

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

v.

ALEX M. AZAR II, in his official capacity as the Secretary of Health and Human Services; UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES; DIANE FOLEY, M.D., in her official capacity as the Deputy Assistant Secretary, Office of Population Affairs; OFFICE OF POPULATION AFFAIRS,

*Defendants.*

Civil Action No. 1:19-cv-01672-  
GLR

**PLAINTIFF’S MOTION FOR PRELIMINARY INJUNCTION**

The Mayor and City Council of Baltimore (the “City”) respectfully requests, pursuant to Federal Rule of Civil Procedure 65(a)(1), that on or before July 22, 2019, the Court issue a preliminary injunction preventing defendants the U.S. Department of Health and Human Services (“HHS”) and its Secretary, Alex M. Azar II, from putting into effect an HHS Final Rule titled *Protecting Statutory Conscience Rights in Health Care; Delegations of Authority*, 84 Fed. Reg. 23170 *et seq.* (May 21, 2019), to be codified at 45 C.F.R. Part 88 (the “Rule”). This Motion is supported by the contemporaneously filed Memorandum of Law, the accompanying declarations, and any additional submissions that may be considered by the Court.

The Rule—which takes effect on July 22, 2019—grants any individual, entity, or provider in healthcare—from front office staff to ambulance drivers—the unqualified right to deny patients healthcare, including reproductive and emergency care, not just on the basis of federally recognized conscience interests, but also on the basis of “ethical or other reasons.” The Rule is a drastic departure from the statutes it purports to implement, which protect religious refusal rights

in specifically delimited circumstances; is in direct violation of statutes prohibiting creation of unreasonable barriers to health care access; violates the U.S. Constitution; and will significantly and irreparably harm the City as health care provider, insurer, and guardian of Baltimore's public health.

Preliminary injunctive relief is warranted because (1) the City is likely to succeed on the merits of its claims; (2) the Final Rule will immediately and irreparably harm the City; and (3) the public interest and balance of equities favor a preliminary injunction. The City has a strong likelihood of success on the merits of its claims under the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2), for reasons including the following:

- The Rule is contrary to law because it violates the Affordable Care Act's ("ACA") Non-Interference Mandate, 42 U.S.C. § 18114, the ACA's prohibition on discrimination in healthcare, 42 U.S.C. § 18116, the Emergency Medical Treatment and Labor Act's ("EMTALA") requirement to make accommodations for individuals needing emergency care, 42 U.S.C. § 1395dd(b)(1), and other laws. *See* 5 U.S.C. § 706(2)(A).
- The Rule violates the Establishment Clause of the United States Constitution, which prohibits accommodations for religion that unduly burden third parties, and the Spending Clause, which prohibits coercive threats to federal funding, among other restrictions. *See id.* § 706(2)(B).
- The Rule exceeds statutory authority under the laws it purports to implement by expanding definitions beyond what is in the statutes. *See id.* § 706(2)(C).
- The Rule is arbitrary and capricious because HHS failed to engage in reasoned decision-making by ignoring countervailing health rights, basing the Rule on speculative fears and

unsubstantiated benefits, and breaking from prior policy without justification. *See id.* § 706(2)(A).

The Rule will cause immediate and irreparable harm to the City as healthcare provider, insurer, and guardian of the public health for reasons including the following:

- The Rule would cripple the City and its clinics and subgrantees in the ability to provide ethical health care by granting an unrestricted right of health care employees to refuse to provide care based on religious, moral, or “ethical or other reasons” and preventing the City from making reasonable accommodations for individuals who refuse to provide care. To comply, the City would need to pay for and train alternate staff in its own programs, as well as compliance monitors for its subgrantees and partners, and to redundantly staff a wide variety of positions. This would be financially and operationally impossible. Thus, the Rule would force the City to provide substandard, unethical care to its residents.
- The Rule is incompatible with the City’s public health mission of providing trauma-informed, judgment-free health care to all and would have devastating effects on public health. Baltimore’s population includes many historically marginalized groups that have long been victims of discrimination in health care and other contexts. In addition to inflicting direct harm upon patients, this discrimination imposes enormous public costs. The Baltimore City Health Department (BCHD) has spent decades working to eradicate discrimination and persuade vulnerable populations to seek necessary health care without fear, all in furtherance of the public health. If the Rule were to take effect, it would sanction and require the City to endorse the very stigma and judgment that it has been combatting, leading to increased discrimination against vulnerable groups, a reduction in access to and quality of care, increased medical and insurance costs, and adverse patient outcomes.

The Rule places the City in an impossible bind: either compromise its public health mission and the ethical obligation to provide care to patients in need by complying, or risk losing federal funding for failure to comply, at an even greater cost as more than 50% of BCHD funding and over 75% of the Baltimore Fire Department's Emergency Medical Services funding is federal. Either option will result in irreparable harm to residents of Baltimore and surrounding areas and to Baltimore's public health, which will increase costs to the City as health care provider and insurer. At a bare minimum, the public interest favors temporarily preserving the status quo.

The City requests that the Rule be enjoined in full on a nationwide level to provide Plaintiff with necessary and appropriate relief. In the alternative, the City requests that the Court stay the effective date of the Rule under 5 U.S.C. § 705 pending adjudication of this case on the merits.

DATED: June 12, 2019

Respectfully submitted

By: /s/ Andre M. Davis  
Andre M. Davis #00362  
Baltimore City Solicitor  
Suzanne Sangree #26130  
Senior Public Safety Counsel and  
Director of Affirmative Litigation  
BALTIMORE CITY  
DEPARTMENT OF LAW<sup>1</sup>  
City Hall, Room 109  
100 N. Holliday Street Baltimore, MD 21202  
Tel: (443) 388-2190  
andre.davis@baltimorecity.gov  
suzanne.sangree2@baltimorecity.gov

Arun Subramanian (pro hac vice pending)  
Seth Ard (pro hac vice pending)  
Elisha Barron (pro hac vice pending)  
Ryan C. Kirkpatrick (pro hac vice pending)  
SUSMAN GODFREY L.L.P.  
1301 Avenue of the Americas, 32nd Fl  
New York, New York 10019  
Tel.: (212) 336-8330  
asubramanian@susmangodfrey.com

---

<sup>1</sup> Jane Lewis, Assistant Solicitor, Baltimore City Law Department, on the brief, admission pending to the bar of the United States District Court for the District of Maryland.

sard@susmangodfrey.com  
ebarron@susmangodfrey.com  
[RKirkpatrick@susmangodfrey.com](mailto:RKirkpatrick@susmangodfrey.com)

Daniel Shih (pro hac vice pending)  
SUSMAN GODFREY L.L.P.  
1201 Third Avenue, Suite 3800  
Seattle, Washington 98101  
Tel.: (206) 516-3880  
dshih@susmangodfrey.com

Richard B. Katskee #27636  
Kenneth D. Upton, Jr. (admitted pro hac vice)<sup>2</sup>  
AMERICANS UNITED FOR SEPARATION  
OF CHURCH AND STATE  
1310 L Street NW, Suite 200  
Washington, DC 20005  
Tel: (202) 466-3234  
[katskee@au.org](mailto:katskee@au.org)  
[upton@au.org](mailto:upton@au.org)

**ATTORNEYS FOR PLAINTIFF**

**CERTIFICATE OF SERVICE**

I hereby certify that on June 12, 2019 the foregoing document was electronically filed with the Clerk of the Court using the CM/ECF system and all counsel of record will receive an electronic copy via the Court's CM/ECF system.

*/s/ Suzanne Sangree*  
\_\_\_\_\_  
Suzanne Sangree

---

<sup>2</sup> Admitted in Texas and Oklahoma only. Supervised by Richard B. Katskee, a member of the D.C. Bar.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

v.

ALEX M. AZAR II, in his official capacity as the  
Secretary of Health and Human Services; UNITED  
STATES DEPARTMENT OF HEALTH AND  
HUMAN SERVICES,

*Defendants.*

No. 1:19-cv-01672 (GLR)

**PLAINTIFF'S MEMORANDUM IN SUPPORT OF  
MOTION FOR A PRELIMINARY INJUNCTION**

**TABLE OF CONTENTS**

TABLE OF CONTENTS..... ii

TABLE OF AUTHORITIES .....v

INTRODUCTION .....1

FACTUAL AND PROCEDURAL BACKGROUND.....3

    A.    The City of Baltimore’s Health Care System .....3

        1.    The Baltimore City Health Department.....4

            a)    BCHD’s trauma-informed approach to care .....4

            b)    Specific BCHD clinics and programs .....7

        2.    Baltimore City Fire Department’s Emergency Medical Services.....8

        3.    Baltimore City as self-insurer of employees and retirees .....9

    B.    Existing Laws That Accommodate Conscience Interests and the  
        Delivery of Ethical Health Care.....9

        1.    Self-enforcing statutes accommodating conscience interests .....10

        2.    Statutes recognizing as paramount the delivery of  
            nondiscriminatory, ethical health care .....10

    C.    The Unlawful New Rule .....11

LEGAL STANDARD.....16

ARGUMENT .....16

I.    Plaintiffs Are Likely to Succeed on the Merits of Their APA Claims.....16

    A.    The Rule Is Not in Accordance with Law.....17

        1.    The Rule violates the ACA’s non-interference mandate. ....17

        2.    The Rule violates EMTALA.....19

        3.    The Rule violates the ACA non-discrimination mandate. ....20

    B.    The Rule Exceeds Statutory Authority. ....21

1.	Congress did not delegate to OCR the Rule’s broad enforcement power.....	21
2.	The Rule expands definitions beyond any scope authorized by statute. ....	22
C.	The Rule Is Arbitrary and Capricious. ....	24
1.	HHS failed to justify departure from prior policy. ....	24
2.	HHS failed to consider harm to patient health.....	25
D.	The Rule Is Unconstitutional. ....	30
1.	The Rule violates the Establishment Clause. ....	30
a)	The Rule impermissibly imposes the costs and burdens of employees’ religious beliefs on patients and other third parties. ....	30
b)	The Rule impermissibly coerces patients and health care providers to adhere to the government’s favored religious practices ....	32
2.	The Rule violates the Spending Clause. ....	33
a)	The Rule is unconstitutionally coercive.....	33
b)	The Rule is unconstitutionally ambiguous.....	34
c)	The Rule imposes unconstitutional retroactive conditions.....	35
d)	The Rule lacks a nexus to the federal funds it threatens.....	36
II.	The City and Its Residents Will Suffer Irreparable Injury.....	36
A.	Baltimore Will Suffer Irreparable Harm If It Attempts to Comply. ....	37
1.	The City cannot comply with the Rule without sacrificing quality of care. ....	37
2.	Compliance with the Rule will severely harm the City’s public health mission. ....	41
B.	Baltimore Will Suffer Irreparable Harm If It Fails to Comply and Loses Federal Funding.....	43
C.	The Rule Will Harm the City as an Insurer. ....	46

D.	The Establishment Clause Violation is Irreparable Harm as a Matter of Law. ....	46
III.	The Balance of Equities and the Public Interest Favor an Injunction. ....	47
IV.	The Court Should Postpone the Rule’s Effective Date or Issue a Nationwide Injunction. ....	48
	CONCLUSION.....	48

**TABLE OF AUTHORITIES**

	<b>Page(s)</b>
<b>Cases</b>	
<i>Allentown Mack Sales &amp; Service, Inc. v. NLRB</i> , 522 U.S. 359 (1998).....	24
<i>Aziz v. Trump</i> , 234 F. Supp. 3d 724 (E.D. Va. 2017) .....	47
<i>Burwell v. Hobby Lobby Stores, Inc.</i> , 134 S. Ct. 2751 (2014).....	30
<i>Cal. Pharmacists Ass’n v. Maxwell-Jolly</i> , 563 F.3d 847 (9th Cir. 2009) .....	44
<i>California v. Azar</i> , 19-cv-01184-EMC, 2019 WL 1877392 (N.D. Cal. Apr. 26, 2019).....	19, 29
<i>Cent. United Life Ins. Co. v. Burwell</i> , 827 F.3d 70 (D.C. Cir. 2016).....	21
<i>Chamber of Commerce v. Edmondson</i> , 594 F.3d 742 (10th Cir. 2010) .....	44
<i>City of Portland v. EPA</i> , 507 F.3d 706 (D.C. Cir. 2007).....	26
<i>Cutter v. Wilkerson</i> , 544 U.S. 709 (2005).....	30, 31
<i>Elrod v. Burns</i> , 427 U.S. 347 (1976).....	46
<i>Encino Motorcars, LLC v. Navarro</i> , 136 S. Ct. 2117 (2016).....	24, 25, 26
<i>Ergon-W. Virginia, Inc. v. EPA</i> , 896 F.3d 600 (4th Cir. 2018) .....	25
<i>Estate of Thornton v. Caldor</i> , 472 U.S. 703 (1985).....	31, 32
<i>F.C.C. v. Fox Television Stations, Inc.</i> , 556 U.S. 502 (2009).....	24

*FDIC v. Meyer*,  
510 U.S. 471 (1994).....44

*Havens Realty v. Coleman*,  
455 U.S. 363 (1982).....41

*Healthy Teen Network v. Azar*,  
322 F. Supp. 3d 647 (D. Md. 2018).....35

*Int’l Refugee Assistance Project v. Trump*,  
857 F.3d 554 (4th Cir.), *as amended* (May 31, 2017) *vacated and remanded*  
*on other grounds*.....47

*Iowa Utils. Bd. v. F.C.C.*,  
109 F.3d 418 (8th Cir. 1996) .....45

*Kravitz v. United States Dep’t of Commerce*,  
366 F. Supp. 3d 681 (D. Md. 2019).....25

*La. Pub. Serv. Comm’n v. FCC*,  
476 U.S. 355 (1986).....21

*Larson v. Valente*,  
456 U.S. 228 (1982).....30

*League of Women Voters of U.S. v. Newby*,  
838 F.3d 1 (D.C. Cir. 2016).....47

*Lee v. Weisman*,  
505 U.S. 577 (1992).....32

*Legend Night Club v. Miller*,  
637 F.3d 291 (4th Cir. 2011) .....46

*Mayor & City Council of Baltimore v. Azar*,  
No. 19-cv-1103-RDB, 2019 WL 2298808 (D. Md. May 30, 2019)..... *passim*

*McCreary Cty. v. ACLU of Ky.*,  
545 U.S. 844 (2005).....30

*McGlothlin v. Connors*,  
142 F.R.D. 626 (W.D. Va. 1992).....37

*Mfrs. Ry. Co. v. Surface Transp. Bd.*,  
676 F.3d 1094 (D.C. Cir. 2012).....24

*Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins.*,  
463 U.S. 29 (1983).....24, 25, 29

*Mountain Valley Pipeline, LLC v. 6.56 Acres of Land, Owned by Sandra Townes Powell,*  
 915 F.3d 197 (4th Cir. 2019) .....37

*Mountain Valley Pipeline, LLC v. W. Pocahontas Properties Ltd. P’ship,*  
 918 F.3d 353 (4th Cir. 2019) .....16, 44

*Nat’l Fed’n of Indep. Bus. v. Sebelius,*  
 567 U.S. 519 (2012).....33, 34, 35

*New York v. United States,*  
 505 U.S. 144 (1992).....36

*Newsom v. Albemarle Cnty. Sch. Bd.,*  
 354 F.3d 249 (4th Cir. 2003) .....47

*Nken v. Holder,*  
 556 U.S. 418, 435 (2009).....47

*North Carolina State Conference of the NAACP v. North Carolina State Board of Elections,*  
 No. 16-cv-1274, 2016 WL 6581284 (M.D.N.C. Nov. 4, 2016) .....41

*Odebrecht Const., Inc. v. Sec’y, Fla. Dep’t of Transp.,*  
 715 F.3d 1268 (11th Cir. 2013) .....44

*Pashby v. Delia,*  
 709 F.3d 307 (4th Cir. 2013) .....36, 41, 47

*Pennhurst State Sch. & Hosp. v. Halderman,*  
 451 U.S. 1 (1981).....34

*Planned Parenthood of Central North Carolina v. Cansler,*  
 804 F. Supp. 2d 482 (M.D.N.C. 2011) .....45

*Planned Parenthood of Ind. v. Comm’r,*  
 699 F.3d 962 (7th Cir. 2012) .....45

*Ragsdale v. Wolverine World Wide, Inc.,*  
 535 U.S. 81 (2002).....21

*Richmond Med. Ctr. for Women v. Gilmore,*  
 11 F. Supp. 2d 795 (E.D. Va. 1998) .....37

*Richmond Tenants Org. v. Kemp,*  
 956 F.2d 1300 (4th Cir. 1992) .....48

*Rosa H. v. San Elizario Indep. Sch. Dist.*,  
106 F.3d 648 (5th Cir. 1997) .....35

*S. Dakota v. Dole*,  
483 U.S. 203 (1987).....33, 36

*Santa Fe Indep. Sch. Dist. v. Doe*,  
530 U.S. 290 (2000).....30, 32

*Senior Executives Ass’n v. United States*,  
891 F. Supp. 2d 745 (D. Md. 2012).....44

*Sherbert v. Verner*,  
374 U.S. 398 (1963).....31

*Smith v. Metro. Sch. Dist. Perry Twp.*,  
128 F.3d 1014 (7th Cir. 1997) .....35

*Smoking Everywhere, Inc. v. FDA*,  
680 F. Supp. 2d 62 (D.D.C. 2010), *aff’d sub nom. Sottera, Inc. v. FDA*, 627  
F.3d 891 (D.C. Cir. 2010).....45

*State v. U.S. Bureau of Land Mgmt.*,  
277 F. Supp. 3d 1106 (N.D. Cal. 2017) .....25

*Temple Univ. v. White*,  
941 F.2d 201 (3d Cir. 1991).....45

*Texas Monthly, Inc. v. Bullock*,  
489 U.S. 1 (1989).....31

*Trump v. Int’l Refugee Assistance*,  
138 S. Ct. 353 (2017).....47

*Trump v. Int’l Refugee Assistance Project*,  
137 S. Ct. 2080 (2017).....47

*United States v. South Carolina*,  
720 F.3d 518 (4th Cir. 2013) .....16

*Util. Air Regulatory Grp. v. E.P.A.*,  
573 U.S. 302, 134 S. Ct. 2427 (2014).....23, 24

*Valle del Sol Inc. v. Whiting*,  
732 F.3d 1006 (9th Cir. 2013) .....41

*Virginia Soc’y for Human Life, Inc. v. Fed. Election Comm’n*,  
 263 F.3d 379 (4th Cir. 2001), *overruled on other grounds in The Real Truth  
 About Abortion, Inc. v. Fed. Election Comm’n*, 681 F.3d 544 (4th Cir. 2012) .....48

*Winter v. Nat. Res. Defense Council, Inc.*,  
 555 U.S. 7 (2008).....16, 36

**Statutes**

5 U.S.C. § 705.....16, 48

5 U.S.C. § 706(2)..... *passim*

42 U.S.C. § 132c-11.....10

42 U.S.C. § 238n.....10, 23

42 U.S.C. §§ 300 to 300a-6.....7

42 U.S.C. § 300a-7.....10, 20

42 U.S.C. § 1320a-1(h).....10

42 U.S.C. § 1395dd.....11, 17

42 U.S.C. § 1395i-5 .....10

42 U.S.C. § 1395x.....10

42 U.S.C. § 1396a(a).....10

42 U.S.C. § 2000e(j) .....11

42 U.S.C. § 18023.....10, 11

42 U.S.C. § 18113(a) .....10

42 U.S.C. § 18114.....11, 17, 18

42 U.S.C. § 18116.....17

42 U.S.C. § 18116(a) .....20

Baltimore City Code Article 4 .....42

Department of Defense and Labor, Health and Human Services, and Education  
 Appropriations Act, 2019 and Continuing Appropriations Act, 2019, Pub. L.  
 No. 115-245, § 507(d), 132 Stat. 2981, 3118 (Sept. 28, 2018).....10, 23

Md. Code Ann., Health Gen. § 20-214.....31  
 Md. Code Ann., State Gov’t § 20-606.....31

**Regulations**

45 C.F.R. pt. 88..... *passim*  
 73 Fed. Reg. 78072 (Dec. 19, 2008).....20  
 76 Fed. Reg. 9968 (Feb. 23, 2011) .....11, 12, 13  
 83 Fed. Reg. 3880 (Jan. 26, 2018) .....12, 13, 25  
 84 Fed. Reg. 23170 (May 21, 2019)..... *passim*  
 Exec. Order No. 13798, 82 Fed. Reg. 21675 (May 8, 2017).....12

**Constitutional Provisions**

Baltimore City Charter, Article II.....3  
 Baltimore City Charter, Article VII, §§ 54-56.....4  
 U.S. Const., Article I, § 8, cl. 1.....33

**Other Authorities**

Baltimore City Health Department Press Release, *Baltimore City Awarded \$5 Million SAMHSA Grant to Implement Community-Based Trauma Informed Care in West Baltimore* (Sept. 15, 2016).....6  
 Baltimore City Health Department, *State of Health in Baltimore*, May 2018.....5  
 Centers for Disease Control and Prevention, *HIV Infection Risk, Prevention, and Testing Behaviors Among Men Who Have Sex With Men--National HIV Behavioral Surveillance, 23 U.S. Cities, 2017*, HIV Surveillance Special Report 22 (Feb. 2019), <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.....5  
 Jennifer Frost et al, *Return on Investment: A Fuller Assessment of the Benefits and Cost Savings of the US Publicly Funded Family Planning Program*, Wiley Periodicals, Inc. (2014).....46  
 Wendy Chavkin, et al., “Conscientious Objection and Refusal to Provide Reproductive Healthcare: A White Paper Examining Prevalence, Health Consequences’ and Policy Responses.” 123 *Int’l J. Gynecol. & Obstet.* 3 (2013).....18

**Comments on the Proposed Rule**

American College of Emergency Physicians Comment Ltr. (Mar. 27, 2018),  
<https://www.regulations.gov/document?D=HHS-OCR-2018-0002-71219>.....27

American Hospital Association Comment Ltr. (Mar. 26, 2018),  
<https://www.regulations.gov/document?D=HHS-OCR-2018-0002-65761>.....27

American Medical Association Comment Ltr. (Mar. 27, 2018),  
<https://www.regulations.gov/document?D=HHS-OCR-2018-0002-70564>.....26

American Nurses Association and the American Academy of Nursing Comment  
Ltr. (Mar. 23, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-55870>.....28

Association of American Medical Colleges Comment Ltr. (Mar. 26, 2018),  
<https://www.regulations.gov/document?D=HHS-OCR-2018-0002-67592>.....27

National Association of Councils on Developmental Disabilities Comment Ltr.  
(Mar. 22, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-66494>.....28

Physicians for Reproductive Health Comment Ltr. (Mar. 28, 2018),  
<https://www.regulations.gov/document?D=HHS-OCR-2018-0002-71284>.....28

## INTRODUCTION

The Mayor and City Council of Baltimore (“City of Baltimore” or “City”) has spent decades and millions of dollars to protect and improve the health of its uniquely vulnerable residents through its trauma-informed, stigma-free public health mission, administered with over 50% federal funding. Now, a new Health and Human Services (HHS) regulation—*Protecting Statutory Conscience Rights in Health Care; Delegations of Authority*, 84 Fed. Reg. 23170 *et seq.* (May 21, 2019), to be codified at 45 C.F.R. Part 88 (the “Rule”)—threatens to cripple the City’s health care system and derail its public health mission by forcing the City to endorse the very stigma it strives to eradicate and destroy the trust the City painstakingly built in its vulnerable communities, or else risk losing all federal funding.

The Rule allows any health care provider, entity, or individual—from front office administrator to ambulance driver—to deny critical health care to patients on the basis of “religious, moral, ethical, or other reasons,” without justification, without adequate notice, and without an exception for emergencies or any other provision to ensure the City can provide patients the care they need. The Rule by its terms extends to medical services generally and appears to include health care services for lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ) individuals, patients struggling with substance abuse, and other vulnerable populations.

The Rule cripples the City’s ability to accommodate objections without sacrificing quality care in its clinics and emergency medical services (EMS). Through EMS the City provides emergency care and transport; through the Baltimore City Health Department (BCHD), the City provides not only reproductive health care including abortion referrals, but also HIV/STD treatment and other general and specialized care to stigmatized and vulnerable communities. The Rule appears to require the City to hire employees to work in its clinics or EMS without knowing, or even asking, whether the employee is willing to provide the care that is typical of and critical to

the health care entity on a nondiscriminatory basis. The Rule also prohibits making reasonable accommodations to avoid interruption of care from objections. For example, upon learning that an employee of the City's Druid Family Planning Clinic in West Baltimore would be unwilling to provide referrals for the full range of reproductive options or treat LGBTQ individuals, the City would be unable to transfer that employee to a different clinic or position unless the employee agreed.

The Rule threatens sweeping sanctions for failure or suspicion of failure to comply, whether by a recipient of federal funds **or** one of its sub-grantees. The Rule authorizes HHS to withdraw, deny, or terminate federal funds if it determines there has been a failure to comply with the Rule (including certification requirements) or related statutes. Thus, a family planning clinic attempting to make an accommodation for an employee who refused to provide care to LGBTQ individuals could result in the loss of federal funding, not only for that clinic but for the BCHD as a whole.

Approximately half of funding for BCHD's clinics and 75% of funding for the Baltimore City Fire Department's Emergency Medical Services (Fire/EMS) comes from federal funds that would be at risk under the Rule. BCHD and Fire/EMS provide services to thousands of residents of Baltimore and surrounding areas, including some of the most vulnerable segments of the population.

The Rule is unlawful because: (1) it expands beyond recognition the limited accommodations for conscience interests reflected in the statutes it purports to implement; (2) it directly contradicts legal rights to non-discriminatory, quality health care and informed consent; (3) it departs, without valid justification, from the existing statutory and regulatory framework to elevate conscience objections over rights to health care and disregards evidence-based harms from

the Proposed Rule, and is, thus, arbitrary and capricious; and (4) it violates the United States Constitution's Establishment Clause and Spending Clause.

This is a quintessential case for a preliminary injunction. The City has a strong likelihood of success on the merits of its claims under the Administrative Procedure Act (APA), 5 U.S.C. §§ 701–706, and the City and the public stand to suffer irreparable harm if the Rule takes effect. The City will face an impossible choice: comply with the Rule by allowing providers to deny care to patients in need, thereby compromising the City's public health mission and obligation to provide ethical care; **or** risk losing critical federal funding for the City's health programs. Either way, the harms—provision of unethical health care, worsening individual health outcomes, unwillingness of vulnerable communities to seek early treatment (which leads to higher costs), and a compromised public health mission, or else possible loss of federal funding and elimination of most health services—will be significant and irreparable. Hence, the Mayor and City Council of Baltimore respectfully requests that the Court enter a preliminary injunction as soon as possible to prevent the Rule from taking effect on July 22, 2019.

## **FACTUAL AND PROCEDURAL BACKGROUND**

### **A. The City of Baltimore's Health Care System**

The Baltimore City Charter vests the City with the general power “to provide for the preservation of the health of all persons within the City,” Baltimore City Charter, Art. II, § 11. The City Charter also grants the City full “police power.” *Id.*, Art. II, § 27; *see also id.*, Art. II, § 47 (empowering the City to “pass any ordinance . . . as it may deem proper in maintaining the . . . health and welfare of Baltimore City.”). The City effectuates this mandate through BCHD and its clinics and subgrantees, through Fire/EMS, and as a self-insurer of current and retired City and Police Department of Baltimore City (BPD) employees nationwide.

## **1. The Baltimore City Health Department**

BCHD is a City agency tasked with the “general care of, and responsibility for, the study and prevention of disease, epidemics, and nuisances affecting public health.” Baltimore City Charter, Art. VII, §§ 54–56. Formed in 1793, BCHD is the oldest continuously operating health department in the United States. It has been working to improve the health and well-being of Baltimore residents for more than 220 years.

BCHD is responsible for protecting public health in a wide range of areas, including acute communicable diseases, chronic disease prevention, HIV/STD prevention and treatment, addiction treatment, reproductive health and family planning, maternal and child health (including pregnancy prevention), school health, adolescent services, senior services, and youth violence prevention. BCHD’s mission is to protect health, eliminate disparities, and ensure the well-being of every Baltimore resident through education, advocacy, and delivery of direct services, which it does in collaboration with other City agencies, health care providers, community organizations, and funders. For many of Baltimore’s more than 600,000 residents, BCHD is the health care provider of last resort. *See* Declaration of Rebecca Dineen (Dineen Decl.) ¶ 2; Declaration of Adena Greenbaum (Greenbaum Decl.) ¶ 40.

### **a) BCHD’s trauma-informed approach to care**

The City faces significant public health challenges compared to the rest of the state and the country as a whole. Baltimore has an age-adjusted mortality rate 40% higher than the rest of the state and ranks last on key health outcomes compared to other jurisdictions in Maryland. An estimated 12,500 residents are living with HIV, and Baltimore’s HIV diagnosis rate is twice that of the State. An estimated 11% of residents age 12 or older abuse or are dependent on illicit drugs or alcohol; in 2016, Baltimore had the highest age-adjusted overdose mortality rate among large

metropolitan counties in the United States. *See* Declaration of Letitia Dzirasa (Dzirasa Decl.), Ex. A (Baltimore City Health Department, *State of Health in Baltimore*, May 2018).

Many Baltimore residents face systemic social, political, economic, and environmental disparities that have an enormous impact on public health. One in three Baltimore children live below the federal poverty line, and the average life expectancy for children born in Baltimore's poorest neighborhoods is up to 19 years lower than in wealthy areas. Members of historically marginalized groups, especially African Americans and LGBTQ individuals, are also more likely to have poor health outcomes. For example, while African Americans constitute 63% of Baltimore's population, they account for more than 82% of those living with HIV. HIV also disproportionately affects sexual minorities. According to a 2017 federal health survey of 23 United States cities, Baltimore had the highest prevalence of HIV among men who have sex with men. *See* Declaration of Suzanne Sangree (Sangree Decl.), Ex. A (Centers for Disease Control and Prevention, *HIV Infection Risk, Prevention, and Testing Behaviors Among Men Who Have Sex with Men—National HIV Behavioral Surveillance, 23 U.S. Cities, 2017*, HIV Surveillance Special Report 22 (Feb. 2019)).

Baltimore residents with the greatest health needs are often the most difficult to reach through public health intervention. Many Baltimore residents have experienced trauma resulting from discrimination, poverty, homelessness, exposure to physical violence, child abuse and neglect, or involvement in the criminal-justice system, among other adverse experiences. These experiences have made many residents mistrustful of and reluctant to engage with medical providers and public officials. Dineen Decl. ¶¶ 5–6. Many people from marginalized communities who have sought out health care services have been met with judgment and blame by providers, making them less likely to continue to seek care in the future. *Id.* ¶ 8.

When some members of the community do not trust the government to provide them with safe, judgment-free services, the overall public health suffers. Dineen Decl. ¶ 9. Many public health experts, including HHS, recognize that addressing serious public health issues requires dedicated outreach to marginalized populations to ensure that they receive and stay connected to care. *See, e.g.*, Sangree Decl., Ex. C (HHS Trauma Informed Care Toolkit).

BCHD uses a trauma-informed approach to health care, an approach endorsed by HHS. *See id.* (“The practice of trauma informed service is less about ‘what’ you’re doing, and more about ‘how’ you’re doing it.”); *see also id.*, Ex. B (Baltimore City Health Department Press Release, *Baltimore City Awarded \$5 Million SAMHSA Grant to Implement Community-Based Trauma Informed Care in West Baltimore* (Sept. 15, 2016)). For years, BCHD has dedicated significant resources to implement a trauma-informed approach, which means eliminating stigma associated with particular diseases, conditions, or groups of people, building trust with individuals in targeted communities, providing judgment-free care, and removing as many structural and administrative barriers to care as possible. This approach shapes every aspect of patient interaction across multiple services, including offering mobile van service, posting clear signage, using simple instructions and paperwork, speaking multiple languages, and minimizing all sense of institutionalization. *See* Dineen Decl. ¶¶ 69–71; *see also* Greenbaum Decl. ¶ 60 (clinics do not impose rules on patients that would deter them from seeking care); Dzirasa Decl. ¶¶ 17–18, Ex. B (Baltimore City Health Department Employee Handbook).

Through these actions, BCHD has painstakingly built trust in communities that historically have been marginalized and disenfranchised. For example, in the case of a preteen girl at a Baltimore public school, it took almost a year of outreach and trust-building by BCHD employees at the school before the girl felt comfortable enough to go to a clinic for an STD test, where she

tested positive for chlamydia and received treatment. Dineen Decl. ¶ 86. Any policy change that impedes trust-building efforts in marginalized communities can set public-health programs back years, if not decades. *Id.*; Greenbaum Decl. ¶ 84.

**b) Specific BCHD clinics and programs**

The City operates several clinical services and health programs through two major divisions: the Division of Youth Wellness and Community Health, and the Division of Population Health and Disease Prevention. Dzirasa Decl. ¶¶ 5–7.

**The Division of Youth Wellness and Community Health** includes the Bureaus of Maternal and Child Health (MCH), Chronic Disease Prevention, Office of Youth and Trauma Services, and the Bureau of School Health. MCH operates one community-based adolescent clinic and two comprehensive family planning clinics in West and East Baltimore. Through these clinics, MCH is the major provider of reproductive health services through the Title X Family Planning Program (“Title X”) to uninsured, underinsured, and underserved residents, serving primarily African-American and Latinx women. *See* Public Health Service Act (PHSA), 84 Stat.1506, *as amended* 42 U.S.C. §§ 300 to 300a-6; Dineen Decl. ¶¶ 24–37. The Bureau of School Health operates several school-based clinics that provide comprehensive primary care, reproductive health care, and other services to Baltimore students. *Id.* ¶¶ 38–40. MCH’s programs are funded in whole or in part by federal funds through Title V, Title X, Head Start, the Office of Adolescent Health, Centers for Disease Control and Prevention grants, and Medicaid reimbursements. *Id.* ¶ 28.

**The Division of Population Health and Disease Prevention** includes the Overdose Prevention program, the Bureau of Clinical Services and HIV Prevention (Clinical Services), and the Bureau of HIV/STD Services. Dzirasa Decl. ¶ 7. Clinical Services oversees two physical locations in the City and two mobile vans offering services that include pre-exposure prophylaxis (PrEP) medication to prevent HIV infection, STD diagnosis and treatment, HIV longitudinal care,

hepatitis C treatment, tuberculosis (TB) screening and treatment, dental care, and buprenorphine treatment (a medically assisted treatment for opioid addiction). Greenbaum Decl. ¶ 21. The clinics are free of charge and handle around 15,000 visits annually. *Id.* ¶ 23–54 (describing clinics). The HIV/STD Prevention Program focuses on activities that prevent the spread of sexually transmitted infections, particularly HIV, syphilis, gonorrhea, and chlamydia. This program provides outreach, education, and testing services that are essential to reducing stigma and other barriers to care, and maintaining public health. *Id.* ¶ 48.

The clinics receive significant federal funding under the PHSA, the Ryan White HIV/AIDS Program, and Centers for Disease Control and Prevention grants. Greenbaum Decl. ¶¶ 22, 48. BCHD administers approximately \$38 million in federal Ryan White funding and subcontracts with over a dozen entities to provide Ryan White HIV/AIDS services to provide a comprehensive system of primary care, essential support services, and medications for low-income people living with HIV in Baltimore and across Maryland. Dzirasa Decl. ¶ 7.

Clinical Services currently administers over 50 subgrants of federal funds from HHS. These subgrants support outreach, HIV and STD surveillance and prevention, behavioral health, and other programs. Greenbaum ¶ 27.

## **2. Baltimore City Fire Department's Emergency Medical Services**

Fire/EMS operates a fleet of medic units to respond to emergency (911) calls and to provide emergency care and/or transport to appropriate medical care. The City has one of the busiest EMS departments per capita in the nation; calls for emergency medical services are unusually high in Baltimore and have been increasing over the past several years. Between FY2015 and FY2016, Fire/EMS transports in Baltimore increased by nearly 5,918 patients, and the City saw an additional 2,972 patient transports between FY2016 and FY2017. In FY2017, Fire/EMS received an all-time high of 154,621 calls for emergency care and transported 100,894 people to area

hospitals. In FY2018, Fire/EMS received 153,232 emergency calls. For FY2018 transports, Fire/EMS received a total of \$19,243,494 in payments, \$14,790,374 of which—approximately 76%—came from Medicaid or Medicare payments. *See* Declaration of James Matz (Matz Decl.) ¶ 5.

Fire/EMS also partners with the University of Maryland to administer a two-year pilot program for Mobile Integrated Healthcare in West Baltimore. Matz Decl. ¶ 7. Mobile Integrated Healthcare is a community-based health care solution for areas with a high volume of preventable or unnecessary ambulance trips and limited access to regular care. *Id.* The program provides rapid-response care to “low-acuity” patients (those who need treatment but not an emergency room) and assists in maintaining individuals’ health at their homes. *Id.* This model has improved health care access for underserved populations and reduced the strain on overburdened emergency systems. *Id.* The program is funded by a \$668,200 grant of federal Medicaid funding provided to through the University of Maryland via the state Health Services Cost Review Commission. *Id.*

### **3. Baltimore City as self-insurer of employees and retirees**

The City is a “self-insured” entity, meaning that the costs of the health care benefits it provides to current and former employees and their families are paid directly by the City. Approximately 12,000 City and BPD employees, 37,000 retirees, and their families receive health care benefits from the City. Declaration of Rajesh Gulhar (Gulhar Decl.) ¶ 2.

#### **B. Existing Laws That Accommodate Conscience Interests and the Delivery of Ethical Health Care**

Congress has enacted a detailed legal framework preserving patients’ rights to informed, nondiscriminatory healthcare while recognizing limited conscience-based objections in healthcare—many of which are further limited to the contexts of abortion, sterilization, assisted suicide, euthanasia, or mercy killing.

**1. Self-enforcing statutes accommodating conscience interests**

Congress enacted self-enforcing legislation accommodating healthcare providers' conscience interests with respect to specific medical procedures. In particular, the Church Amendments, codified at 42 U.S.C. § 300a-7, address conscience interests in the contexts of abortion and sterilization;<sup>1</sup> the Coats-Snowe Amendment, codified at 42 U.S.C. § 238n, and the Weldon Amendment<sup>2</sup> address conscience interests in the context of abortions; and Sections 1303 and 1553 of the ACA address conscience interests in the context of abortion and assisted suicide, euthanasia, and mercy killing, 42 U.S.C. §§ 18023(a)(1), (b)(1)(A), (b)(4); *id.* § 18113(a). Additional statutes accommodate address conscience interests outside the context of abortions, sterilizations, assisted suicide, and euthanasia in the context of discrete programs or issues, such as vaccination. Many relate only to conditions imposed on “religious nonmedical health care providers.” *See, e.g.* 42 U.S.C. § 1320a-1(h); 42 U.S.C. § 132c-11; 42 U.S.C. § 1395i-5; 42 U.S.C. § 1396a(a); 42 U.S.C. §§ 1395x(e) & 1395x(y)(1).

**2. Statutes recognizing as paramount the delivery of nondiscriminatory, ethical health care**

The statutes accommodating conscience interests in clearly delineated circumstances are part of a larger statutory framework recognizing as paramount patients' right to prompt access to nondiscriminatory medical care. Section 1554 of the ACA limits HHS rulemaking authority by

---

<sup>1</sup> For entities that receive grants or contracts for biomedical or behavioral research, only, the Church Amendments protect “individuals” from having to “perform or assist in the performance of any part of a health service program or research activity funded in whole or in part under a program administered by [HHS] if his performance or assistance in the performance of such part of such program or activity would be contrary to his religious beliefs or moral convictions.” 42 U.S.C. § 300a-7(d).

<sup>2</sup> The Weldon Amendment is an appropriations rider that has been included in each HHS appropriations statute enacted since 2004. *See, e.g.*, Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019 and Continuing Appropriations Act, 2019, Pub. L. No. 115-245, § 507(d), 132 Stat. 2981, 3118 (Sept. 28, 2018).

prohibiting any rule that creates unreasonable barriers to health care access or restricts informed consent. *See* 42 U.S.C. § 18114. Section 1557 of the ACA prohibits discrimination in health care on bases recognized in federal civil rights laws. The Emergency Medical Treatment and Labor Act (EMTALA), protects patients' rights to emergency medical care. 42 U.S.C. § 1395dd.<sup>3</sup> The ACA clarifies that conscience exemptions in the abortion context must not "be construed to relieve any health care provider from providing emergency services as required by State or Federal law," including EMTALA. 42 U.S.C. § 18023. Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000e, *et seq.*, prohibits discrimination against employees based on their religious beliefs and requires employers to make accommodations only if doing so would not cause "undue hardship" for the employer. 42 U.S.C. § 2000e(j).

### C. The Unlawful New Rule

The new Rule seeks to supplant the 2011 rule governing implementation of conscience laws through a complaint process in HHS's Office for Civil Rights (OCR). The 2011 rule created the complaint enforcement mechanism for the Church, Weldon, and Coats-Snowe Amendments but removed certain provisions of an earlier regulation that contained definitions of terms, requirements, prohibitions, and a certification requirement. *See* 76 Fed. Reg. 9968 (Feb. 23, 2011). The 2011 rule "partially rescind[ed] [the earlier regulation] based on concerns expressed that it had the potential to negatively impact patient access to contraception and certain other medical services without a basis in federal conscience protection statutes." *Id.* at 9974. Importantly, the 2011 rule clarified that "[f]ederal provider **conscience statutes . . . were never intended to allow**

---

<sup>3</sup> EMTALA defines the term "emergency medical condition" to include "a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy . . ." *Id.* § 1395dd(e)(1)(A).

**providers to refuse to provide medical care to an individual because the individual engaged in behavior the health care provider found objectionable.”** *Id.* at 9973–74 (emphasis added).

The 2011 rule responded to public concerns that there was “no clear mechanism for a health care provider who believed his or her rights were violated to seek enforcement of those rights,” *id.* at 9972, by designating OCR to “receive complaints based on the Federal health care provider conscience protection statutes,” and to “coordinate the handling of complaints with [HHS] funding components from which the entity, to which a complaint has been filed, receives funding.” *Id.* at 9975, 9977.

The new Rule has its origins in an Executive Order that President Trump signed on May 4, 2017, entitled “Promoting Free Speech and Religious Liberty.” Exec. Order No. 13798, 82 Fed. Reg. 21675 (May 8, 2017). On January 18, 2018, the Acting Secretary of HHS established a new Conscience and Religious Freedom Division within OCR with responsibility for enforcing religious-refusal laws. Subsequently, OCR increased the budget of the Conscience and Religious Freedom Division by \$1.546 million.

Pursuant to Executive Order 13798, on January 26, 2018, HHS published a Notice of Proposed Rulemaking “to enhance the awareness and enforcement of Federal health care conscience and associated anti-discrimination laws, to further conscience and religious freedom, and to protect the rights of individuals and entities to abstain from certain activities related to health care services without discrimination or retaliation.” *Protecting Statutory Conscience Rights in Health Care; Delegations of Authority*, 83 Fed. Reg. 3880, 3881 (proposed Jan. 26, 2018) (the “Proposed Rule”). The Proposed Rule anticipated refusal to provide health care services or research activities on **any ground**—“religious, moral, ethical, or other.” *Id.* at 3923.

OCR's stated justification for the 2018 Proposed Rule is that, "[s]ince the designation of OCR as the agency with authority to enforce Federal health care conscience laws in 2008, OCR has received a total of forty-four complaints" of violation of conscience interests (in 10 years). 83 Fed. Reg. at 3886. Thirty-four of those complaints were received since the 2016 election. *Id.* From 2008 to 2016—including in the 5 years after the 2011 rule went into effect—OCR received only **1.25 complaints per year**. *Id.* The Proposed Rule describes the procedures undertaken for resolving these complaints and **does not mention how existing procedures for receiving and resolving complaints under the 2011 rule (or before) were deficient**.

HHS received 242,000 public comments, 84 Fed. Reg. at 23180 & n.41, many of which raised concerns about: health consequences and patient burdens resulting from increased stigmatizing denials of medical services and care to vulnerable populations; the Proposed Rule's vague, excessively broad, unworkable requirements; and the Proposed Rule's incompatibility both with medical ethics and federal, state, and local laws, including the U.S. Constitution. *See infra* Section I.C.2.

The final Rule was published in the Federal Register on May 21, 2019. 84 Fed. Reg. 23170 (May 21, 2019). The final Rule is substantially the same as the Proposed Rule.

**First**, the Rule "[e]xpands the regulation's scope," 84 Fed. Reg. at 23227, by expanding definitions of who may deny care and on what basis. Like the Proposed Rule, the Rule purports to "protect the rights of individuals, entities, and health care entities to refuse to perform, assist in the performance of, or undergo certain health care services or research activities to which they may object for religious, moral, ethical, or other reasons." *Id.* at 23263 (to be codified at 45 C.F.R. § 88.1). While the Weldon, Coats-Snowe, and Church Amendments do not define the terms "assist in the performance," or "health care entity," the Rule broadly and vaguely defines "assist in the

performance” to encompass any action with a “specific, reasonable, and articulable connection” to furthering a procedure, health service program, or research activity, including “counseling, referral, training, or otherwise making arrangements.” *Id.* In response to comments seeking to delineate the boundaries of the Rule, HHS declined to draw bright lines for an entity seeking to comply, and instead suggested that preparing a room for a procedure, scheduling an appointment, or driving an ambulance *could* all come within the new conscience protections. *See id.* at 23186, 23188.

**Second**, the Rule prohibits employers from ensuring that any religious accommodations preserve continuity of care, and it imposes unworkable administrative requirements. For example, in defining “discriminate or discrimination,” the Rule prohibits regulated health care entities from asking, before hiring, whether a prospective employee will object on moral or religious grounds to performing essential job functions; and it requires a “persuasive justification” for inquiring about objections more than once a year even once the employee is hired. 84 Fed. Reg. at 23263 (to be codified at 45 C.F.R. § 88.2). If the employer learns of an objection, an accommodation is allowed only if the objector “voluntarily accepts” it, so an objector may reject any proposed accommodation, no matter how necessary, reasonable, or proportionate. *Id.*

In addition, the Rule conditions continued receipt of federal funding on “[p]rovision of a compliant assurance and certification” of compliance with the Rule and related statutes. 84 Fed. Reg. at 23269 (to be codified at 45 C.F.R. § 88.4). Failure to so certify may result in the same losses of funding and other punitive measures as may be imposed for a substantive violation of the Rule or related statutes. *See id.* at 23272 (to be codified at 45 C.F.R. § 88.7(j)).

**Third**, the Rule authorizes HHS to withhold, deny, suspend, or terminate “Federal financial assistance or other Federal funds” if it determines that there is a “failure to comply.” 84

Fed. Reg. at 23271–72 (to be codified at 45 C.F.R. § 88.7(i)(3)). Funds may be withheld even when there are good-faith compliance efforts. *Id.* The Rule “clarifies that recipients are responsible for their own compliance with Federal conscience and anti-discrimination laws and implementing regulations, as well as for ensuring their sub-recipients comply with these laws.” *Id.* at 23180.

The Rule does not specify the funds a recipient stands to lose if HHS determines that the recipient or its subrecipient has not complied with the Rule. *See id.* at 23271–72 (to be codified at 45 C.F.R. § 88.7(i)). A finding of violation “threaten[s]” all funding streams implicated by any of the statutes that the Rule purports to implement. *Id.* at 23223. The Rule thus appears to place at risk not only the City’s receipt of all federal funds from HHS, but also federal funds from the Department of Labor and Department of Education that are implicated by the Weldon Amendment, including, potentially, funds entirely unrelated to health care. *See* 84 Fed. Reg. at 23172 (Weldon implicates “funds made available in the applicable Labor, HHS, and Education appropriations act”); *id.* at 23265–66, 23272 (to be codified at 45 C.F.R. §§ 88.3(c), 88.7(i)(3)).

The Rule authorizes OCR to conduct broad compliance reviews and “similar procedures,” as well as to initiate reviews based on information from a complaint “or other source”—including based on any indication of a “threatened or potential” failure to comply. The process to compel compliance is described by broad reference to three disparate administrative procedures as examples of enforcement powers. *See* 84 Fed. Reg. at 23272 (to be codified at 45 C.F.R. § 88.7(i)(3)) (“[C]ompliance . . . may be effected . . . pursuant to statutes and regulations which govern the administration of contracts (e.g., Federal Acquisition Regulation), grants (e.g., 45 C.F.R. Part 75) and Centers for Medicare and Medicaid Services funding arrangements (e.g., the Social Security Act).”).

As set forth below, the Rule is contrary to existing law, without authority from the statutes it purports to implement, fails to consider important policy as set forth in thousands of comments received and ignored, and violates the United States Constitution by elevating religious rights over other recognized rights, and placing impermissible conditions on recipients of federal funding.

### **LEGAL STANDARD**

A plaintiff seeking a preliminary injunction “must establish that: (1) it is likely to succeed on the merits; (2) it is likely to suffer irreparable harm without the preliminary injunction; (3) the balance of equities tips in its favor; and (4) the injunction is in the public interest.” *Mountain Valley Pipeline, LLC v. W. Pocahontas Properties Ltd. P’ship*, 918 F.3d 353, 366 (4th Cir. 2019) (quoting *Winter v. Nat. Res. Defense Council, Inc.*, 555 U.S. 7, 20 (2008)). Under the APA, a “reviewing court . . . may issue all necessary and appropriate process to postpone the effective date of an agency action.” 5 U.S.C. § 705. “The purpose of a preliminary injunction is merely to preserve the relative positions of the parties until a trial on the merits can be held.” *United States v. South Carolina*, 720 F.3d 518, 524 (4th Cir. 2013) (citation omitted). This remedy is available when “necessary to prevent irreparable injury.” 5 U.S.C. § 705.

### **ARGUMENT**

#### **I. Plaintiffs Are Likely to Succeed on the Merits of Their APA Claims.**

The APA requires that a “reviewing court shall . . . hold unlawful and set aside agency action” that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” “contrary to constitutional right, power, privilege, or immunity,” or “in excess of statutory jurisdiction, authority, or limitations.” 5 U.S.C. § 706(2)(A)–(C). The Rule violates the APA on each of these independent grounds.

**A. The Rule Is Not in Accordance with Law.**

The Rule violates multiple statutory provisions, including: the ACA’s non-interference and non-discrimination mandates, 42 U.S.C. §§ 18114, 18116, and the EMTALA’s mandate to provide emergency care, 42 U.S.C. § 1395dd, among others. The Rule must therefore be “held unlawful and set aside.” 5 U.S.C. § 706(2)(A).

**1. The Rule violates the ACA’s non-interference mandate.**

The Rule violates every provision of ACA Section 1554. The first three provisions of prohibit HHS from promulgating any regulation that “creates any unreasonable barriers to the ability of individuals to obtain appropriate medical care”; “impedes timely access to health care services”; or “limits the availability of health care treatment for the full duration of a patient’s medical needs.” 42 U.S.C. § 18114.

The creation of unreasonable barriers to access to health care is an inevitable and, indeed, contemplated result of the Rule. The Rule expressly states that “finalizing the rule is appropriate **without regard to whether data exists on the competing contentions about its effect on access to services**” and contends that this view “represents Congress’s considered judgment that these rights are worth protecting **even if they impact overall or individual access to a particular service**, such as abortion.” 84 Fed. Reg. at 23182 (emphasis added). Medical groups and numerous individual physicians have denounced the Rule as a violation of basic medical ethics. *See infra* Section I.C.2. Courts have found public commentary probative, at the preliminary injunction stage, of whether a regulation violates ACA § 1554. *See Mayor & City Council of Baltimore v. Azar*, No. 19-cv-1103-RDB, 2019 WL 2298808, at \*9 (D. Md. May 30, 2019).

HHS wrongly contended that there is “insufficient evidence to conclude that conscience protections have negative effects on access to care.” 84 Fed. Reg. at 23251 & n.345. The White Paper HHS cites for this proposition itself recognizes that “conscientious objection ... is **one of**

**many** barriers to reproductive healthcare.” *Id.* (emphasis added). The White Paper states that health care providers should take steps to mitigate these barriers to access by “disclosure to employers and patients, and duties to refer, to impart accurate information, to provide urgently needed care.” Sangree Decl., Ex. D (Wendy Chavkin, et al., “Conscientious Objection and Refusal to Provide Reproductive Healthcare: A White Paper Examining Prevalence, Health Consequences’ and Policy Responses.” 123 Int’l J. Gynecol. & Obstet. 3 at S53 (2013)). The Rule not only fails to implement these disclosure and referral obligations; it affirmatively prohibits them. HHS cannot turn a blind eye to the evidence that the Rule will impede timely access to care and impose unreasonable barriers. *See also* Dzirasa Decl. ¶ 24; Dineen Decl. ¶¶ 79–83; Greenbaum Decl. ¶ 80; Matz Decl. ¶¶ 12–15.

HHS also acknowledges that “in some circumstances, some patients do experience emotional distress as a consequence of providers’ exercise of religious beliefs or moral convictions” but declines to “weigh such emotional distress against the right to abide by one’s conscience.” 84 Fed. Reg. at 23251. This response ignores that when “a provider in declining for reasons of religious belief or moral conviction to perform an objected-to service or procedure . . . express[es] disapprobation of the patient, especially regarding his or her personal identity or personal conceptions of morality,” *id.*, that disapprobation inevitably acts as a barrier to health care in vulnerable communities, in violation of ACA § 1554. Dzirasa Decl. ¶¶ 25–26; Dineen Decl. ¶¶ 8, 85; Greenbaum Decl. ¶ 80.

The next three provisions of Section 1554 prohibit rulemaking that “restricts the ability of health care providers to provide full disclosure of all relevant information to patients making health care decisions” or “violates principles of informed consent and the ethical standards of health care professionals.” 42 U.S.C. § 18114. The Rule’s allowance for anyone “assist[ing] in the

performance of any lawful health service” to deny care, including “counseling” or “referral,” 84 Fed. Reg. at 23263, 23265, will “restrict[] the ability of health care providers to provide full disclosure,” violating the ACA. *See California v. Azar*, 19-cv-01184-EMC, 2019 WL 1877392, at \*24 (N.D. Cal. Apr. 26, 2019) (HHS likely violated Section 1554 where Title X rule “obfuscate[s] and obstruct patients from receiving information and treatment for their pressing medical needs”); *Baltimore v. Azar*, 2019 WL 2298808, at \*9 (“Baltimore City has shown that the Final Rule [implementing Title X] likely violates the ACA § 1554 by creating unreasonable barriers for patients to obtain appropriate medical care.”).

## **2. The Rule violates EMTALA.**

The Rule gives short shrift to EMTALA, noting only that “where EMTALA might apply in a particular case, the Department would apply both EMTALA and the relevant law under this rule harmoniously to the extent possible.” 84 Fed. Reg. at 23188. The Rule contains no directive as to how or even whether emergency care is to be provided when it conflicts with the categorical refusal-of-care right that the Rule purports to confer on employees. Instead the Rule offers vague direction that whether refusals are permitted “would depend on the facts and circumstances.” *Id.* at 23263.

The uncertainty of the Rule, with the possibility of draconian sanctions for noncompliance, is utterly unworkable in practice, particularly in the context of a medical emergency. Matz Decl. ¶¶ 9–10. First responders cannot make advance accommodations for employee refusals, because the work is unpredictable by nature, and there is no room for staff redundancy on lean mobile response teams. *Id.* at ¶¶ 13–14; *see also* Greenbaum Decl. ¶ 14. Refusals of service at the scene of an emergency call would put patients’ lives at risk and would violate the basic ethical duty never to abandon a patient. Matz Decl. ¶¶ 12, 15. Yet, under the Rule, failure to permit employees to refuse to provide care at the scene could result in catastrophic funding cuts, and a corresponding

decrease in services that would also mean lives lost. *Id.* at ¶ 16. By purporting to extend rights to ambulance drivers among other emergency providers, 84 Fed. Reg. at 23263, without any express exception for emergencies, the Rule directly conflicts with EMTALA.

**3. The Rule violates the ACA non-discrimination mandate.**

The Rule is also unlawful because it appears to permit providers to exclude patients from full and equal healthcare benefits and services, and to permit providers and other healthcare personnel to discriminate on the basis of sex and disability. Section 1557 of the ACA prohibits discrimination under any health program or activity on the basis of classifications listed in four federal civil rights statutes: Title VI of the Civil Rights Act of 1964 (race, color, and national origin); Section 504 of the Rehabilitation Act of 1973 (disability); Title IX of the Education Amendments of 1972 (sex), and the Age Discrimination Act of 1975 (age). 42 U.S.C. § 18116(a).

Whereas the 2008 rule confirmed that it did not authorize prohibited discrimination under federal civil rights laws, the present Rule contains no such assurance. *See* 73 Fed. Reg. 78072 at 78080 (Dec. 19, 2008) (“emphasiz[ing] that the health care conscience protection laws exist as one part of a number of federal laws that address discrimination on a variety of grounds, and that the actions described in the hypothetical situations that violate federal civil rights laws, continue to violate federal civil rights laws.”). On the contrary, in response to a public comment that the Rule would negatively impact referral and counseling for LGBTQ persons, HHS did not disagree, but instead stated: “The Department does not pre-judge matters without the benefit of specific facts and circumstances, and particular claims under 42 U.S.C. § 300a–7(d) will be evaluated on a case-by-case basis.” 84 Fed. Reg. at 23189. The Rule’s encouragement of discrimination violates ACA § 1557.

**B. The Rule Exceeds Statutory Authority.**

Congress did not delegate to HHS the authority to elevate religious, moral, and other objections over health care rights, civil rights, and existing enforcement mechanisms for conscience rights. Nor did Congress delegate the authority to put at risk a sweeping range of federal funding untethered to the goals of the Rule. Federal agencies “literally [have] no power to act . . . unless and until Congress confers power upon” them. *La. Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 374 (1986); *see also* 5 U.S.C. § 706(2)(C).

**1. Congress did not delegate to OCR the Rule’s broad enforcement power.**

Through the Rule, HHS “provides robust certification and enforcement provisions” and “sets forth in more detail the investigative and enforcement responsibility of OCR.” *See* 84 Fed. Reg. at 23179. Nothing in any federal statute authorizes the Rule’s extraordinarily broad and vague enforcement scheme authorizing HHS to withhold, deny, suspend, or terminate millions of dollars in federal health care funds to the City if, in OCR’s determination, there is a failure by the City or its subgrantees to comply with the Rule or any of the underlying statutes. Yet that is the authority HHS asserts. *See* 84 Fed. Reg. at 23271–72 (to be codified at Section 88.7(i)(3)(i)–(vii)).

Agency action is invalid when it attempts to alter or add additional criteria beyond those in the governing statute. *See Cent. United Life Ins. Co. v. Burwell*, 827 F.3d 70, 72–73 (D.C. Cir. 2016) (rejecting rule that “amend[ed] the criteria” under the ACA regarding excepted benefits). *See also Ragsdale v. Wolverine World Wide, Inc.*, 535 U.S. 81, 97 (2002) (An agency exceeds its authority if it issues a regulation that “effects an impermissible alteration of the statutory framework.”). The Rule’s implementation of specific penalties for noncompliance with two dozen laws, 84 Fed. Reg. at 23272, is unmoored from any statutory text. Although the Weldon Amendment purports to strip noncompliant entities of federal funding under specifically delineated circumstances, nothing in that law or elsewhere, supports the sweeping enforcement powers

asserted in the Rule. And nothing in the Weldon Amendment permits the conclusion that Congress authorized use of those enforcement mechanisms to enforce entirely different statutes.

**2. The Rule expands definitions beyond any scope authorized by statute.**

The Rule also exceeds statutory authority through its expansive definitions of terms—definitions that go well beyond anything in the statutes. For example, the Rule defines “assist in the performance” to mean “to take an action that has a specific, reasonable, and articulable connection to furthering a procedure,” which “may include counseling, referral, . . . or otherwise making arrangements for the procedure . . . depending on whether aid is provided by such actions.” 84 Fed. Reg. at 23263 (to be codified at 45 C.F.R. § 88.2). In addition to the broad sweep of the phrase “articulable connection,” the term “making arrangements” suggests that minor, incidental, and purely administrative tasks could qualify. The Rule confirms that “preparing a room for an abortion or scheduling an abortion” are covered. 84 Fed. Reg. at 23186. HHS further confirmed the definition’s expansive sweep by stating that “assist in the performance” covers “EMTs and paramedics” and could apply to “ambulance crews”—though it “declines to take . . . a categorical approach” regarding these employees. *Id.* at 23188. The Rule thus leaves the requirements so vague that recipients of federal funds will be required to guess at which employees must be permitted to opt out of which tasks relating to provision of, for example, service to a woman with an ectopic pregnancy in need of transportation to the hospital and possibly an emergency abortion.

Additionally, the Rule’s definitions expand the right to deny care well beyond the direct medical care and research contemplated in the statutes that HHS purports to enforce. The Rule defines “health care entity” to extend beyond “health care personnel” to include as an “illustrative, not exhaustive” list: pharmacists, pharmacies, medical laboratories, and research facilities; and, for purposes of the Weldon Amendment, health-insurance issuers, health-insurance plans, plan sponsors, and third-party administrators. 84 Fed. Reg. at 23264. This definition is far broader than

the specific definitions of “health care entity” contained in the Coats-Snowe Amendment, *see* 42 U.S.C. § 238n(c)(2) (“an individual physician, a postgraduate physician training program, and a participant in a program of training in the health professions”), or the Weldon Amendment, *see* Pub. L. No. 115-245, § 507(d)(2), 132 Stat. at 3118 (“an individual physician or other health care professional, a hospital, a provider-sponsored organization, a health maintenance organization, a health insurance plan, or any other kind of health care facility, organization, or plan”). And the Rule’s definition of “health care entity” appears to expand the applicable statutes beyond recognition, to permit objections by human-resources analysts, customer-service representatives, data-entry clerks, and numerous others who believe that analyzing benefits, answering a benefits-related question, or entering a particular preauthorization for an objected-to procedure, for example, would be inconsistent with their personal beliefs.

The Rule also defines “referral or refer for” broadly to mean “the provision of information in oral, written, or electronic form . . . where the purpose or reasonably foreseeable outcome of provision of the information is to assist a person in receiving funding or financing for, training in, obtaining, or performing a particular health care service, program, activity, or procedure.” 84 Fed. Reg. at 23264. Even the posting of notices is considered a “referral.” *Id.* The provision of referrals for abortions is an essential service provided in the City’s reproductive health care clinics, Dineen Decl. ¶¶ 31, 72. Yet, the Rule appears to permit employees to refuse even to provide information on all options, when requested.

Agency action is unreasonable if it would bring about “an enormous and transformative expansion in [the agency’s] regulatory authority” without clear congressional authorization. *Util. Air Regulatory Grp. v. E.P.A.*, 573 U.S. 302, 134 S. Ct. 2427, 2432 (2014) (agency action was unreasonable where the Act made clear that it was designed to apply to, and could not be extended

beyond a “handful” of sources). “When an agency claims to discover in a long-extant statute an unheralded power to regulate a significant portion of the American economy, we typically greet its announcement with a measure of skepticism. We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance.” *Id.* at 2444. Here, Congress has not assigned to HHS authority to transform the delivery of health care to patients and to redefine and implement two dozen statutes—it certainly has not done so “clearly.” The Rule exceeds statutory authority.

**C. The Rule Is Arbitrary and Capricious.**

The Rule is arbitrary and capricious because HHS failed to “give adequate reasons for [their] decisions.” *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016). The agency’s decision-making “must be logical and rational,” *Allentown Mack Sales & Service, Inc. v. NLRB*, 522 U.S. 359, 374 (1998); it must be both “reasonable and reasonably explained.” *Mfrs. Ry. Co. v. Surface Transp. Bd.*, 676 F.3d 1094, 1096 (D.C. Cir. 2012) (Kavanaugh, J.). Likewise, agency rulemaking is arbitrary and capricious if, in coming to its decision, the agency “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983).

**1. HHS failed to justify departure from prior policy.**

When an agency departs from a prior policy, it must “display awareness that it is changing position,” show that “there are good reasons” for the reversal, and demonstrate that its new policy is “permissible under the statute.” *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009). A more “detailed justification” is needed when “serious reliance interests” are at stake. *Id.*;

*accord Encino Motorcars*, 136 S. Ct. at 2126 (“In explaining its changed position, an agency must also be cognizant that longstanding policies may have engendered serious reliance interests that must be taken into account.”) (citation omitted). The Rule’s significant departure from the policy of the 2011 rule will impact the delivery of health care nationwide and the administration of programs accepting federal funds.

The sole justification for this departure is the receipt of 34 complaints of alleged violations of conscience interests from 2016 to 2018—a purported spike from the preceding 8 years, and a total of 44 complaints in 10 years. 83 Fed. Reg. at 3886. The Proposed Rule detailed OCR’s handling of the complaints and identified no deficiencies in their handling or resolution. *Id.* An administration change does not authorize an unreasoned reversal of course. *State v. U.S. Bureau of Land Mgmt.*, 277 F. Supp. 3d 1106, 1123 (N.D. Cal. 2017) (a new administration must give reasoned explanations for a policy change and address the findings underpinning a prior rule); *see also Baltimore v. Azar*, 2019 WL 2298808, at \*11 (“[W]here, as here, an agency adopts a rule that directly contradicts prior agency conclusions of fact and law, it must acknowledge that it is doing so and give a reasonable justification for the change.”).

## **2. HHS failed to consider harm to patient health.**

The Rule is arbitrary and capricious for the additional reason that HHS “entirely failed to consider an important aspect of the problem,” *State Farm*, 463 U.S. 29, 43 (1983), and “explain[ed] its decision in a manner contrary to the evidence before it,” *Ergon-W. Virginia, Inc. v. EPA*, 896 F.3d 600, 613 (4th Cir. 2018). To comply with Section 706(2)(A), an agency “must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *State Farm*, 463 U.S. at 43 (citation omitted); *Kravitz v. United States Dep’t of Commerce*, 366 F. Supp. 3d 681, 746–47 (D. Md. 2019) (finding agency action arbitrary and capricious where the agency’s “post-hoc explanation is still

contradicted by the Administrative Record and lacking foundation in the facts.”). Despite the substantial funding and critical programs at risk, HHS failed to engage in reasoned decisionmaking, relying instead on conclusory and unsubstantiated statements. Given the “serious reliance interests at stake,” HHS’s “conclusory statements do not suffice to explain its decision.” *Encino Motorcars*, 136 S. Ct. at 2127.

HHS received more than 242,000 public comments in response to the Proposed Rule, 84 Fed. Reg. at 23,180 & n.41, including comments from a broad array of major medical associations, academics, other experts, hospitals, state and local governments, reproductive-rights organizations, children’s rights organizations, disease advocates, civil-liberties organizations, academics, and individuals. The commenters raised substantial concerns that the Rule will limit access to health care, especially in the LGBTQ community and among women seeking reproductive health care. *See also* Dzirasa Decl. ¶ 6 (describing populations served by BCHD clinics. An agency must address “significant” comments or those “which, if true, raise points relevant to the agency’s decision.” *City of Portland v. EPA*, 507 F.3d 706, 715 (D.C. Cir. 2007); Yet HHS simply ignored a multitude of significant comments, in contravention of that mandate. For example:

- The American Medical Association commented that the Proposed Rule “would undermine patients’ access to medical care and information, impose barriers to physicians’ and health care institutions’ ability to provide treatment, impede advances in biomedical research, and create confusion and uncertainty among physicians, other health care professionals, and health care institutions about their legal and ethical obligations to treat patients.”<sup>4</sup>

---

<sup>4</sup> American Medical Association Comment Ltr. (Mar. 27, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-70564>.

- The Association of American Medical Colleges explained that the Proposed Rule is incongruous with medical professionalism and that it will harm lower-income Americans, racial and ethnic minorities, the LGBTQ community, and patients in rural areas.<sup>5</sup>
- The American College of Emergency Physicians, on behalf of its 37,000 members, concluded that “[d]enial of emergency care or delay in providing emergency services on the basis of race, religion, sexual orientation, gender identity, ethnic background, social status, type of illness, or ability to pay, is unethical.”<sup>6</sup>
- The American Hospital Association objected that the Rule’s overbroad and expanded definitions risk creating unintended consequences for patient care and run counter to hospital policies not to discriminate in the delivery of emergency, urgent, and necessary care on the basis of a patient’s race, color, national origin, citizenship, alienage, religion, creed, sex, sexual orientation, gender identity, age, or disability.<sup>7</sup>
- The American Nurses Association and the American Academy of Nursing expressed concerns that the Proposed Rule would “lead to inordinate discrimination against certain patient populations—namely individuals seeking reproductive health care services and [LGBTQ] individuals.” This proliferation of discrimination could “result in reduced access

---

<sup>5</sup> Association of American Medical Colleges Comment Ltr. (Mar. 26, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-67592>.

<sup>6</sup> American College of Emergency Physicians Comment Ltr. (Mar. 27, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-71219>

<sup>7</sup> American Hospital Association Comment Ltr. (Mar. 26, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-65761>.

to crucial and medically necessary health care services and the further exacerbation of health disparities between these groups and the overall population.”<sup>8</sup>

- Physicians for Reproductive Health warned that the Proposed Rule unlawfully exceeds HHS’s authority by impermissibly expanding federal conscience laws, creates barriers to health care and exacerbates already existing inequities, and will cause severe consequences for providers while undermining the provider-patient relationship.<sup>9</sup>
- The National Association of Councils on Developmental Disabilities opposed the Proposed Rule because it would “introduce broad and poorly defined language,” is “vague and confusing,” and “[m]ost important, . . . the regulations fail to account for the significant burden that will be imposed on patients, a burden that will fall disproportionately and most harshly on women, people of color, people living with disabilities, and [LGBTQ] individuals. These communities already experience severe health disparities and discrimination, conditions that will be exacerbated by the proposed rule, possibly ending in in poorer health outcomes.”<sup>10</sup>

HHS’s conclusory non-response to the public comments is that the Rule could just as easily increase access to healthcare as decrease it—an assertion that is not only unsubstantiated but also contradicted by the evidence in the administrative record. Specifically, the agency says that it “expects any decrease in access to care to be outweighed by significant overall increases in access generated” by the Rule because the Rule will supposedly allow objecting practitioners to continue

---

<sup>8</sup> American Nurses Association and the American Academy of Nursing Comment Ltr. (Mar. 23, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-55870>.

<sup>9</sup> Physicians for Reproductive Health Comment Ltr. (Mar. 28, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-71284>.

<sup>10</sup> National Association of Councils on Developmental Disabilities Comment Ltr. (Mar. 22, 2018), <https://www.regulations.gov/document?D=HHS-OCR-2018-0002-66494>.

in the practice of medicine (or to enter the field). 84 Fed. Reg. at 23252 & n.347. The sole evidence to which the agency points, however, is an advocacy group’s decade-old, online survey of members of faith-based organizations, a large percentage of which said they were “very” or “somewhat” likely to limit the scope of their practice if a 2008 conscience rule was rescinded.<sup>11</sup> *Id.* HHS cites no evidence (1) that survey results for members of **faith-based** medical organizations are representative, (2) that the online survey even attempted methodological rigor, including adjusting for biases in the population surveyed and the subset that responded, or (3) that there was any actual decrease in access to care—much less an exodus of providers—when the 2008 rule was rescinded. *See id.*

It was unreasonable for HHS to credit an outdated, unrepresentative, and speculative survey and to disregard the overwhelming evidence, in detailed comments from the nation’s major medical organizations, raising grave concerns about the legality and reasonableness of the proposed regulation and opining that the Rule will significantly decrease access to care. HHS’s determination that the Rule will increase access straightforwardly “runs counter to the evidence before the agency” and is therefore arbitrary and capricious. *State Farm*, 463 U.S. at 43; *see also California*, 2019 WL 1877392 at \*38 (rejecting Defendants’ unsubstantiated claims that other providers are “waiting in the wings” to fill the void left by their Title X rule).

---

<sup>11</sup> The survey was fielded March 31, 2009 to April 3, 2009 and was extremely limited: it was completed by 2,865 members of the Christian Medical and Dental Association (CMDA), 400 members of the Catholic Medical Association (CMA), 69 members of the Fellowship of Christian Physicians Assistants, 206 members of the Christian Pharmacists Fellowship International, and 8 members of Nurses Christian Fellowship. <https://www.freedom2care.org/polling>. The poll was taken again in May 2011, *id.*, and, again, there is no evidence of any decrease in care.

**D. The Rule Is Unconstitutional.**

Agency action is invalid under the APA if it is contrary to constitutional right, power, privilege or immunity. 5 U.S.C. § 706(2)(B). The Rule violates the Constitution's Establishment Clause and Spending Clause. It is therefore invalid.

**1. The Rule violates the Establishment Clause.**

The Establishment Clause bars official conduct that favors one faith over others, has the primary purpose or primary effect of advancing or endorsing religion, or coerces religious belief or practice. *See, e.g., McCreary Cty. v. ACLU of Ky.*, 545 U.S. 844, 860 (2005); *Santa Fe Indep. Sch. Dist. v. Doe*, 530 U.S. 290, 302 (2000). The Rule officially prefers the religious beliefs of objectors over the rights and beliefs of providers and patients, and it coerces religious exercise by requiring providers and patients to act in accordance with objecting employees' religious beliefs. The Rule's favoritism toward religious beliefs invoked by objecting employees is subject to strict scrutiny. *See Larson v. Valente*, 456 U.S. 228, 246 (1982). The Rule cannot survive that, or any, scrutiny because, among other reasons, there are obvious less-restrictive alternatives for accommodating objecting employees, including existing policies that the City, its subgrantees, and other healthcare entities nationwide already employ.

**a) The Rule impermissibly imposes the costs and burdens of employees' religious beliefs on patients and other third parties.**

The Rule violates the Establishment Clause because it imposes costs, burdens, and harms on health care providers and patients for the purpose of facilitating the religious beliefs and practices of objecting employees. The Establishment Clause prohibits religious exemptions or accommodations by government that would have a "detrimental effect on any third party." *Burwell v. Hobby Lobby Stores, Inc.*, 134 S. Ct. 2751, 2781 n.37 (2014); *see also Cutter v. Wilkerson*, 544 U.S. 709, 720 (2005). That is because religious exemptions that burden third parties impermissibly

prefer the religion of those who are benefited over the beliefs and interests of those who are not. *See, e.g., Texas Monthly, Inc. v. Bullock*, 489 U.S. 1, 15 (1989) (plurality opinion).

The prohibition against harming third parties is well-settled. In *Estate of Thornton v. Caldor*, 472 U.S. 703 (1985), the Court invalidated a state law requiring employers to accommodate people observing the Sabbath in all instances, because “the statute t[ook] no account of the convenience or interests of the employer or those of other employees who do not observe a Sabbath.” *Id.* at 709; *see also Texas Monthly*, 489 U.S. at 15, 18 n.8 (plurality opinion) (invalidating tax exemption for religious periodicals because it increased taxes on nonbeneficiaries); *cf. Sherbert v. Verner*, 374 U.S. 398, 409 (1963) (permitting religious accommodation for employee who was fired for refusing to work on her Sabbath because it would not “abridge any other person’s religious liberties”).

In evaluating Establishment Clause challenges, courts must “account [for] the burdens a requested accommodation may impose on nonbeneficiaries” and ensure that the accommodation does not “override other significant interests.” *Cutter*, 544 U.S. at 720, 722. The City and Maryland have laws and policies, consistent with existing federal law, to ensure that they can deliver care to their patients while also respecting employees’ religious beliefs.<sup>12</sup> *See* Dzirasa Decl. ¶¶ 15–19. The Rule undermines essential patient protections by inviting employees, contractors, and volunteers of health care institutions to deny care to patients based on religious, moral, or other objections

---

<sup>12</sup> For example, Maryland law prohibits employers from discriminating against any individual with respect to religion, except when providing a notice or advertisement indicating a bona fide occupational qualification for employment, *see* Md. Code Ann., State Gov’t § 20-606; and provides that a person may not be required “to perform or participate in, or refer to any source for, any medical procedure that results in artificial insemination, sterilization, or termination of pregnancy,” except insofar as “the failure to refer a patient to a source for any medical procedure that results in sterilization or termination of pregnancy” would be the cause of death or serious physical injury or serious long-lasting injury to the patient or otherwise contrary to the standards of medical care, Md. Code. Ann., Health Gen. § 20-214.

either to the treatment or to the characteristics or circumstances of the patient, without regard to the burdens and harms they will impose on patients and providers.

The Rule hamstring the City's ability to make appropriate accommodations for objecting providers, and hence refusals will result in delays or denials of care. As set forth in Section II, *infra*, the Rule's elevation of certain religious rights over all else places the City in an impossible bind—no matter whether the City complies with the Rule or forgoes federal funding, Baltimore residents, the City fisc, and the City's public health will be unreasonably burdened and suffer significant harm. *See* Dzirasa ¶¶ 25–28, 31; Greenbaum ¶¶ 83–86; Dineen ¶ 81–89; Matz Decl. ¶¶ 9–16; *see also infra* Section II (discussing irreparable harm); Section I.C.2 (comments discussing harm to vulnerable populations). The Rule thus violates the Establishment Clause's prohibition against governmental mandates under which “religious concerns automatically control over all secular concerns.” *Caldor*, 472 U.S. at 709.

**b) The Rule impermissibly coerces patients and health care providers to adhere to the government's favored religious practices**

The Rule also impermissibly uses the government's authority to coerce the City and its patients to act in accordance with the religious beliefs and practices of objecting employees. “[T]he Constitution guarantees that government may not coerce anyone to support or participate in religion or its exercise.” *Lee v. Weisman*, 505 U.S. 577, 587 (1992); *see Santa Fe*, 530 U.S. at 312. Yet the Rule allows individual employees to dictate whether and how patients receive health care based on their own personal religious views. That is true even when those beliefs are expressly contrary to the mission of the BCHD and its programs or the patient's own beliefs. For example, women who seek reproductive health care at a clinic that provides family-planning services may be denied care based on the religious views of a single employee, or they may receive skewed

advice based on the employee's religious beliefs rather than medical protocol. *See* Dineen Decl. ¶ 86. This violates the Establishment Clause.

**2. The Rule violates the Spending Clause.**

Under the Spending Clause, U.S. Const., art. I, § 8, cl. 1, Congress must not impose conditions on federal funds that are (1) so coercive that they compel (rather than encourage) recipients to comply, (2) ambiguous, (3) retroactive, or (4) unrelated to the federal interest in a particular program. *Nat'l Fed'n of Indep. Bus. v. Sebelius* (“*NFIB*”), 567 U.S. 519, 575–78 (2012); *S. Dakota v. Dole*, 483 U.S. 203, 206–08 (1987). Conditioning the City's receipt of federal funds on compliance with the Rule would violate all these limitations.

**a) The Rule is unconstitutionally coercive.**

The Rule threatening to strip all federal funding if OCR deems the Rule violated is an unconstitutionally coercive “gun to the head.” *NFIB*, 567 U.S. at 581. Because federal funding accounts for approximately 50% of BCHD's budget and 75% of Fire/EMS's budget—the threatened loss of federal funding leaves the City “with no real option but to acquiesce.” *Id.* at 581–82. The Rule threatens not only Medicaid funding, as in *NFIB*, but all federal funding, under a vast array of health, education, and employment programs, including over half the funds for BCHD. *Id.* at 581–82. *See* Dzirasa Decl. ¶ 3; Greenbaum Decl. ¶ 22; Dineen Decl. ¶ 28; Matz Decl. ¶ 6. Hence, the Rule violates the Spending Clause: Congress may not “penalize [recipients] that choose not to participate in [a] new program by taking away their existing [ ] funding.” *NFIB*, 567 U.S. at 585.

The Rule's unbounded enforcement authority, *see* 84 Fed. Reg. at 23272, which expands the Weldon Amendment's context-specific (that is, limited to abortion) consequences to two dozen now-expanded federal conscience laws across the range of health care service, and the vague scope of the Rule's mandate, both multiply the Rule's coercive effect. Given the millions of dollars in

funding at stake, the loss of which would decimate the delivery of health care to one of the country's most vulnerable cities, the Rule constitutes "economic dragooning" rather than "relatively mild encouragement" to comply. *See NFIB*, 567 U.S. at 581–82. For that reason, the City is likely to succeed in showing that the Rule is unconstitutionally coercive.

**b) The Rule is unconstitutionally ambiguous.**

Additionally, if Congress desires to condition the States' receipt of federal funds, it "must do so unambiguously." *Pennhurst State Sch. & Hosp. v. Halderman*, 451 U.S. 1, 17 (1981). "[L]egislation enacted pursuant to the spending power is much in the nature of a contract; in return for federal funds, the States agree to comply with federally imposed conditions." *Id.* "There can, of course, be no knowing acceptance if a State is unaware of the conditions or is unable to ascertain what is expected of it." *Id.* The Rule's expansive and vague definitions, untethered to prior constructions of the relevant statutes, give entities seeking to comply little to no guidance on what is expected. For example, the Rule purports to allow any "health care personnel" to refuse to provide medical care or to perform any action that has an "articulable connection" to furthering a procedure on the basis of religious, ethical, or "other reasons," without providing any information to the patient about the patient's medical condition or treatment options. 84 Fed. Reg. at 23263. HHS compounds this ambiguity by responding to comments seeking clarity about the Rule's scope by saying that the issues must be resolved on a case-by-case basis depending on the facts and circumstances. *Id.* at 23188, 23189, 23205. The City cannot make knowing choices about its conduct with respect to treatment of providers' denials of care to vulnerable residents and the limitations on the City's policies and actions that come with federal funding when HHS refuses to make clear what those limitations are.

In addition, the Rule makes the City responsible for policing its subgrantees' compliance. 84 Fed. Reg. at 23180 ("[R]ecipients are responsible for their own compliance with Federal

conscience and anti-discrimination laws and implementing regulations, as well as for ensuring their sub-recipients comply with these laws.”). Thus, the City could be found in violation of the Rule if a sub-grantee is found in violation, regardless of whether the City was put on notice of such violation. The Spending Clause does not allow such an outcome. *See Smith v. Metro. Sch. Dist. Perry Twp.*, 128 F.3d 1014, 1030 (7th Cir. 1997) (holding that “[t]o impute liability to a program or activity” based on one person’s actions, “even if [the government entity] acted without notice” of the person’s actions, “cannot be used to support a monetary award in a Spending Clause case”); *Rosa H. v. San Elizario Indep. Sch. Dist.*, 106 F.3d 648, 654 (5th Cir. 1997) (“As a statute enacted under the Spending Clause, Title IX should not generate liability unless the recipient of federal funds agreed to assume the liability.”). Terminating the City’s funding based on the conduct of third-party subgrantees, as the Rule purports to do, would create such an unsure stream of funding that it would be financially paralyzing for the City. Greenbaum Decl. ¶¶ 76–78 (discussing City’s reliance on small sub-grantees).

**c) The Rule imposes unconstitutional retroactive conditions.**

Relatedly, the federal government cannot “surpris[e] participating States with post-acceptance or ‘retroactive’ conditions.” *NFIB*, 567 U.S. at 582–83 (requirement violated where the Medicaid expansion was a shift not merely in degree, but in kind, even where Congress had authority to “alter, amend, or repeal” the laws). City agencies accept and plan for the receipt of federal funding with the expectation that they will receive the funds under existing agreements—and in accordance with the terms and conditions of existing federal programs. *See Healthy Teen Network v. Azar*, 322 F. Supp. 3d 647, 654–55 (D. Md. 2018) (noting that multi-year agreements “give the grantee organization some assurance that . . . they can plan for the necessary staff and facilities to carry out the grant’s purpose). The BCHD and Fire/EMS programs would be crippled by being unable to expend anticipated funds because they cannot absorb such a loss of funding

without a reduction in staffing, programs, and services. *See* Dzirasa Decl. ¶ 31; Matz Decl. ¶ 12. And the situation for the City is all the more untenable because of HHS’s insistence that it can and will define what constitutes a violation only after the fact, in retrospective enforcement proceedings.

**d) The Rule lacks a nexus to the federal funds it threatens.**

Finally, the Spending Clause requires that funding conditions “bear some relationship to the purpose of the federal spending,” *New York v. United States*, 505 U.S. 144, 167 (1992), and be “reasonably calculated” to address the “particular . . . purpose for which the funds are expended,” *Dole*, 483 U.S. at 208–09. “Conditions on federal grants might be illegitimate if they are unrelated to the federal interest in particular national projects or programs.” *Id.* at 207 (quotations omitted). The Rule places various federal grants and reimbursements—such as those for HIV/STD prevention, emergency health care and transport, and reproductive health care—at risk even though the purposes of those statutes are wholly unrelated to the protection of conscience objections. The Rule purports even to jeopardize funding for the City’s labor and educational programs—programs with no relationship whatsoever to the Rule’s health care conscience restrictions.

**II. The City and Its Residents Will Suffer Irreparable Injury.**

The City and its residents will suffer ongoing and irreparable harm if the Rule is allowed to take effect on July 22, 2019. “[A] party seeking a preliminary injunction must prove that he or she is ‘likely to suffer irreparable harm in the absence of preliminary relief.’” *Pashby v. Delia*, 709 F.3d 307, 328 (4th Cir. 2013) (quoting *Winter*, 555 U.S. at 20). In this Circuit, there is irreparable injury when a movant makes a “clear showing” of “actual and imminent” harm that “cannot be fully rectified by the final judgment after trial,” including economic harms if damages are not recoverable or could not undo a permanent harm resulting from a temporary loss of funds.

*Mountain Valley Pipeline, LLC v. 6.56 Acres of Land, Owned by Sandra Townes Powell*, 915 F.3d 197, 216–18 (4th Cir. 2019).

If the Rule goes into effect, the City will have two choices: (1) attempt to comply with the Rule and allow its employees to refuse to provide care, resulting in the unethical practice of medicine and endangering the lives of patients and residents, or (2) fail to comply and disproportionately risk losing crucial federal funding, which would cripple the City’s ability to provide critical care to its most vulnerable populations. No matter what the City decides, the Final Rule will cause irreparable harm. *See* Dzirasa Decl. ¶¶ 28–31; Matz Decl. ¶¶ 9–16.

**A. Baltimore Will Suffer Irreparable Harm If It Attempts to Comply.**

If the City attempts to comply with the Rule, its medical providers would be forced to contravene their ethical obligations to provide patient-centered care. BCHD and Fire/EMS lack the resources to comply with the Rule without leaving gaps in health care—gaps that will inevitably result in the provision of inferior care and worse health outcomes, and will greatly harm the City’s public health mission.

**1. The City cannot comply with the Rule without sacrificing quality of care.**

Harm to the provider-patient relationship inherent in forcing a medical provider to give—and a patient to receive—care that falls below the standard required by professional ethics and best practices is irreparable. *See, e.g., Baltimore v. Azar*, 2019 WL 2298808, at \*12 (*citing Richmond Med. Ctr. for Women v. Gilmore*, 11 F. Supp. 2d 795, 809 (E.D. Va. 1998) (irreparable injury where physicians would be “constrained to alter their medical advice to, and their medical care of, their patients contrary to their best judgments”); *McGlothlin v. Connors*, 142 F.R.D. 626, 642 (W.D. Va. 1992) (“[T]he threat of future denial of health benefits represents a sufficient direct threat of personal detriment.”) (citation omitted)). The Rule’s unqualified refusal rights would

undermine the practical ability to provide prompt, non-discriminatory care in conformance with professional standards. Employee refusals under the Rule will result in denials of timely care to Baltimore residents, in City programs and elsewhere, and will hamper the City's delivery of quality health care, which will result in significant harm for individual patients and for public health at the population level.

### **BCHD**

The Rule will be costly, if not impossible for BCHD to administer, which will result in gaps in services. Greenbaum Decl. ¶¶ 73–75. Employees of BCHD clinics perform work that is highly targeted and involves the same types of services every day. *Id.* ¶ 73. Therefore, a provider or staff member objecting to assisting in the provision of a service or to helping a particular patient demographic would necessarily refuse to perform a significant portion of his or her job duties. *Id.* Without being able to fill that position with someone willing to perform critical job duties, BCHD's only alternative would be to double-staff the clinics. *Id.* Adding such redundancy is financially impossible, as the City's clinical and other programs are already understaffed and underfunded. *Id.*; Dineen Decl. ¶ 80.

The City's hiring processes for health care workers make it uniquely vulnerable to harm from the Rule's mandate to accommodate objectors above all else. Most City job openings are listed on a central City Human Resources Department website and describe the open positions in general terms. Greenbaum Decl. ¶ 14. Applicants learn of the specific job duties of the position and the services that they would be asked to provide only during the interview for the position. Thus, applicants who would object to providing certain services or treating some subpopulations might not know that a job to which they were applying required them to perform objected-to services for objected-to patients until at least partway through the hiring process. *Id.*

Unlike at many private clinics whose mission statements make explicit that they are devoted to serving historically underserved or stigmatized populations or to providing health procedures that some other providers might find objectionable, applicants to BCHD, Fire/EMS, and other City health care entities may not share in or even know of the City's public health mission, and may bring with them any number of religious, moral, or personal views about individual choices, minority groups, or health care procedures. A rule requiring the City to hire persons to perform services that those individuals have no intention of performing would be unworkable.

An added hurdle to staffing is the specialized training requirements in some of BCHD's clinics. Greenbaum Decl. ¶ 74. To prescribe buprenorphine, for example, medical professionals are legally required to undergo specialized training. *Id.* And once certified, providers may treat only up to a maximum number of patients depending on the level of certification. *Id.* Similarly, TB treatment is highly specialized, and new nurses must train for up to six months before they can provide the full spectrum of care for TB patients. *Id.* Providers at the reproductive health clinics must also complete specialized training in order to prescribe and administer long-acting reversal contraceptives. *Id.* Thus, even if funding could be secured, accommodating staff refusals in these clinics would create a gap in services before new staff could be put in place. In the interim, patients would suffer, unintended pregnancies would increase, drug overdoses would increase, and STD/HIV and TB cases would increase, potentially leading to outbreaks. *Id.*

The subgrantee compliance certification that the Rule appears to require would also create unmanageable administrative burdens. Greenbaum Decl. ¶ 75. Currently BCHD ensures that its subgrantees comply with federal law as required by the terms of the subgranted federal funding. *Id.* However, BCHD lacks staff resources to additionally review and monitor the internal personnel

policies and procedures of its subgrantees to ensure they are organizing their health care to prioritize employee objections over patient care. *Id.*

In addition, BCHD's strategy for expanding outreach to underserved populations is increasingly to subgrant federal funds to small, community-based organizations. Greenbaum Decl. ¶ 76. These smaller organizations tend to be new and have few paid staff members, but they know, and are trusted by, their client populations. *Id.* ¶ 77. The nature of these organizations complements BCHD's patient-centered philosophy by allowing outreach and services to be provided by members of the patients' own communities. But because of their inexperience and lack of resources, these small organizations sometimes lack processes that would allow the BCHD to ensure that their internal personnel policies comply with the Rule. *Id.* ¶ 78.

#### **FIRE/EMS**

Fire/EMS would face similar barriers to complying with the Rule without sacrificing ethical health care. EMTs are dispatched for emergency care based on the 911 callers' report of what the injured person needs and the proximity of a Fire/EMS resource. Time is of the essence. If, upon arrival at the scene, any Fire/EMS employee were entitled to refuse to provide care, there would be no alternative care immediately available. People will die as a result. *See Matz Decl.* ¶¶ 11–15. Fire/EMS has neither the funding nor the logistical capacity to staff every ambulance and every fire truck with multiple EMS employees to cover every possible objection by any employee, including the possibilities that the person in crisis could be gay, transgender, experiencing an ectopic pregnancy, an intravenous-drug user, a sex worker, or some other person or condition objectionable to a particular EMS employee for whatever reason. *Matz Decl.* ¶¶ 14–15.

Because the City's health care providers lack the resources to double-staff at clinics and Fire/EMS or otherwise avoid gaps in health care from refusals, the City will be hampered in its

ability to provide nondiscriminatory, quality care to residents of Baltimore and the surrounding areas, including some of the most vulnerable members of society. This will harm BCHD and Fire/EMS, constraining the ability to provide ethical, patient-centered care. *Baltimore v. Azar*, 2019 WL 2298808, at \*12. And as set forth below, the public health consequences will be severe and irreparable.

**2. Compliance with the Rule will severely harm the City’s public health mission.**

The City’s public health mission will be irreparably harmed by the Rule should it take effect. This Circuit has held that “beneficiaries of public assistance may demonstrate a risk of irreparable injury by showing that enforcement of a proposed rule may deny them needed medical care.” *Pashby*, 709 F.3d at 329. “Ongoing harms to a [plaintiff’s] organizational mission[.]” likewise establishes a likelihood of irreparable harm. *Valle del Sol Inc. v. Whiting*, 732 F.3d 1006, 1029 (9th Cir. 2013); *North Carolina State Conference of the NAACP v. North Carolina State Board of Elections*, No. 16-cv-1274, 2016 WL 6581284, at \*9 (M.D.N.C. Nov. 4, 2016) (“The NAACP has likewise demonstrated that they will face irreparable harm if an injunction does not issue. An organization has been harmed in its own right if the defendant’s actions ‘perceptibly impaired’ the organization’s programs, making it more difficult to carry out its mission.”) (citing *Havens Realty v. Coleman*, 455 U.S. 363, 379 (1982)).

The Rule threatens to undermine BCHD’s mission to “protect health, eliminate disparities, and ensure the well-being of every Baltimore resident through education, advocacy, and direct service delivery.” Dzirasa Decl. ¶ 4. The Rule requires BCHD and Fire/EMS to endorse the very stigma that the City has painstakingly sought to eradicate through its trauma-informed approach to care. This approach has succeeded by establishing trust with patients and patient communities

over time, sometimes over the course of years. That trust can collapse in the single moment it takes for a patient to be turned away. Dineen Decl. ¶ 85; Greenbaum Decl. ¶ 4.

If health care staff refuse to treat patients for religious, moral, or “other” reasons based on patients’ identity or the services sought, it would inherently communicate a sense of judgment and disapprobation to those who are denied care. Patients who have faced a lifetime of discrimination and trauma will be particularly vulnerable to the stigma and psychological harms of such refusals. Already traumatized patients will lose trust in their providers and in the City more generally, and will be deterred from seeking care in the future. The stigmatizing effects of being denied care that one individual experiences will ripple out through word of mouth in that person’s community, leaving others, once again, mistrustful of government health care programs and reluctant to seek care. Inevitably the Rule would undermine BCHD’s and the City’s reputation in hard-to-reach communities where health disparities are the greatest. Greenbaum Decl. ¶ 83; Dzirasa Decl. ¶ 26.

For example, BCHD clinics display notices to patients that they will receive care without discrimination on the basis of their race, color, national origin, age, gender, sexual orientation, gender identity or expression, physical or mental disability, religion, ethnicity, language, or inability to pay.<sup>13</sup> Greenbaum Decl. ¶ 61. However, if the Rule is permitted to take effect, Baltimore residents may view alongside such notice, a notice to health care employees that:

You may have the right under Federal law to decline to perform, assist in the performance of, refer for, undergo, or pay for certain health care-related treatments, research, or services (such as abortion or assisted suicide, among others) that violate your conscience, religious beliefs, or moral convictions.

---

<sup>13</sup> The City of Baltimore’s Community Relations law prohibits discrimination in many contexts, including health care, where discrimination is defined as “any difference in the treatment of an individual or person because of race, color, religion, national origin, ancestry, sex, marital status, physical or mental disability, sexual orientation, gender identity or expression.” Baltimore City Code Article 4, § 1-1(f)(1); *id.* § 3-4 (addressing health care specifically).

84 Fed. Reg. at 23272 (Appendix A). While such notice is not required under the Rule, voluntary posting of “notice concerning Federal conscience and anti-discrimination laws” will be “non-dispositive evidence of compliance.” 84 Fed. Reg. at 23216. Given the risk of loss of federal funding, the City may feel no choice but to comply.

Any policy change that impedes trust-building efforts in marginalized communities can set public-health programs back decades. Dineen Decl. ¶ 86; Greenbaum Decl. ¶84. Disruptions in care for high-risk groups threaten the broader population with devastating harms, including increased prevalence of communicable diseases like tuberculosis, HIV, and sexually transmitted diseases, as well as teen pregnancies, infant deaths, and opioid overdoses. Dzirasa Decl. ¶ 28; Greenbaum Decl. ¶ 20. BCHD’s clinics are often facilities of last resort—safety nets—for Baltimore’s most at-need residents. Dzirasa Decl. ¶ 24. If BCHD can no longer provide judgment-free health care, these individuals will forgo necessary preventive and other health care, resulting in worse and more costly health outcomes. *Id.* ¶ 26; Greenbaum Decl. ¶ 80. Even those who have access to health care elsewhere sometimes choose to come to the BCHD for services because they are too embarrassed to seek those services from their primary-care providers. If the Rule takes effect and more health care providers restrict access based on “conscience” objections, the numbers of individuals forgoing care may rise even further. The City will ultimately end up bearing the long-term costs resulting from the loss of patients’ timely access to effective preventive healthcare.

**B. Baltimore Will Suffer Irreparable Harm If It Fails to Comply and Loses Federal Funding.**

If the costs of compliance are impossibly high, the potential costs of non-compliance are worse. Failure to comply whether consciously or by inadvertently running afoul of the Rule’s

vague and sweeping requirements, could mean the loss of millions of dollars in federal grant funding that would cripple the City's ability to provide essential health services. The Rule allows HHS to withdraw, deny, terminate, and even purportedly claw back Medicare and Medicaid reimbursements and all other federal funds if HHS determines there has been a failure to comply with the Rule or the statutes on which it is purportedly based. These penalties could be applied for even a single violation or a violation by a different entity, such as a subgrantee private clinic. For the City, this means the potential loss of millions of dollars in federal funding, including over half the BCHD budget, over 75% of the emergency medical services budget, and the defunding of critical programs such as HIV and STD prevention and treatment; reproductive health and family planning; tuberculosis screening, treatment, and control; addiction treatment; immunizations; and emergency-room diversion and care.

Even purely economic harm, such as the City's loss of funding, constitutes irreparable injury for purposes of preliminary injunction if "monetary damages will be unable to remedy financial losses when litigation ends" or when "temporary delay in recovery somehow translates into permanent injury—threatening a party's very existence by, for instance, driving it out of business." *Mountain Valley Pipeline*, 915 F.3d at 217–18. Both factors are present here. Baltimore cannot recover damages for its forgone federal funding because HHS's sovereign immunity precludes monetary recovery. *Id.*; *see also, e.g., Baltimore v. Azar*, 2019 WL 2298808, at \*12; *Senior Executives Ass'n v. United States*, 891 F. Supp. 2d 745, 755 (D. Md. 2012) (citing *FDIC v. Meyer*, 510 U.S. 471, 475 (1994)) (irreparable injury where federal government's sovereign immunity precludes recovery of money damages); *Odebrecht Const., Inc. v. Sec'y, Fla. Dep't of Transp.*, 715 F.3d 1268, 1289 (11th Cir. 2013) (same); *Chamber of Commerce v. Edmondson*, 594 F.3d 742, 770–71 (10th Cir. 2010) (same); *Cal. Pharmacists Ass'n v. Maxwell-Jolly*, 563 F.3d 847,

849, 852 (9th Cir. 2009) (same); *Iowa Utils. Bd. v. F.C.C.*, 109 F.3d 418, 426 (8th Cir. 1996) (same); *Temple Univ. v. White*, 941 F.2d 201, 214–5 (3d Cir. 1991) (same); *Smoking Everywhere, Inc. v. FDA*, 680 F. Supp. 2d 62, 77 n.19 (D.D.C. 2010) (same), *aff'd sub nom. Sottera, Inc. v. FDA*, 627 F.3d 891 (D.C. Cir. 2010).

The loss of federal funding will cause permanent injury to the City’s health care system. Because BCHD’s clinics rely on federal funding to provide services, the loss of that funding threatens their continued existence. As a district court in this circuit noted, irreparable harm is “likely” where a reproductive health clinic is closed. *Planned Parenthood of Central North Carolina v. Cansler*, 804 F. Supp. 2d 482, 499 (M.D.N.C. 2011) (granting preliminary injunction to Planned Parenthood against enforcement of a law that would have excluded it from receiving funding, including Title X funding, for contraception and teen pregnancy prevention). “[I]t would be extremely difficult, if not impossible, to reopen and re-establish client relationships at some point in the future” after “staff members are laid off and the clinic is closed.” *Id.* And the longer an entity remains unable to receive federal funding and has to cut services, the greater the burdens to eventually reestablishing those services. *Id.*; *accord, e.g., Planned Parenthood of Ind. v. Comm’r*, 699 F.3d 962 (7th Cir. 2012).

These harms are far from speculative: The City has seen firsthand the effects of service interruptions in underserved communities. In the early 1990s, federal funding to the City’s STD clinics was reduced, decreasing the number of medical professionals and outreach personnel on staff. This, combined with the rise of crack-cocaine use and housing displacement of many poor residents, led to a 500% increase in syphilis infections across Baltimore. Greenbaum Decl. ¶ 6. Without treatment, syphilis and gonorrhea may lead to infertility. Syphilis also causes blindness, pelvic inflammatory disease (causing extreme pain in women), miscarriages, stillbirths, and

disabilities in infants. And HIV and hepatitis C, if left untreated, can be deadly. The progress that BCHD has made in preventing and treating HIV and STDs could be undone by a rule allowing refusals to provide care, setting our public-health efforts back by 20 or 30 years. *See* Greenbaum Decl. ¶¶ 67–72, 81, 84–86.

Likewise, cuts to family-planning services will lead to more unintended pregnancies and higher health costs. In 2010, services provided at Title X health centers in Maryland saved the state and federal government \$147,766,000. These savings came from preventing unintended pregnancies, sexually transmitted diseases (including HIV), and cases of cervical cancer. At a national level, savings from Title X services totaled \$7 billion that year. *See* Sangree Decl., Ex. E (Jennifer Frost et al, *Return on Investment: A Fuller Assessment of the Benefits and Cost Savings of the US Publicly Funded Family Planning Program*, Wiley Periodicals, Inc. (2014))

**C. The Rule Will Harm the City as an Insurer.**

The City’s coffers will suffer as health care costs for its employees, retirees, and their families living all over the country increase as a result of the Rule. Stigmatizing refusals of health care nationwide will drive the City’s insured away from preventive care and other appropriate treatment which can detect and treat infectious disease before it spreads or serious illness like cancer early. Early detection and treatment is less costly and results in better outcomes. Delays in accessing care will cause conditions to become acute and will increase costly emergency care and care for advanced conditions. These increased costs will be borne by the City.

**D. The Establishment Clause Violation is Irreparable Harm as a Matter of Law.**

Finally, “it is well established that ‘the loss of First Amendment freedoms, for even minimal periods of time, unquestionably constitutes irreparable injury.’” *Legend Night Club v. Miller*, 637 F.3d 291, 302 (4th Cir. 2011) (quoting *Elrod v. Burns*, 427 U.S. 347, 373 (1976) (plurality opinion) (brackets omitted). Hence, “[a]s a matter of law, the threat of an Establishment

Clause violation in and of itself constitutes irreparable harm.” *Aziz v. Trump*, 234 F. Supp. 3d 724, 737 (E.D. Va. 2017) (citing *Newsom v. Albemarle Cnty. Sch. Bd.*, 354 F.3d 249, 261 (4th Cir. 2003)). For that reason alone, the need for a preliminary injunction is manifest.

### **III. The Balance of Equities and the Public Interest Favor an Injunction.**

When a preliminary injunction is sought against the government, the balance-of-the-equities and public-interest factors merge. *Nken v. Holder*, 556 U.S. 418, 435 (2009). The public interest “lies with safeguarding public health.” *Pashby*, 709 F.3d at 331. In particular, the Fourth Circuit recognizes the “robust public interest in safeguarding access to health care for those eligible for Medicaid,” i.e., low-income individuals. *Id.* at 330–31.

The City has demonstrated that, absent an injunction, the City, its residents, and people across the country whom the City insures will all suffer irreparable harm. By contrast, Defendants face no injury from an injunction; it will merely preserve the status quo of accommodating conscience rights in medical care, subject to the rights of patients, while questions about the lawfulness of the Rule’s drastic expansions are adjudicated. *See Trump v. Int’l Refugee Assistance Project*, 137 S. Ct. 2080, 2087 (2017) (“[T]he purpose of such interim equitable relief is not to conclusively determine the rights of the parties, but to balance the equities as the litigation moves forward.”). “There is no public interest in the perpetuation of unlawful agency action.” *League of Women Voters of U.S. v. Newby*, 838 F.3d 1, 12 (D.C. Cir. 2016). And “upholding the Constitution undeniably promotes the public interest.” *Int’l Refugee Assistance Project v. Trump*, 857 F.3d 554, 604 (4th Cir.), *as amended* (May 31, 2017) *vacated and remanded on other grounds in Trump v. Int’l Refugee Assistance*, 138 S. Ct. 353 (2017).

**IV. The Court Should Postpone the Rule’s Effective Date or Issue a Nationwide Injunction.**

All relevant factors favor preliminary injunctive relief. Given the equities, the Court should stay the effective date of the Rule until a determination on the merits, pursuant to 5 U.S.C. § 705, or else issue a nationwide preliminary injunction enjoining the regulation from taking effect. An injunction solely as to the City of Baltimore would be insufficient to protect the City’s interests for at least two reasons. First, the City insures individuals who live and travel in every state in the country, Gulhar Decl. ¶ 2, and if the Rule is allowed to take effect outside the City, these employees and retirees will experience denials of care that will result in worse health outcomes and higher costs for the City (as well as for patients). Second, if the injunction is limited to the City, or the State of Maryland, residents from surrounding states and the District of Columbia who lack the protection of the preliminary injunction, will increasingly rely on the City’s already strained health care system as the Rule constricts health care in their own communities. A nationwide injunction is necessary to prevent the full scope of irreparable harm to the City that will occur if the Rule takes effect. *Virginia Soc’y for Human Life, Inc. v. Fed. Election Comm’n*, 263 F.3d 379, 393 (4th Cir. 2001) (“Nationwide injunctions are appropriate if necessary to afford relief to the prevailing party.”) *overruled on other grounds in The Real Truth About Abortion, Inc. v. Fed. Election Comm’n*, 681 F.3d 544 (4th Cir. 2012); *Richmond Tenants Org. v. Kemp*, 956 F.2d 1300 (4th Cir. 1992) (nationwide injunction prohibiting eviction of public housing tenants without notice and a hearing was appropriate where plaintiffs were tenants from across the country). At minimum, the Court should stay the Rule’s effective date pursuant to 5 U.S.C. § 705.

**CONCLUSION**

For the foregoing reasons, the City respectfully requests that the Court grant its Motion for Preliminary Injunction.

DATED: June 12, 2019

Respectfully submitted,

By: /s/ Andre M. Davis  
Andre M. Davis #00362  
Baltimore City Solicitor  
Suzanne Sangree #26130  
Senior Public Safety Counsel and  
Director of Affirmative Litigation  
BALTIMORE CITY  
DEPARTMENT OF LAW<sup>14</sup>  
City Hall, Room 109  
100 N. Holliday Street Baltimore, MD 21202  
Tel: (443) 388-2190  
andre.davis@baltimorecity.gov  
suzanne.sangree2@baltimorecity.gov

Arun Subramanian (pro hac vice pending)  
Seth Ard (pro hac vice pending)  
Elisha Barron (pro hac vice pending)  
Ryan C. Kirkpatrick (pro hac vice pending)  
SUSMAN GODFREY L.L.P.  
1301 Avenue of the Americas, 32nd Fl  
New York, New York 10019  
Tel.: (212) 336-8330  
asubramanian@susmangodfrey.com  
sard@susmangodfrey.com  
ebarron@susmangodfrey.com  
[RKirkpatrick@susmangodfrey.com](mailto:RKirkpatrick@susmangodfrey.com)

Daniel Shih (pro hac vice pending)  
SUSMAN GODFREY L.L.P.  
1201 Third Avenue, Suite 3800  
Seattle, Washington 98101  
Tel.: (206) 516-3880  
dshih@susmangodfrey.com

---

<sup>14</sup> Jane Lewis, Assistant Solicitor, Baltimore City Law Department, on the brief, admission pending to the bar of the United States District Court for the District of Maryland.

Richard B. Katskee #27636  
Kenneth D. Upton, Jr. (admitted pro hac vice)<sup>15</sup>  
AMERICANS UNITED FOR SEPARATION  
OF CHURCH AND STATE  
1310 L Street NW, Suite 200  
Washington, DC 20005  
Tel: (202) 466-3234  
[katskee@au.org](mailto:katskee@au.org)  
[upton@au.org](mailto:upton@au.org)

**ATTORNEYS FOR PLAINTIFF**

---

<sup>15</sup> Admitted in Texas and Oklahoma only. Supervised by Richard B. Katskee, a member of the D.C. Bar.

**CERTIFICATE OF SERVICE**

I hereby certify that on June 12, 2019 the foregoing document was electronically filed with the Clerk of the Court using the CM/ECF system and all counsel of record will receive an electronic copy via the Court's CM/ECF system.

/s/ Suzanne Sangree  
Suzanne Sangree

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

vs.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and

U.S. DEPARTMENT OF HEALTH AND HUMAN  
SERVICES,

*Defendants.*

Case No. 1:19-cv-01672

DECLARATION OF REBECCA S. DINEEN

**DECLARATION OF REBECCA S. DINEEN, M.S., IN SUPPORT OF  
MOTION FOR PRELIMINARY INJUNCTION**

I, Rebecca S. Dineen, declare as follows:

1. I am Assistant Commissioner for the Bureau of Maternal and Child Health in the Baltimore City Health Department. I have held this position since January 2010.

2. The Baltimore City Health Department is responsible for addressing public-health challenges and administering public-health initiatives to protect and promote the health and well-being of Baltimore's more than 600,000 residents.

3. The Health Department's development and implementation of programs and its provision of healthcare services is informed by the unique vulnerabilities of the City's residents.

4. Historically, race discrimination, including discrimination by government-funded hospitals and healthcare providers, impeded black patients' access to healthcare. Likewise, black patients historically have been subjected to medical testing and study without their informed consent and in ways that grossly violate contemporary medical ethical standards.

5. Baltimore currently has high rates of poverty and violent crime, both of which disproportionately affect communities of color. Large numbers of Baltimore residents have experienced trauma. Trauma may result from discrimination, poverty, homelessness, exposure to physical violence, child abuse and neglect, or involvement in the criminal-justice system, among other adverse experiences.

6. These experiences of historical marginalization, discrimination, and trauma—often at the hands of the government—have made many residents mistrustful of and reluctant to engage with medical providers and public officials offering healthcare services and related assistance.

7. This mistrust is compounded in parents suffering from substance-use disorders, who may hesitate to seek care for themselves and their children out of fear that the government will reduce their parental rights or take away their children altogether.

8. And many people from marginalized communities who *have* sought out healthcare services have been met with judgment and blame by providers, making them less likely to continue to seek care in the future.

9. When some members of the community don't trust the government to provide them with safe, judgment-free services, the overall public health suffers.

10. Thus, the Health Department is adopting a holistic, trauma-informed approach to its public-health mission that prioritizes breaking down the stigma of receiving care, building trust with individuals and communities, and ensuring that each person we serve is treated with dignity.

11. I am familiar with the new rule promulgated by the U.S. Department of Health and Human Services, entitled "Protecting Statutory Conscience Rights in Health Care; Delegations of Authority" ("the Rule").

12. I have grave concerns that any regulation that may grant healthcare employees the unqualified right to refuse to treat, assist, or refer patients for care would undermine the Health Department's years of work persuading Baltimore residents to seek and accept care and would threaten the overall public health. The consequences may be devastating, both for the innumerable individuals who rely on the Health Department for healthcare services and for the Health Department's ability to advance the well-being of Baltimore residents at the population level.

*About Me*

13. I have more than twenty years of experience in public health. I have worked in fourteen countries on three continents, in both the public and private sectors.

14. As an experienced project manager, I have the skills to strategically advance, design, implement, and evaluate public-health initiatives and programs to improve health outcomes.

15. I have expertise in the substantive areas of maternal and child health, family planning, HIV/AIDS, malaria, and primary healthcare. My work has involved policy and advocacy, training, behavioral change, and community mobilization.

16. The City Health Department's Bureau of Maternal and Child Health provides adolescent and family reproductive-health services and supports the health and well-being of pregnant women, infants, and children in Baltimore. As Assistant Commissioner for the Bureau, I am responsible for the development and implementation of all of its programs and initiatives.

17. I developed and oversee its flagship initiative, B'more for Healthy Babies, a broad-ranging, city-wide strategy to improve birth outcomes through direct services, education, community outreach, and policy, as well as the numerous programs that operate under it.

18. I lead a staff of 135 and oversee the efforts of more than 200 volunteers annually. I am responsible for the Bureau's annual operating budget of approximately \$29 million.

19. Before becoming Assistant Commissioner for the Bureau, I served as Bureau Chief for Maternal and Infant Care, overseeing the provision through home visits of healthcare services to pregnant women and women with infants.

20. Prior to my employment with the Health Department, I worked for several years at Jhpiego, an international nonprofit organization affiliated with The Johns Hopkins University, where I developed and oversaw the implementation of global health initiatives in the areas of maternal health, malaria, and HIV/AIDS in Africa and Asia, among other projects.

21. I have authored or co-authored numerous papers and delivered presentations on reproductive, maternal, and child health.

22. I earned a Master of Science in Health Policy and Management from the Harvard School of Public Health in 1998.

23. My curriculum vitae is attached as Exhibit A.

***Public-Health Initiatives of the Bureau of Maternal and Child Health***

24. Through its flagship initiative, B'more for Healthy Babies, the Bureau of Maternal and Child Health applies a trauma-informed approach in the provision of adolescent and family reproductive-health services; care for pregnant women; and care for mothers, infants, and children in Baltimore. Our programs are designed to improve health before pregnancy, including family planning and reproductive health; to ensure quality care during pregnancy; and to support families in raising healthy children. Our vision is a Baltimore in which all children are born healthy and grow and thrive in healthy families. We seek to reduce the teen birth rate; reduce the rates of fetal, infant, and maternal mortality; and reduce the number of child and adolescent deaths.

25. As a public-health entity, our mission is to provide population-level change. That is, in addition to providing services at the individual level, we seek to shape the health of entire populations over time by making it easier for everyone to obtain care, using evidence-based

approaches to improve the quality of services, mobilizing communities, and advocating for policies at all levels that improve access to care.

26. Our programs are also driven by racial, social, and economic justice. Black and Hispanic teens have birth rates three and four times higher, respectively, than white teens. And black babies die at twice the rate of white babies. We seek to eliminate the racial and economic disparities in the incidence of poor outcomes and inequities in the overall provision of care.

27. We rely on more than 100 partners to carry out our programs and achieve our goals, including city agencies, corporate healthcare entities, academic institutions, and nonprofit organizations, including a number of small, grassroots organizations.

28. All of our programs, whose descriptions follow, are funded in whole or in part by federal financial assistance administered through the U.S. Department of Health and Human Services. Some of our funding comes directly from the federal government, but much of it is passed through the State of Maryland. This includes funds through Title V and Title X of the Public Health Services Act, Head Start, the Office of Adolescent Health, the Centers for Disease Control and Prevention, and Medicaid reimbursements.

*Family-Planning and Reproductive-Health Clinics*

29. The Bureau of Maternal and Child Health funds and operates three clinics that offer family-planning and reproductive-health services: the Druid Family Planning Clinic in West Baltimore, the Eastern Family Planning Clinic in East Baltimore, and the Healthy Teens and Young Adults Clinic. The family planning and reproductive health clinics provide care to one-third of Baltimore women.

30. The mission of these clinics is to reduce unintended pregnancies and to improve pregnancy outcomes by providing family-planning and reproductive-health services to women and

men ages 25–50. The Druid Clinic also hosts the Healthy Teens and Young Adults Clinic, which offers these same services to young women and men ages 10–24.

31. Among the services offered at the clinics are: clinical examinations; prescription, distribution, and administration of contraceptives, including intrauterine devices and subdermal implants; emergency contraceptives; pregnancy testing and referrals; options counseling for pregnant individuals, including referrals for abortion; breast exams; pap tests; STD screening and treatment; HIV testing and counseling; substance-use and mental-health screenings and referrals; individual, group, and family counseling; and health education and outreach.

32. The clinics operate weekdays during normal business hours, with some extended hours offered at the Druid Clinic each week. In addition to appointments, both clinics offer blocks of walk-in hours each week.

33. The clinics provide their services on a sliding scale and do not turn away patients based on an inability to pay. For many patients, clinic visits are the primary or sole source of reproductive or related healthcare.

34. More than 5,000 people receive care at these clinics each year.

35. The Health Department employs approximately 25 people at these three clinics, including one physician, two nurse practitioners, one nurse, and 20 administrative and other staff. Spanish-speaking staff is available. The staff members are all full-time employees of the Health Department.

36. The Bureau's clinics receive funding through Title X of the Public Health Services Act and through HHS's Office of Adolescent Health.

37. In addition to operating its own family-planning and reproductive-health clinics, the Health Department also provides subgrants to four other clinics throughout Baltimore that provide similar services.

*School Clinics*

38. The Health Department operates clinics at seven schools in Baltimore. The clinics operate during school hours and have dedicated full-time staff. These clinics offer the same family-planning and reproductive-health services as the other three clinics, including the provision of contraceptives; STD screening; options counseling for pregnant patients, including referrals for abortion; and other counseling services.

39. The school clinics offer their services for free to students who are unable to pay.

40. The school clinics receive Title X funding through the Bureau of Maternal and Child Health. These clinics are operated by the Bureau of School Health.

*Immunization Clinics*

41. The Health Department operates an immunization program to help prevent vaccine-preventable disease, to conduct disease surveillance, and to provide and monitor immunization-related health education and community outreach.

42. The Health Department operates "T.I.K.E." (To Immunize Kids Everywhere) Clinics, which provide free immunizations to children and adolescents, with an additional limited number of adult immunizations. Services through T.I.K.E. Clinics are available to those without a healthcare provider or whose insurance does not cover immunizations.

43. The clinics offer all immunizations clinically recommended for children and adolescents, including measles, mumps, and rubella; chicken pox; diphtheria, tetanus, and pertussis; and Hepatitis B. The clinic also offers influenza vaccinations.

44. In addition to immunizations, the T.I.K.E. Clinics offer lead testing for pregnant women and for children ages nine months to six years old.

45. The clinics operate out of the Health Department's Druid and Eastern Health Centers during selected hours throughout the week. The clinics are available by appointment or on a walk-in basis.

46. The Immunization Program also collects data and conducts outreach. Its Immunization Registry Project collects and securely discloses vaccination records for children, adolescents, and young adults. And the program provides education and outreach targeted at families with children who are delayed in their recommended immunizations and to neighborhoods at risk for under-immunization.

47. The Immunization Program is funded through the Maryland Department of Health with funds from the Centers for Disease Control and Prevention.

*Home-Visiting Services*

48. Through its Maternal and Infant Care Program (M&I), the Health Department provides support services to pregnant women and women with young children in Baltimore through a home-visiting program and group-based interventions.

49. M&I operates the Nurse Family Partnership Program, an evidence-based intervention method that is commonly used by public-health entities nationally and internationally. This prescriptive model employs nurses to provide home care to low-income, first-time-pregnant women. Baltimore's NFP program caters particularly to teens and pregnant women up to 24 years old. Clients often possess chronic medical conditions that may complicate their pregnancies, along with mental-health or substance-use disorders. The program serves approximately 100 women at any given time. Visits focus on six domains: personal and environmental health; life courses involving family planning, education, and job skills; parenting and attachment; interpersonal

relationships with family and friends; and referrals to other health and human services. The program is supported by federal funds from HHS's Maternal, Infant, and Early Childhood Home Visiting Program.

50. M&I also operates two group programs for parents: Circle of Security, which provides parenting groups for its clients and in other community settings, and B'more Fit for Healthy Babies, which offers postpartum stress management, fitness, and nutrition guidance. Both programs are operated in English and Spanish. These sessions serve 10–25 women on average each week, and B'more Fit has served over 800 women since its inception in 2012. Baltimore Medical Systems, a federally qualified health center, partners with the City Health Department and M&I on the NFP program, Circle of Security, and B'more Fit. The Health Department also provides subgrants to partner organizations that operate home-visiting and center-based services.

51. With funding from the Baltimore City Health Department, the Family League of Baltimore oversees five organizations that implement the Healthy Families America home-visiting model for more than 400 families annually. Healthy Families America is an evidence-based model through which nonmedical staff, supervised by social workers, provide home visits. The model begins with prenatal visits and continues through early childhood, with a focus on bonding, school readiness, and referrals to other support services.

52. In addition to the Family League, the Health Department provides supplemental funding to Baltimore Healthy Start, which provides home-visiting and center-based services to approximately 1,000 mothers, fathers, and infants each year.

53. The care provided through home visiting is intensive and the services wide-ranging.

54. The home visitors offer counseling and coaching, referrals into other healthcare services as necessary, education on parenting, and assistance connecting women to other core

social services, like housing and G.E.D. programs. The home visitors also evaluate women with infants and young children for signs of post-partum depression, make referrals for other healthcare services, offer breastfeeding support, and provide counseling on family planning.

55. The frequency of visits is consistent with the needs of the clients, stage of pregnancy or developmental milestones of infants, and the guidelines of both the NFP and Healthy Families America models. Visits may occur weekly, biweekly, or monthly. If a client is in crisis or facing a health complication, visits may be more frequent. Home visitors also remain in contact with their clients by phone and text message.

56. All programs are provided at no cost to those receiving the services.

*Teen Pregnancy Prevention*

57. The Teen Pregnancy Prevention Program seeks to reduce teen births by increasing access to family-planning clinical services, health education, and information.

58. In addition to the work of the Healthy Teens & Young Adults Clinic and School Clinics, the Health Department conducts outreach to outside providers to determine what services are offered and to recommend improvements to the quality of services provided. Specifically, the Health Department coordinates with clinics to determine what methods of contraception they offer and to advocate that they make the full range of contraceptives available, to the extent that they are not already doing so.

59. The Teen Pregnancy Prevention Program also operates the U Choose: Know What U Want campaign, which seeks to deliver sexual and reproductive-health education to adolescents and teens through age-appropriate messaging, with a particular focus on addressing the myths and commonly held misconceptions surrounding reproductive health. The Program likewise partners with middle schools and high schools to provide reproductive-health education in Baltimore

schools. Each year, more than 10,000 students receive sexual-health education informed by this program.

*Support for Children with Developmental Delays*

60. The Baltimore Infants and Toddlers program provides support services to families of developmentally delayed infants and children up to two years old or infants and children who have been diagnosed with a condition that is likely to affect development. These are mandated services under Part C of the Individuals with Disabilities Education Act.

61. Once enrolled, the children are assessed to identify early-intervention needs in the areas of speech and language; physical, cognitive, and psycho-social development; and self-help skills. Through the program, the Health Department offers diagnosis, speech pathology and audiology, occupational therapy, physical therapy, psychological services, health services related to other early-intervention services, education and counseling, and case management services.

62. Approximately 2,000 infants and toddlers receive early-intervention services annually. The Health Department is the lead agency designated by the Mayor's Office to provide services to infants and toddlers with special needs. The Department coordinates the care for all of these families and contracts with the Baltimore City School System and private entities to offer the required clinical and developmental services.

63. Where not otherwise covered through Medicaid or other insurance, the program is provided at no cost to the families receiving the services, made possible by HHS funding.

*Nutrition Support*

64. The Health Department operates the Women, Infants, and Children program, through which participants receive Electronic Benefits Transfer Cards to purchase healthy foods. Program participants also receive nutrition education and counseling, as well as health screenings, including growth and weight assessments for pregnant women and infants and children. Through

the program, 15,275 women and children receive nutrition and related support annually. In the future, the Bureau of Maternal and Child Health hopes to expand this program to provide screening and referrals for substance use, mental health, and other conditions.

*Philosophy of Care, Successes, and Ongoing Challenges*

65. Over the last several years, the Baltimore City Health Department has made significant strides in improving reproductive healthcare and care for pregnant women, infants, and children in Baltimore.

66. In the last ten years, the teen birth rate has decreased by 55%. In the same time, the infant mortality rate has decreased by 36%. Infant mortality is now the lowest it has been since we began recording its rate in the 1950s. Racial disparities in health outcomes are also decreasing. We have seen a 38% decrease in the black-white disparity in infant mortality over the last ten years. And the black-white disparity in the teen birth rate has dropped by 76%.

67. In addition to the evidence-based, high-quality clinical care and services we provide, we operate with the understanding that our programs can improve public-health outcomes only if the men, women, and children for whom they are designed actually use the programs to obtain care. Therefore, we operate our programs based on—and attribute much of our success to—a philosophy that prioritizes access to care.

68. First, we recognize that many Baltimore residents have experienced various types of physical, psychological, or emotional trauma, leading them to be mistrustful of the government and reluctant to seek out or accept care from the Health Department. Our trauma-informed approach recognizes that before we can provide care, we must earn the trust of Baltimore residents.

69. The trauma-informed care approach touches on all aspects of the patient experience. It means creating an environment at our clinics that is welcoming and does not appear overly institutionalized or penal; that has clear signage and is easy for the patient to navigate; and

that offers instructions and paperwork in simple terms, with pictures where possible, and in multiple languages.

70. Trauma-informed care also shapes patient interactions with employees, from the intake clerk to the medical provider. It means the administrative and intake staff treat patients kindly and with patience if they, for example, do not have their IDs or required paperwork in order. It means that providers characterize patients' health issues—specifically as to substance abuse—not as something the patient *did*, but rather as something that happened *to* the patient. It means ensuring that patients understand that they are entitled to privacy and confidentiality with respect to the care they receive. It means linking patients to other healthcare and social services.

71. Second, we try to remove as many structural and administrative barriers to care as possible. For example, our home-visiting program allows pregnant women and women with infants to receive care—including some clinical services—at their homes. For many, including those who are fearful of going to a clinic or unable to do so because of disability or other limiting factors, this service is the difference between receiving care and not. Similarly, our School Health clinics are located at Baltimore schools. Students who may not be willing or able to go to a separate location to receive reproductive healthcare are able to receive this care in a more convenient and familiar setting.

72. Finally, a core component of B'more for Healthy Babies is its centralized intake system, through which more than 4,000 Medicaid-eligible pregnant women and families with infants are referred to providers each year. Care coordinators work telephonically with families to make referrals. And to support our most vulnerable families and those who are harder to reach, the Health Department employs dedicated pregnancy-engagement specialists, who are stationed in hospital and provider waiting rooms to connect with pregnant women and women with infants.

The pregnancy-engagement specialists provide options counseling and make referrals to Health Department programs.

73. The Health Department likewise partners with healthcare providers and community organizations to link women to programs for which they may be eligible.

74. Community outreach is a particularly important component of getting women into care. Thus, the Health Department engages in door-to-door canvassing in targeted neighborhoods to identify women and families who are eligible for care. The Health Department also partners with community organizations to create neighborhood-based hubs through which families may feel more comfortable seeking out information, referrals, and care. Though still few, these local organizations have close ties to the communities that they are serving. Our partnerships with these groups are another means through which the Health Department seeks to build trust within Baltimore communities.

75. Notwithstanding our successes over the last several years, there is much still to do to provide population-level improvements in reproductive, fetal, maternal, and child health. The teen birth rate in Baltimore is still twice as high as that of Maryland and three times the national average. And while the rate of infant mortality in Baltimore has decreased, it remains higher than the national average. And despite recent improvements, disparities in health outcomes persist along racial and ethnic lines.

76. Likewise, although we have made great strides in building trust in communities through our trauma-informed approach to care, we still are doing the work of building trust, reducing stigma, and encouraging people to seek and accept care.

77. Early-childhood care continues to be an undervalued public-health issue, neglecting the critical first five years of a child's life, during which brain development and adverse childhood experiences will determine health outcomes later in life.

78. Our overall annual funding has remained flat for the past ten years. Even on our current budget, many of our programs are already understaffed and otherwise underfunded.

*Potential Harms Stemming from Refusals of Care*

79. Any rule permitting healthcare employees to refuse to treat, assist, or refer Baltimore residents seeking care would impose administrative and logistical hurdles, impede individuals' access to care, and threaten the mission of the Bureau of Maternal and Child Health and its work to protect and improve public health in Baltimore.

80. Compliance with any such rule would create nearly insurmountable logistical and administrative hurdles. The Bureau's clinics and other services would not be able to accommodate multiple refusals. The clinics and other programs are leanly staffed with healthcare workers. For some programs, including home visiting and door-to-door outreach, a single Health Department employee is assigned to cover various neighborhoods or households. An employee who refuses to perform certain services at a clinic or refuses to complete home visits for a certain demographic would create a significant lapse in care. If the Health Department were unable to replace or reassign that employee, the only way for operations to proceed as normal would be to hire additional employees to fill the gaps in service. This putative workaround would be essentially impossible in practice. The Health Department's clinical and other programs are already understaffed and utterly lack the financial resources to fill duplicate positions.

81. Refusals under such a rule would result in denials of timely care to Baltimore residents, and it is hard to overstate the harms that would follow, both for individual patients denied care and for public health in Baltimore at the population level.

82. For many individuals who receive services through us, the Health Department provides services of last resort. Likewise, Health Department services may be the only source of care that a vulnerable patient trusts. This means that a person turned away from a Health Department clinic or program likely cannot or will not receive care elsewhere.

83. The Maternal and Child Health Bureau provides fundamental services at pivotal moments in the lives of their patients: sexual health education and contraceptive care for the teenager who becomes sexually active; options counseling for the pregnant teenager; basic prenatal care and referral to a provider for the pregnant woman who needs assistance maintaining a healthy pregnancy; and nutrition education and support services for the first-time mother and her infant child.

84. Disruption in the provision of these services may have serious consequences for the woman and her child. A woman who lacks access to reproductive healthcare and options counseling may have an unwanted pregnancy and an unwanted child. Statistically, the rates of child abuse and neglect are much higher for children who are the result of unwanted pregnancies. Likewise, without a home visit, a pregnant woman's preeclampsia may go undiagnosed. Untreated, this condition can be fatal to the mother and baby. And without intervention, a pregnant woman with a substance-use disorder may give birth to a baby with neonatal abstinence syndrome, posing a number of serious and potentially long-lasting health risks.

85. Just as fundamentally disruptive are the stigma and psychological harms that a patient may suffer when denied care. Patients with a history of trauma and who have faced a

lifetime of discrimination will be particularly vulnerable to those harms. Our developing trauma-informed approach to care relies on establishing trust with patients and patient communities over time. That scaffolding, which sometimes takes years to build, can collapse utterly in the single moment it takes for a patient to be turned away because of who they are or the services they seek.

86. Take, for example, the case of a preteen girl at a Baltimore public school. It took almost a year of outreach and trust-building by Health Department employees at the school before the girl felt comfortable enough to go to a clinic for an STD test, where she ultimately tested positive for chlamydia and received treatment. Imagine that the girl arrived at the clinic, only to be told by the intake clerk that she could not obtain STD testing because the intake clerk objected on religious or moral grounds to preteens having sex. The likelihood is very low that this girl would bother to make another appointment or, indeed, seek out services from the Health Department in the future.

87. And the stigmatizing effects of being denied care that one person experiences may ripple out into that person's community, leaving others, once again, mistrustful of government healthcare programs and reluctant to seek care.

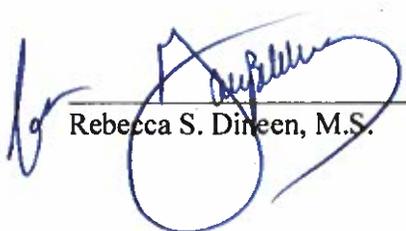
88. In short, the outcomes that denials of timely care would allow are diametrically contrary to the goals of client care based on building trust and lasting relationships in the community. Further, while each of the examples I have given demonstrate harm to individual patients seeking clinical care, from a public-health perspective the cumulative effect would be to reverse years of progress.

89. The consequences of forgoing federal funding, or of losing funding because of alleged or threatened noncompliance, would be equally drastic. We would be forced to stop almost

all of our operations. The vast majority of the funding that I oversee comes from the U.S. Department of Health and Human Services.

90. As an experienced public-health official, I foresee serious impediments to the efforts of the Bureau of Maternal and Child Health to carry out its mission to provide population-level care in the areas of reproductive health and care for pregnant women, infants, and children in Baltimore.

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was executed on June 11, 2019, in the State of Maryland.

  
\_\_\_\_\_  
Rebecca S. Dineen, M.S.

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

vs.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and

U.S. DEPARTMENT OF HEALTH AND HUMAN  
SERVICES,

*Defendants.*

Case No. 1:19-cv-01672

DECLARATION OF DR. LETITIA DZIRASA  
BALTIMORE CITY HEALTH COMMISSIONER

**DECLARATION OF LETITIA DZIRASA, M.D.  
IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION**

I, Letitia Dzirasa, M.D., declare that, if called upon, I would testify to the following:

1. I am the Commissioner for the Baltimore City Health Department (“BCHD”). I entered my current position in March of 2019.
2. Prior to joining BCHD, I worked as the Health Innovation Officer at Fearless Solutions, a Baltimore based digital services firm. and as the medical director for school-based health and quality at Baltimore Medical System.
3. BCHD has a \$150 million annual operating budget, which supports nearly 1,000 employees and includes funds for sub-grantees that augment our efforts to provide for public health services and programming for Baltimore City residents. BCHD funds come from multiple funding sources, but primarily from grants awarded by state and federal agencies and private foundations rather than the city’s General Fund. In Fiscal Year 2019, BCHD’s operating budget included \$69,445,000 in direct federal funds, as well as \$32,793,000 in funds from the state of Maryland, which includes federal grants administered and awarded by state agencies.

4. BCHD's mission is to protect the public health, eliminate disparities, and ensure the well-being of every Baltimorean through education, advocacy, and direct service delivery. BCHD offers health services to individuals through a variety of clinics and programs. Unlike most healthcare providers, our clinics and programs are guided by an overarching strategy to alleviate broader public health challenges.

5. The City operates several clinical services and health programs through two major divisions: The Division of Youth Wellness and Community Health, and the Division of Population Health and Disease Prevention.

6. **The Division of Youth Wellness and Community Health** includes the Bureaus of Maternal and Child Health, Chronic Disease Prevention, Office of Youth and Trauma Services, and the Bureau of School Health. Some examples of programs in this division include:

- **Adolescent and Reproductive Health:** ARH is the major provider of Title X reproductive health services to uninsured, underinsured, and underserved residents and operates one community-based adolescent clinic (Healthy Teens and Young Adults or HTYA) and two comprehensive family planning clinics in West and East Baltimore. The HTYA Center, established 21 years ago in response to the need for separate adolescent services, serves male and female adolescents ages 10-24 and also provides health education and outreach, information and referral, and mental health services. The Druid Health Center serves primarily adult African American women and men. The Eastern Health Center, located in east Baltimore City, serves mainly Latinx adult women and men. ARH, through its Title X grant, provides supplemental funding to BCHD School-based Health Services, Johns Hopkins Harriet Lane Teen Clinic, Baltimore Medical System, Family Health Centers of Baltimore, and the University of Maryland Adolescent and Young Adult Clinic. ARH is in its fourth funding year of a five-year federal grant to

implement evidence-based teen pregnancy prevention curricula in middle schools, high schools, and the BCHD network of Title X clinics. The project's outcomes are to increase adolescents' knowledge and access to comprehensive reproductive health services and to delay initiation of sexual activity.

- **Maternal and Infant Care** provides prenatal and early childhood home visiting services to young first-time mothers through the Nurse Family Partnership program.
- **School Health** provides most City schools with basic health services including first aid, hearing and vision screening, and medication administration. BCHD also provides comprehensive primary care at seven school-based clinics throughout the City. The school-based clinics provide patients with reproductive health care, immunizations, preventive services, and in some cases, mental health and substance abuse counseling.

7. **Population Health and Disease Prevention** includes the Overdose Prevention program, Bureau of Clinical Services and HIV Prevention, Office of Acute Communicable Diseases, Bureau of HIV/STD Services, Field Health Services, and the Office of Public Health Preparedness and Response. Some examples of programs in this division include:

- **The Bureau of Clinical Services** oversees two physical locations in the City and two mobile vans offering services that include pre-exposure prophylaxis (PrEP) medication for HIV, STI diagnosis and treatment, HIV longitudinal care, Hepatitis C treatment, and buprenorphine treatment. The clinics are free of charge and see around 8,600 patients and 15,000 visits annually.
- **The HIV/STD Prevention Program** focuses on activities that prevent the spread of sexually transmitted infections, particularly HIV, Syphilis, Gonorrhea, and Chlamydia. This program includes outreach and testing services, and conducts over 5,000 HIV and Syphilis tests annually.

- **The Ryan White HIV/AIDS Program** provides a comprehensive system of HIV primary medical care, essential support services, and medications for low-income people living with HIV. BCHD administers approximately \$38 million in federal Ryan White funding and subcontracts with over a dozen entities to provide Ryan White HIV/AIDS services and case management to individuals living with HIV in the Baltimore Eligible Metropolitan Area and across Maryland.
- **The Overdose Prevention Program** implements the Baltimore City Health Department's opioid-overdose-prevention strategy and other harm-reduction initiatives. This program oversees an Overdose Survivors Outreach program funded by a grant from the Substance Abuse and Mental Health Services Administration within HHS. Through this program, emergency first responders connect overdose survivors with peer recovery specialists who can educate them about naloxone and substance-use-disorder treatment options.

8. The City faces significant public health challenges, including rising numbers of HIV infections and sexually transmitted infections (STIs), annual deaths from opioid overdose that eclipse homicide rates, and tuberculosis. The teen birth rate in Baltimore is still twice as high as that of Maryland and three times the national average. Attached as Exhibit A to this declaration is a Health Department White Paper on the State of Health in Baltimore from May 2018, describing Baltimore's public health status in greater detail.

9. It is impossible to address these challenges without also addressing the significant disparities that exist because of structural discrimination, racism, poverty, and historical practices of exclusion. Baltimore's public health crises are disproportionately borne by its poorest residents, and by individuals who have historically faced discrimination based on their racial or ethnic group;

socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity.

10. Poverty and discrimination create numerous obstacles to health for Baltimore residents. Many individuals cannot afford to pay for care or have no providers in their area. Others who have sought out health care services have been met with judgment and blame by providers, making them less likely to continue to seek care in the future. In addition, individual trauma resulting from discrimination, poverty, homelessness, exposure to physical violence, child abuse and neglect, or involvement in the criminal-justice system, among other adverse experiences, can lead to worse health outcomes and greater distrust of health care providers and government officials.

11. The Department has spent decades working to overcome these obstacles among at-risk groups, including LGBTQ people, people living with HIV/AIDS and substance use disorders, communities of color, immigrant populations, and women seeking reproductive healthcare.

12. We accomplish this goal through an approach known as “trauma-informed care.” This approach, which is recognized and endorsed by HHS, focuses on eliminating stigma associated with particular diseases, conditions, or groups of people, building trust with individuals in targeted communities, providing judgment-free care, and removing as many structural and administrative barriers to care as possible.

13. BCHD brings treatment to patients where they are, through home visiting programs, mobile clinic vans, and community-based clinics. BCHD designs clinic environments to be welcoming, with clear signage and accessible instructions for patients. Administrative and intake staff are required to treat patients kindly and with patience and to ensure that patients understand that they are entitled to privacy and confidentiality with respect to the care they receive.

14. Through these targeted efforts, BCHD has accomplished some notable successes. For example, rates of new diagnoses of HIV in Baltimore have fallen from over 900 cases of new

infections in 2008 to 213 new diagnoses of HIV in 2017. Baltimore's ranking has dropped from the city with the second highest rates of HIV in the country several years ago, to 23<sup>rd</sup> in 2017. Since 2009, there has been a 36% reduction in infant mortality and a 38% reduction in the black-white disparity in infant mortality.

15. The City of Baltimore maintains equal-employment-opportunity policies that protect all employees in the Health Department.

16. All of the City's employment decisions are made without regard to race, color, age, national origin, ancestry, marital status, sexual orientation, gender, religion, veteran status, physical or mental disability, genetic information, gender identity or expression, or any other status protected by law. The City ensures equal opportunity in all aspects of employment, including hiring, work assignments, promotions and demotions, compensation, transfers, training and career development, discipline, and termination.

17. In its contracts with outside entities for the provision of healthcare services, the Health Department routinely includes nondiscrimination language requiring that the entities abide by equal-employment-opportunity practices in accordance with the City's own policies.

18. All employees across the Health Department are bound by the Health Department Employee Handbook, attached as Exhibit B to this Declaration. The handbook requires employees to comply with federal, state, and local laws prohibiting discrimination and harassment. It also requires that employees be helpful and courteous to their coworkers, clients, and the general public.

19. The Handbook also prohibits certain activities with respect to employees' expression of their personal beliefs, values, and commitments. It notes that certain beliefs and values may create conflicts of interest in the workplace if they prevent an employee from fulfilling his or her job responsibilities—including serving members of the public—or if they cause offense to another staff

member. Thus, employees must not use Health Department time or facilities to further such beliefs and values or to convince others of their belief system after they have been asked to stop.

20. Employees are also expected to comply with the practices and policies of the Health Department's trauma-informed approach and overall philosophy, detailed below.

21. Failure to comport with these rules and expectations may result in disciplinary action ranging from written reprimand to termination. Each Health Department employee is required to sign, before a witness, a statement acknowledging that they received a copy of the handbook and understand its contents.

22. I am familiar with the new rule promulgated by the U.S. Department of Health and Human Services, entitled "Protecting Statutory Conscience Rights in Health Care; Delegations of Authority" ("the Rule").

23. In my professional judgment, based on years of experience and education in healthcare law and policy, the Rule will impossibly hinder the BCHD's ability to fulfill its mission, and would be contrary to our legal, ethical, and contractual obligations. If implemented, the Rule will have serious negative public health consequences.

24. If the Rule is implemented, many people turned away from services would go without the medical care that they deserve and need. BCHD's clinics are safety-net clinics for Baltimore's most at-need residents. Most of our patients cannot afford and cannot access care anywhere else. Some of our patients do have other providers, but choose to use our services in order to avoid stigma from their regular providers for seeking certain types of treatment.

25. If BCHD care staff refuse to treat patients for religious, moral or "other" reasons, based on either the services sought or the patient's identity, it would inherently communicate a sense of judgment to the patient. Such refusals will cause already traumatized patients to lose trust in their providers and in the City more generally.

26. Denials of service will cause patients to delay seeking medical care for fear of being discriminated against or mistreated in our facilities; even a few denials of service can ripple throughout a community, driving away existing patients and deterring high-risk individuals from seeking care.

27. Many of our clinical programs depend on outside providers subject to the rule, such as pharmacists who fill prescriptions from our HIV and STI clinics. Pharmacist refusals to fill our patients' prescriptions would deprive those patients of important medication and would undermine BCHD's mission of preventing the spread of infectious diseases.

28. All of the above disruptions in care will lead to worse individual and public health outcomes, such as increased incidences of HIV, other STIs, tuberculosis, and other communicable and infectious diseases; increased teen pregnancy and infant mortality rates; and increased overdose deaths.

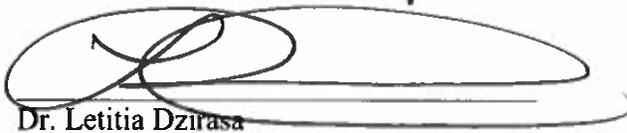
29. Compliance with the Rule would create an impossible administrative burden for BCHD clinics. We have limited funds and staffing resources, and therefore cannot create additional positions to cover for employees who refuse to provide certain services or serve particular populations—particularly if employees do not give advance notice of their intent to refuse to provide services.

30. The Rule seems to conflict with BCHD's carefully balanced employment policies, which require both strict adherence to nondiscrimination laws in employment and neutrality in the delivery of services.

31. Failure to comply with the Rule would have devastating consequences for BCHD and for the public health of Baltimore as a whole. Over 50% of the BCHD budget comes from federal funds, either through direct grant programs or as pass-through funds from the state. If BCHD were to lose these funds because of an alleged violation of the Rule, or because the City turned down

funding to avoid the Rule's unworkable requirements, the result would be a drastic reduction in services, leaving many of our most vulnerable residents without connections to care.

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was executed on 6/11 2019, in the State of Maryland.



Dr. Letitia Dzirasa

# **Exhibit A**

## **to Dzirasa Declaration**



# White Paper: State of Health in Baltimore

*Summary of Key Issues, Services, and Policies*

May 2018



*Catherine E. Pugh, Mayor, City of Baltimore*  
*Leana Wen, M.D., M.Sc., Commissioner of Health*

1001 E. Fayette Street • Baltimore, MD 21202

@Bmore\_Healthy 

@DrLeanaWen 

@BaltimoreHealth 

[health.baltimorecity.gov](http://health.baltimorecity.gov)

## **Table of Contents**

<i>State of Health in Baltimore</i>	<b>3</b>
Current Snapshot of Health	<b>3</b>
About the Baltimore City Health Department	<b>4</b>
Healthy Baltimore 2020	<b>4</b>
<i>Baltimore’s Public Health Priorities</i>	<b>5</b>
Priority 1: Behavioral Health	<b>5</b>
Priority 2: Violence Prevention	<b>12</b>
Priority 3: Chronic Disease Prevention	<b>15</b>
Priority 4: Public Health Infrastructure	<b>19</b>
<i>Conclusion</i>	<b>29</b>
<i>References</i>	<b>30</b>

## State of Health in Baltimore

It is impossible to discuss the health and well-being of Baltimore City's residents without applying the lens of health equity and systemic disparities. While the overall mortality rate in Baltimore City has declined over the past decade, the city still has an age-adjusted mortality rate 40 percent higher than the rest of the state<sup>1</sup> and ranks last on key health outcomes compared to other jurisdictions in Maryland.<sup>2</sup>

This reality is compounded by a series of complicated systemic social, political, economic, and environmental obstacles. With one in three children living below the Federal Poverty Level and about 30 percent of households earning less than \$25,000 per year<sup>3</sup>, income, poverty, and race have an enormous impact on health outcomes across Baltimore's neighborhoods.

The state of health is especially urgent when we consider that Baltimore houses some of the best healthcare institutions in the country. We know that healthcare alone cannot drive health: while 97 percent of healthcare costs are spent on medical care delivered in hospitals, only 10 percent of factors that determine life-expectancy take place within the four walls of a clinic.<sup>4</sup> Where we live, work, and play each day drives our health and well-being.

The mission of the Baltimore City Health Department (BCHD) is to protect health, eliminate disparities, and ensure the well-being of every resident of Baltimore through education, advocacy, and direct service delivery. We envision an equitable, just, and well Baltimore where everyone has the opportunity to be healthy and to thrive.

### *Current Snapshot of Health in the City*

- The leading causes of death in Baltimore City are heart disease, cancer, stroke, chronic lower respiratory disease, accidents (unintentional injuries), homicide, and drug- and/or alcohol-induced causes of death, such as overdose and alcoholic liver disease.<sup>5</sup>
- Life expectancy differs by up to 19 years between neighborhoods.<sup>6</sup>
- Although HIV rates in the City have declined over the past decade, Baltimore's HIV diagnosis rate is more than twice that of the state—53.7<sup>7</sup> versus 22.1<sup>8</sup> (per 100,000 population). An estimated 13,000 residents are living with HIV<sup>9</sup>; while African-Americans constitute 63 percent of the City's population,<sup>10</sup> they account for more than 82 percent of those living with HIV.<sup>11</sup>
- In Baltimore City, one in three high school students is either obese or overweight. One in four high school students drinks one or more regular sodas every day, while less than half eat one or more servings of vegetables a day.<sup>12</sup> Less than half of middle school students eat breakfast on a daily basis.<sup>13</sup>
- Baltimore City's asthma-induced emergency department visit rate is three times the state rate and the highest in Maryland.<sup>14</sup>

- 11.7 percent of babies born in the City are low birthweight,<sup>15</sup> compared to a national average of 8.2 percent.<sup>16</sup>
- 31 percent of children in Baltimore have Adverse Childhood Experience (ACEs) scores of 2 or more, meaning that they have experienced more than two incidences of events such as domestic violence, living with someone with an alcohol/drug addiction, the death of a parent, or being a victim/witness of violence.<sup>17</sup>
- 23 percent of adults living in Baltimore are smokers, compared to a state average of 15 percent.<sup>18</sup>
- In 2016, Baltimore City had the highest age-adjusted overdose mortality rate among large metropolitan counties in the US.<sup>19</sup> From January to September 2017, there were 574 drug and alcohol-related deaths in Baltimore City, a 16 percent increase over the same period in 2016.<sup>20</sup>
- About 11 percent of Baltimore City residents (aged 12 or older) are estimated to abuse and/or be dependent on illicit drugs or alcohol.<sup>21</sup>

## *About the Baltimore City Health Department*

Founded in 1793, BCHD is the oldest continuously-operating health department in the country, with about 1,000 employees and an annual budget of \$130 million. BCHD's wide-ranging responsibilities include maternal and child health, youth wellness, school health, senior services, animal control, restaurant inspections, violence prevention, emergency preparedness, STD/HIV treatment and prevention, and acute and chronic disease prevention.

Over the past three and a half years, under the leadership of Commissioner Dr. Leana Wen, BCHD has made major strides in addressing the public health challenges facing Baltimore City. Several programs have moved the needle on health outcomes and are national models for public health innovation. This white paper captures those accomplishments and provides an overview of the City's priority public health issues and BCHD's responses to them.

## *Healthy Baltimore 2020*

In August 2016, BCHD launched *Healthy Baltimore 2020*, a strategic blueprint for health in the city. Building upon BCHD's ongoing work and prior accomplishments, *Healthy Baltimore 2020* was designed during an 18-month community listening tour of convenings, town halls, public comment periods, and conversations to solicit feedback from representatives of healthcare institutions, community partners, faith-based institutions, local businesses, universities, youth groups, and others. The plan was shaped by input from the Local Health Improvement Council (LHIC), a BCHD-led advisory group consisting of members from each of Baltimore's hospitals and federally-qualified health centers as well as community-based organizations. The plan articulates a bold vision: *to cut health disparities in Baltimore City in half over the next ten years.*

This vision is particularly important as rapid shifts take place at the federal level with respect to both public health and healthcare. In this environment, it is even

more essential that local health departments lead the way in implementing and expanding programs that serve our most vulnerable residents.

*Healthy Baltimore 2020* tackles this through the lens of three core values:

- **Race, Equity and Inclusion:** It is impossible to talk about health in Baltimore without addressing the significant disparities that exist because of structural discrimination, racism, poverty, and historical practices of exclusion. As a result, every aspect of the work we do at BCHD is rooted in combating health inequity and ensuring that all residents of our city have the right to a healthy, robust life. We commit to applying this lens to our own actions as public health workers and will not shy away from difficult conversations that may arise.
- **Focus on Well-Being:** As a local health department, we do not merely treat the symptoms of poor health—we also address the barriers to overall well-being. In Baltimore, this includes applying a trauma-informed approach to all that we do, recognizing the cyclical, generational nature of trauma and its impact on both physical and mental health. We cannot provide effective services without acknowledging the role that trauma plays across the life course, and we look forward to working with our community partners to promote healing and awareness.
- **Health-in-All-Policies:** We view health as foundational to every issue—unhealthy children cannot learn in school, and unhealthy adults cannot be a productive part of the workforce. As we examine critical issues across the City—the economy, public safety, education—we believe that health should be addressed as a critical driver of each and should therefore be a key voice at the decision-making table. As a result, our work does not stop at the health department—and we work with partners from multiple sectors to realize our vision.

The plan also highlights four priority health topics, based on community feedback, evidence-based practice, and an existing track record of accomplishment. These four areas, described in further detail below, are behavioral health, violence prevention, chronic disease prevention, and public health infrastructure.

## Baltimore's Public Health Priorities

### *Priority 1: Behavioral Health*

#### ***Addressing the Opioid Epidemic***

**Background:** Our city cannot be healthy without addressing opioid addiction and overdose. More than 25,000 of our residents suffer from opioid addiction.<sup>22</sup> In 2015, 393 people died of overdose. In 2016, that number was 694—a jump of 77 percent. Based on data through September of 2017, the 2017 total will be even

higher.<sup>23</sup> Drug addiction affects our entire community and ties into nearly every issue facing our city, including crime, unemployment, and poverty.

### Accomplishments/Progress/Update

BCHD has developed a comprehensive, three-pillar strategy to combat opioid addiction and overdose, a strategy that serves as a national model of innovation:

- **Pillar 1: Prevent deaths from overdose and save lives.** In July 2015, Dr. Wen declared opioid overdose a public health emergency. The first pillar of BCHD's opioid overdose prevention campaign has been expanding access to naloxone, the lifesaving medication that reverses the effects of an opioid overdose. Key activities include:
  - BCHD, in collaboration with partner organizations, has trained more than 33,500 people—at street markets, metro stops, jails, and neighborhood meetings—to administer naloxone. We use epidemiological data to target our training to “hotspots,” taking naloxone directly to the most at-risk communities and putting it in the hands of those who need it most. Since 2015, naloxone has been used to save more than 2,000 lives: acts of neighbors saving fellow neighbors. This number does not include the many lives saved by nurses, doctors, EMS, and police officers.
  - In October 2015, Dr. Wen issued a standing order and prescribed naloxone to all of the City's 620,000 residents. Baltimore City became the first jurisdiction in Maryland to expand access to naloxone using a standing order. In June 2017, Dr. Wen issued a new standing order that allows residents to purchase naloxone without the previously required training certificate, making the medication effectively available over-the-counter. BCHD visited every pharmacy in the City to detail pharmacists, making sure that they were aware of the change.
  - Baltimore City was one of the first jurisdictions to require naloxone training as part of court-mandated time in Drug Treatment Court. We have also trained federal, state, and city legislators so that they can not only save lives, but serve as ambassadors and champions to their constituents.
  - BCHD helped the Baltimore Police Department incorporate naloxone training into their programming, and every patrol officer will carry the medication by the end of 2018. Police officers have already used naloxone to save the lives of nearly 200 of our residents.
  - BCHD maintains a map of pharmacies that regularly stock naloxone at [www.dontdie.org](http://www.dontdie.org).
- **Pillar 2: Increasing access to on-demand treatment and long-term recovery support.** Preventing overdose is only the first step in addressing addiction. To adequately treat people with substance use disorders, we must ensure that there is 24/7 access to on-demand treatment. Nationwide, only 10 percent of patients with addiction get the treatment they need.<sup>24</sup> In collaboration with Behavioral Health System Baltimore, the City's local

behavioral health authority, BCHD has already taken several actions to ensure access to treatment, including:

- In October 2015, the City launched a 24/7 Crisis, Information, and Referral phone line for anyone with addiction and/or mental health concerns; the line receives nearly 1,000 calls each week for crisis services and referral to appointments.
- In February 2017, Baltimore City launched the Law Enforcement Assisted Diversion (LEAD) program, which allows police officers to offer eligible individuals who are arrested for low-level drug offenses intensive case management instead of prosecution, helping to connect them with social services and addiction treatment.
- In fall of 2017, the City began piloting a “hub and spokes” model of treatment that builds on the work of the Baltimore Buprenorphine Initiative, increasing the availability of addiction treatment in the primary care setting and incorporating buprenorphine treatment into our clinics. As of April 2018, one hub and 10 spokes are online.
- In April 2018, BCHD joined with the City’s 11 acute-care hospitals to announce the Levels of Care for Baltimore City Hospitals Responding to the Opioid Epidemic, which will enshrine evidence-based hospital interventions and publicly recognize hospitals that implement them. A hospital can be level 3, 2, or 1—with a level 1 hospital responding to the epidemic as comprehensively as possible. The Levels of Care builds on progress already made by the City’s emergency departments, all of which will offer universal addiction screening, peer recovery specialists, and on-demand medication-assisted treatment for opioid addiction by fall 2018.
- The City has built a simple tool to track real-time capacity for treatment among a small group of community-based providers. This tool serves as a proof of concept for a more sophisticated tracking system that will operate across the public behavioral health system, which is being developed with support from the Open Society Institute—Baltimore.
- In April 2018, the City’s Stabilization Center pilot began seeing patients, and full implementation is set for spring of 2019. The stabilization center will provide a safe place for individuals who are under the influence of drugs and/or alcohol to deal with their addiction and receive short-term medical and social interventions. These include medical screening and monitoring, connections to behavioral health and social services, and buprenorphine induction to treat opioid addiction. Through emergency medical system transport, the Center will divert patients who meet specific criteria from emergency departments and provide stronger links to community-based behavioral health care. It will create a non-traditional access point for individuals with behavioral health needs who engage in high-risk substance use and related behaviors who are experiencing a crisis and/or at risk of overdose. This is the beginning of Baltimore's efforts to create a 24/7 behavioral health emergency department. Just as a patient with a physical complaint can go into an emergency

department any time of the day for treatment, a person suffering from addiction must be able to seek treatment on-demand.

- Pillar 3: Provide education to reduce stigma and prevent addiction.** The way we talk about addiction must change. Stigma against individuals with substance use disorder and treatment—especially medication-assisted treatment for opioid use disorder, the gold standard—stands in the way of efforts to reverse the tide of addiction and overdose. BCHD has been at the forefront of changing the public perception of addiction so that those in need are not ashamed to seek treatment. BCHD led a citywide effort to educate the public and providers on the nature of addiction: that it is a disease for which treatment exists, that recovery is possible, and that we must all play a role in preventing addiction and saving lives.

Key activities include:

- Don't Die, launched in July 2015, is a public education campaign that emphasizes that addiction is a chronic disease and provides information about how individuals can access naloxone and treatment.
  - BCHD led educational programs for doctors and providers of all specialties about the judicious prescribing of opioid painkillers and the need for the co-prescribing of naloxone.
  - In October of 2016, BCHD established the Work Group on Drug Treatment Access and Neighborhood Relations, co-chaired by Don Fry, President and CEO of the Greater Baltimore Committee; Bill McCarthy, Executive Director of Catholic Charities; and Dr. Wen. The Work Group has convened public sessions featuring national and local policy experts, including Mayor Catherine E. Pugh; Kana Enomoto, then Deputy Assistant Secretary for Mental Health and Substance Use at the Substance Abuse and Mental Health Services Administration within the U.S. Department of Health and Human Services; and Dr. Wilson Compton, Deputy Director of the National Institute on Drug Abuse. The Work Group was created to expand access to evidence-based treatment while maintaining positive relationships between treatment providers and the communities they serve.
- Fentanyl Task Force.** In 2015, we learned that 40 people died from overdoses involving fentanyl—a synthetic opioid—between January and March alone.<sup>25</sup> Fentanyl is many times stronger than heroin, and many individuals using heroin were not aware that they were using fentanyl-laced heroin. Fentanyl continues to drive a dramatic increase in the rate of overdose death: in Baltimore City, the number of people dying from fentanyl has increased nearly 35 times since 2013, and it is now responsible for the majority of all overdose-related deaths (12 fentanyl deaths in 2013 vs. 419 fentanyl-related deaths in 2016).<sup>26</sup> To address this spike, BCHD launched a citywide Fentanyl Task Force with representatives from local hospitals, the Baltimore City Police Department, the Baltimore City Fire Department, and other City agencies and community-based organizations, to discuss ways to identify and prevent fentanyl-related deaths. A key recommendation that

surfaced was implementing a real-time alert and city-wide rapid response system to identify spikes in overdoses and deploy street outreach teams to affected areas of the city. BCHD put this system in place with Baltimore City EMS in fall 2016 and in 2017, the City responded to 45 spikes by deploying outreach teams and alerting residents to each spike via email and text.

Baltimore City has one of the most ambitious overdose response and addiction treatment programs in the country. The U.S. Senate and House of Representatives, the White House, and the Surgeon General have all highlighted BCHD's innovative approach to address the opioid epidemic as a national best practice.

### **Challenges and Aspirations**

While we have made important strides in responding to substance use and overdose, more must be done, including:

- **Ensuring naloxone accessibility.** This means ensuring that the price of the life-saving antidote, which has more than doubled over the past few years, remains affordable. Rising prices severely limit the ability of providers and first responders to purchase naloxone, threatening access at a time when opioid overdose is a national public health emergency. BCHD has continually faced a shortage of naloxone: we lack the resources to provide the medication even to our highest-risk populations, forcing us to ration and triage. In May 2018, Dr. Wen joined with the advocacy group Public Citizen to call on the White House to reduce the price of naloxone by invoking a power granted to the federal government by existing law (28 USC Sec. 1498). Until this happens, in the midst of a crisis and in the city with the highest age-adjusted overdose fatality rate in America, more funding must be allocated for the purchase of this life-saving drug.
- **Increasing access to on-demand treatment.** We must ensure that high-quality treatment options are not only available to those suffering from opioid addiction but available on-demand. This means making mobile crisis response teams available 24/7 and increasing the number of crisis beds, including through the City's Stabilization Center. It means expanding the capacity for non-crisis outpatient medication-assisted treatment—especially in primary care settings and outside of traditional business hours. And it means doing more to meet residents where they are. For example, BCHD, Behavioral Health System Baltimore, and the Baltimore City Fire Department are launching a program to send peer recovery specialists to the scene of non-fatal overdoses to engage with consenting overdose survivors who refuse transport to a hospital; we expect to serve several thousand individuals each year.

BCHD is also exploring the incorporation of buprenorphine treatment into a mobile health clinic that will travel with our needle exchange van. BCHD is focused on engaging residents at high risk of overdose who are not accessing treatment, both by leveraging existing points of connection (e.g., in emergency departments and hospitals, jails and prisons, BCHD's HIV/STD

clinics, federally-qualified health centers, etc.) and by creating new points of connection. For all of these initiatives, one of the greatest barriers is a lack of resources: unless funding is allocated to the areas of greatest need, including Baltimore, we will continue to struggle to reverse the tide of addiction and overdose. With this barrier in mind, BCHD worked with the office of Congressman Elijah Cummings on legislation that he introduced with Senator Elizabeth Warren—the Comprehensive Addiction Resources Emergency Act—to provide states and local jurisdictions the funding they need, creating a version of the Ryan White HIV/AIDS Program for the opioid epidemic. BCHD strongly supports this legislation and continues to advocate for its passage.

- **Additional funding for upstream prevention and stigma reduction.** We know that addressing substance use is key to ensuring that our residents can achieve better physical health and can pursue employment opportunities that will contribute to overall economic development in our city. To stop the cycle of addiction, we must continue to invest in prevention services and anti-stigma education. In 2018, BCHD will launch the next phase of its Don't Die campaign, which will emphasize that addiction is a disease for which treatment exists.

## ***Addressing Trauma and Access to Mental Health Services***

**Background:** Baltimore City faces significant behavioral health challenges and disparities. Despite Baltimore City's residents making up 10 percent of Maryland's total population,<sup>27</sup> 29 percent of the state's substance abuse-related emergency department visits are from Baltimore City.<sup>28</sup> Over 60,000 residents are estimated to have a drug or alcohol addiction.<sup>29</sup>

### **Accomplishments/Progress/Update**

- **Addressing trauma in West Baltimore.** In September 2016, BCHD was awarded a 5-year, \$5 million grant by the U.S. Department of Health and Human Services for the Resiliency in Communities after Stress and Trauma (ReCAST) program. The goal of ReCAST is to reduce the impact of trauma and build resilience in Central West Baltimore communities adversely affected by the April 2015 unrest. The program empowers community organizations from West Baltimore to implement high-quality, trauma-informed services to promote connectedness and resilience in youth.
- **Promoting student resilience.** Complementing ReCAST, the Baltimore City Public School System was awarded a \$2 million grant by the U.S. Department of Education to fund school-based mental health, counseling, and behavioral programs. In partnership with City Schools, BCHD will pilot tele-health services at Booker T. Washington Middle School during the 2018-2019 school year. This will include physical and mental health services.
- **Trauma-informed care.** There is growing recognition in Baltimore City that generations of exposure to poverty, racism, violent crime, and domestic violence has resulted in extremely high levels of traumatic stress for

individuals, families, and communities. Recognizing that trauma is a major underlying factor of behavioral health issues and violence, BCHD has launched a trauma-informed care training initiative across City government, which has already reached more than 2,000 City employees, including police officers and other front-line City workers. The goal of this initiative is to educate all front-line City workers in trauma-informed approaches, including:

- Understanding trauma
  - Understanding the impact of traumatic stress on brain development
  - Integrating trauma-informed practices into work with City residents
- **Increased focus on treatment and case management.** Eight of Baltimore City's twelve hospitals participate in Screening, Brief Intervention, and Referral to Treatment (SBIRT), an evidence-based public health approach to providing early intervention and treatment services to those at risk of substance use and mental health disorders.

BCHD seeks to increase case management capability for all individuals leaving jails and prisons. These individuals are in a highly vulnerable state, and must be connected to medical treatment, psychiatric and substance use treatments, housing and employment support, and more. We know that deploying credible messengers from the community, as community health workers to reach people where they are, works. BCHD aspires to bring jobs and opportunities to vulnerable individuals and neighborhoods that otherwise have limited employment opportunities.

### **Challenges and Aspirations**

- **Citywide trauma strategy.** To convene and align trauma-informed care efforts with the ReCAST work and other local collaborations focused on trauma, BCHD will launch a citywide trauma strategy in 2018 to bring together community-based organizations, academics, foundations, residents, and additional stakeholders to ensure that a shared language and set of practices related to trauma are implemented. Central to this strategy will be building capacity within our institutions to be trauma-informed and helping to scale community models for responding to trauma.
- **24/7 Behavioral Health Emergency Department.** Building upon the idea of the stabilization center, this facility would be one step closer to on-demand treatment for addiction and mental health services, which are significant unmet needs in Baltimore. The center will also alleviate pressure from emergency departments and jails, which are ill-equipped to address these patients' needs.

## Priority 2: Violence Prevention

**Background:** Addressing violence and public safety are key priorities for Baltimore City. BCHD takes a three-pronged public health approach to violence prevention: violence interruption, addressing addiction and mental health needs, and upstream investment.

### Accomplishments/Progress/Update

- **Violence Reduction Initiative.** Since the beginning of November 2017, BCHD has taken an active role in Mayor Pugh's Violence Reduction Initiative to focus city services on high-crime areas. As part of the initiative, BCHD provides needle exchange services and naloxone trainings in targeted areas, and agency staff work closely to address environmental health concerns within the Initiative's zones. The Mayor also called upon BCHD's inspection team to expand resources and increase food facility inspections in five priority areas in the City and reinforced the importance of interagency collaboration. By conducting in-depth food facility inspections in high-crime areas, including nighttime inspections, inspectors help create a governmental presence in the community. Not only is the health risk to customers reduced by ensuring adherence to food safety regulations, but in the event a facility is closed, the desire of individuals to gather at that location is virtually eliminated during the period of closure. The initial five priority areas have since been expanded to seven priority areas.
- **Violence interruption.** Safe Streets takes a public health approach to violence and maintains that violence is a learned behavior that can be prevented using disease control methods, as violent events often "cluster" like an infectious disease outbreak. At various points, three of the four Safe Streets sites have gone a year or more without a fatal shooting, and the McElderry Park site recently went 545 days without a fatal shooting. Mayor Pugh is a strong advocate for Safe Streets and, in recognizing the success of the program, is expanding the program from 4 sites to 10 sites and will directly oversee the expansion out of the Mayor's Office. Safe Streets has proven successful in significantly reducing incidences of shootings and homicides, and BCHD looks forward to the program being expanded, saving more lives, and preventing the intensive trauma and costly citywide ripple effects associated with major acts of violence.
  - In the fall 2016, BCHD was awarded a \$500,000 grant by the U.S. Department of Justice to expand Safe Streets into emergency departments. Safe Streets employees will be located in ERs in order to reduce violence-related injury re-admissions by resolving conflicts immediately after an altercation occurs to prevent retaliation.
  - In 2017, Safe Streets mediated 1,242 conflicts, 89 percent of which were deemed likely or very likely to result in violence without an intervention.
  - Safe Streets held 122 community events with an estimated 12,400 community members in total attendance.

- **Addiction and mental health.** Behavioral health and substance use are key factors in violence prevention: eight out of 10 individuals in jail use illegal substances and four out of 10 have a diagnosed mental illness.<sup>30</sup> Every \$1 invested in addiction treatment saves society \$12.<sup>31</sup> BCHD's comprehensive, three-pillar strategy will combat opioid addiction and ensure that this root cause of violence is addressed.
- **Violence as a public health issue.** We know violence is a generational challenge impacted by the social determinants that shape people's lives. BCHD's approach to violence prevention starts as far "upstream" as possible. A decade ago, Baltimore City's infant health outcomes ranked as one of the worst in the country, with an infant mortality rate nearly twice the national average and with very large disparities between black and white birth outcomes. In response, B'More for Healthy Babies (BHB) was born as a city-wide public-private coalition of more than 150 nonprofits, public agencies, and foundations. The goal of the initiative is to ensure that all of Baltimore's babies are born at a healthy weight, full-term, and ready to thrive in healthy families. It is a comprehensive, evidence-based solution that builds cross-sector partnerships for strategic planning and implementation; strengthens systems and streamlines interventions to achieve maximum effectiveness; ensures community and client participation in planning; and emphasizes proactive monitoring and data-driven decision-making.

### **Accomplishments/Progress/Update**

- **B'More for Healthy Babies.** Since its inception in 2009, BHB has experienced extraordinary success. It has:
  - Reduced the infant mortality by an astonishing 35 percent, bringing it to its lowest point in Baltimore's history
  - Closed the disparity between black and white infant deaths by almost 60 percent
  - Decreased the teen birth rate in the City by an unprecedented 49 percent
  - Reduced sleep-related infant deaths by 50 percent

The program's success has been widely recognized; it was awarded the 2014 Family League Award, the 2015 Academy for Excellence in Local Governance County Best Practices Award, and the 2015 Spirit of Service Award from the Healthy Teen Network.

Building upon the success of BHB, BCHD seeks to take a comprehensive approach to youth health and wellness

- **Youth Health and Wellness Plan.** In November 2016, BCHD launched a comprehensive youth health and wellness plan that applies the same principles that have made BHB so successful to the full youth life course of 0-19 years old. This plan will focus on three categories of long-term outcomes:

- **Healthy Minds:** including improved social and emotional development as well as improved behavioral health
  - **Healthy Bodies:** including continuation of reduced teen births and improved physical health outcomes, including immunizations and oral health
  - **Healthy Communities:** including improved peer relationships, community connectedness, and connections with trusted adults
- **Vision for Baltimore.** As part of the Youth Health and Wellness Plan, BCHD launched Vision for Baltimore in the spring of 2016. If a child cannot see, they may struggle to learn to read, to focus in class, and may be unlikely to be motivated to come to school. To that end, BCHD, City Schools, Johns Hopkins University, non-profit provider Vision To Learn, and Warby Parker partnered on Vision for Baltimore. This innovative citywide strategy ensures that all students in Baltimore City elementary and middle schools have universal access to glasses, in an effort to improve performance, engagement, and opportunity. Through Vision for Baltimore, we have served more than 35,000 students and provided needed eye care to 5,000 youth.
  - **School Health.** BCHD provides health services in all Baltimore City Public Schools. We have helped children succeed in school by supporting mental health services in 119 schools and by providing students with access to health suite services, with nearly 300,000 annual visits in 180 schools. However, capacity is somewhat limited: Nurse Practitioners serve multiple School-Based Health Centers (SBHCs), which leads to less than optimal coverage. When the Nurse Practitioner is absent, the SBHC is not able to provide the full range of clinical services that would otherwise be available.

Many diagnostic, treatment, and preventive services cannot be provided in health suites. Tele-health is an innovative and effective way to address this gap in capacity and expand the level of care offered across schools without having to staff each with a full-time primary care provider, and BCHD will roll-out a telehealth pilot in the fall of 2018.

- **Reproductive health.** In 2015, BCHD and a broad coalition of partners in the City, including Baltimore City Public Schools, were awarded an \$8.5 million Teen Pregnancy Prevention Initiative grant from the U.S. Department of Health and Human Services to ensure that there is evidence-based, comprehensive sex education in middle schools and high schools, with the aim of reducing the teen birth rate and providing accurate, evidence-based reproductive health education. After three years, BCHD has implemented new, comprehensive, evidence-based curricula in many of our middle and high schools.

As of 2016, Baltimore City's teen birth rate is 32.6 births per 1,000 15-19 year old females. While the teen birth rate declined over the last decade, the racial disparity continues to persist. The White teen birth rate is 24.0 births per 1,000 15-19 year old females compared to 36.7 for Black females and 71.6 for Latina females in the same age range. These rates are also higher

than the national and Maryland teen birth rates. The teen births are concentrated in neighborhoods defined as vulnerable based on income and education levels. Baltimore City's teen births are also concentrated in several neighborhoods that are racially concentrated and have limited access to healthcare and less access to evidence-based teen pregnancy prevention.<sup>32</sup>

## Challenges and Aspirations

- **Investing upstream to ensure public safety.** Safe Streets, while a best-in-class model, is only one innovative way to tackle youth violence. We must also invest in the upstream interventions described above—including glasses and lead poisoning prevention programs, which address shared risk and protective factors across multiple forms of youth violence and prevention programs. Addressing violence as a public health issue is a key strategy in ensuring our city's overall safety. Rather than viewing violence solely through a criminal justice or law enforcement lens, taking a public health approach to violence acknowledges that—like many challenges facing our society—violence is cyclical and tied to systemic barriers. In order to move the needle on crime and homicide, we must deploy our resources toward public health interventions that tackle the root causes of violence.
- **Sustainability challenges tied to federal policy.** With state and federal budgets steadily decreasing, these critical programs face potential funding cuts. Several components of BHB and the Youth Health and Wellness Plan are under threat as federal priorities shift. For example, reproductive health programs and services for pregnant women are at risk, as the federal government is currently proposing cuts to several key offices, including the Office of Adolescent Health.

Additionally, the grant that BCHD was awarded in 2015 to provide evidence-based education and services through its Teen Pregnancy Prevention Initiative was prematurely terminated. During the summer of 2017, the Trump Administration abruptly cancelled the grant without warning, forcing the program to close-out two years early and threatening educational programs for thousands of Baltimore's youth. Given this landscape, implementing and expanding our initiatives will require multiple funding streams, including philanthropic, government, and billable services. In March 2018, in an effort to ensure this critical work continues, Baltimore City joined a lawsuit against the U.S. Department of Health and Human Services to challenge the decision to eliminate funding for this evidence-based intervention.

## Priority 3: Chronic Disease Prevention

**Background:** BCHD is committed to fighting chronic disease, one of the leading causes of death and poor health in Baltimore City. We take a multi-pronged approach to addressing chronic disease that encompasses direct services, education, and policy actions. Our chronic disease efforts include:

- **Tobacco Use Prevention and Cessation.** Smoking is the leading cause of preventable death from heart disease, stroke, and cancer. BCHD strives to make Baltimore a smoke-free city that is free of addiction to tobacco and the diseases that tobacco use causes, like heart disease, lung disease, lung cancer, and asthma. BCHD enforces local tobacco control laws and provides outreach and education including smoking cessation. Our in-class education visits bring tobacco education into each classroom in Community Schools, allowing for important conversations on the dangers of tobacco for youth at their most vulnerable ages.
- **Hypertension and Diabetes.** BCHD works with community clinics to implement screening and treatment best practices for hypertension, prediabetes, and diabetes. Enabling clinics to catch diabetes before it starts means that patients have the opportunity to make lifestyle changes like eating healthy foods, becoming physically active, and maintaining a healthy weight. BCHD also targets disparities in hypertension through work at the University of Maryland Medical Center. The program offers free screenings, cooking classes, gym memberships, and grocery store tours to African American men with high blood pressure.
- **Sugar-Sweetened Beverages.** One in three high school students is either obese or overweight. One in four high school students drinks one or more regular sodas every day, while less than half eat one or more servings of vegetables a day.<sup>33</sup> In 2018, BCHD began implementing legislation requiring all restaurants to offer milk, 100% juice, or water as the default options for beverages for children's menu items. The bill, which BCHD supported along with coalition partners, addresses the rates of consumption of sugar-sweetened beverages by Baltimore City youth and will help make the healthy choice the easy choice. In addition, legislation was previously proposed to the City Council that would require retailers to post warning labels noting the connection between sugar-sweetened beverages and health conditions such as obesity. BCHD hopes to work with City Council to ensure residents are aware of the link between such beverages and poor health. We are continuing to work with community partners on this and other efforts to reduce the scourge of childhood obesity and reduce disparities in Baltimore.
- **Food Access.** Baltimarket works to improve the health and wellness of residents by using food access and food justice as strategies to transform communities. The program is comprised of a suite of community-based food access and food justice programs that promote nutrition knowledge and skills and increase food access. Through Baltimarket, BCHD tackles systemic inequalities that ultimately affect the health and wellness of residents in Healthy Food Priority Areas (areas that lack access to healthy food options). The three programs that make up Baltimarket are:
  - **Virtual Supermarket:** The first national community-based program that uses online food ordering and accepts SNAP, BCHD's Virtual Supermarket Program is an innovative public-private partnership

between BCHD and ShopRite grocery stores. The program uses ShopRite's online grocery ordering and delivery platform to bring food to Healthy Food Priority Areas. Through early 2018, this program has served over 1,200 customers at 13 sites and has delivered over \$500,000 worth of fresh groceries, with the help of 56 Neighborhood Food Advocate volunteers. In March of 2018, BCHD expanded to its 14<sup>th</sup> Virtual Supermarket location.

- **Healthy Corner Stores:** BCHD aims to reduce chronic diseases through a multi-level, community-based effort that transforms the retail food environment in Baltimore's Healthy Food Priority Areas. It engages corner stores, grocery stores, youth, and caregivers to increase supply and demand for healthy foods. It works with 25 stores.
- **Neighborhood Food Advocates and Food Justice Forum:** Neighborhood Food Advocates are trained community members who plan, implement, evaluate, and sustain the Virtual Supermarket Program. The Food Justice Forum is an annual event that engages in dialogue about food injustice in Baltimore, discusses the role that race and place play in access to healthy foods, and promotes community solutions that are working in Baltimore. The 2018 Food Justice Forum will focus both on the potential of technology to improve access to healthy foods and the relationship between hunger and aggressive behavior.
- **Lead Prevention.** Nearly 56,000 children age 6 and under are at risk for lead poisoning in Baltimore. Lead poisoning can cause permanent brain damage; no amount of lead is safe for children. BCHD seeks to reduce lead poisoning through prevention and aggressive enforcement of lead laws. BCHD educates and strongly encourages families and providers to test children ages 1 and 2 for lead levels, performs outreach to pregnant women to evaluate potential lead hazards, and, with numerous partners including Baltimore City Housing, conducts home visits and develops strategies to reduce lead paint hazards in homes. Lead poisoning disproportionately affects Baltimore's most vulnerable children, and BCHD recognizes the paramount importance of protecting our youth.
- **Asthma.** More than a third of Baltimore City high school students have been diagnosed with asthma at some point, compared to 26.3 percent statewide and 22.8 percent nationally.<sup>34</sup> The pediatric ED visit rate for asthma in the City was 2.6 times higher than the state rate (360.2 vs 136.1 per 10,000 people).<sup>35</sup> BCHD provides evidence-based home visits for children with moderate-to-severe asthma to educate families about medical management and about preventing environmental asthma triggers, thereby reducing ED visits for children with asthma. BCHD conducts extensive education about asthma as well as provides supplies to increase asthma management, such as dust mite-proof mattress and pillow covers and green cleaning supplies. In FY 2017, 88 percent of children who completed this intervention showed a decrease in symptoms.

## Accomplishments/Progress/Update

We have made significant progress in tackling chronic disease through public health campaigns and advocating for policy changes at all levels of government:

- **Lead prevention reforms.** Childhood lead poisoning has decreased significantly and is currently at the lowest level since Maryland's lead law was implemented in 1994 and enhanced enforcement began at the City level in 2000. Since then, the number of lead poisoning cases has decreased by 92 percent.<sup>36</sup> Additionally, a BCHD-led pilot to test children's jewelry revealed extreme levels of lead in many readily available products at local stores. Based on the results of this testing, BCHD implemented regulatory action against lead in children's jewelry that prohibits the sale of such jewelry if measuring over 100ppm of lead. In October 2017, BCHD became eligible to conduct point-of-care testing, enabling BCHD to rapidly determine blood lead levels. BCHD is seeking to expand access to this newly available and critically important test.
- **Alcohol.** BCHD has advocated for a variety of policy initiatives to address the harmful effects and pervasive availability of alcohol. This includes increased enforcement funding and capacity and efforts to reduce liquor store density in neighborhoods. BCHD's advocacy has resulted in a statewide ban of powdered alcohol.
- **Tobacco regulation.** BCHD has advocated for several policy initiatives to address the harmful effects of tobacco. These include regulation of hookah establishments, a state-wide tobacco tax to be used for medical care, a ban on indoor smoking, including e-cigarettes, buffer zones around schools, and increased enforcement funding and capacity. BCHD has also implemented its strategy to reduce the sales of tobacco to youth under the age of 18. By providing store education, increasing enforcement, and engaging stakeholders, BCHD decreased the rate of non-compliance by 56 percent from 2015 to 2016.

## Challenges and Aspirations

- **Lead prevention.** Despite significant progress, our work is far from done: about 5.7 percent of tested children have positive results for lead.<sup>37</sup> In order to build on our lead prevention efforts, additional funding is necessary at the local level to increase testing and provide primary prevention services. Furthermore, the state threshold for outreach to a child who tests positive for lead is too high, and many youth are not served as a result. BCHD has advocated for decreasing the action level with the understanding that there is no safe lead exposure for children. Finally, additional efforts are needed to support lead abatement in homes, as lead paint hazards are the leading cause of childhood lead poisoning.
- **Local tobacco authority.** Preventing youth from smoking in the first place is critical to reducing tobacco use in Baltimore. 90 percent of smokers start

before the age of 18, but telling kids about the dangers of smoking is not enough when they are exposed to those same dangers at home every day.<sup>38</sup> Inspiring families to create smoke-free homes can be an effective way to limit exposure to both secondhand smoke and tobacco use for kids. Baltimore City is currently unable to enforce certain tobacco violations locally due to state preemption. We are working with our representatives in the Maryland General Assembly on legislation that would allow us to enact and enforce measures regulating the sale and distribution of tobacco products in the city.

- **Decreased funding for public health prevention.** Funding to conduct public health education about asthma, lead poisoning prevention, and tobacco comes from federal agencies like the Centers for Disease Control and Prevention. Those agencies are now facing the threat of severe funding cuts, which will cause Baltimore City to lose essential prevention dollars. We will continue to advocate for the preservation of these prevention dollars and work collectively to identify strategies for filling the funding gaps that may be caused by shifts at the federal level.

## *Priority 4: Public Health Infrastructure*

### ***Senior Health and Wellness***

**Background:** BCHD is committed to enhancing the quality of life of our older adults. We help these residents age in place and remain connected to their communities by delaying premature institutionalization and providing protection from abuse and neglect. BCHD guarantees essential core programs for older adults that include the operation of 14 senior centers, advocacy, guardianship, in-home care services, health evaluation, transportation, training, and volunteer opportunities.

### **Accomplishments/Progress/Updates**

BCHD has piloted several innovative approaches to improve health outcomes among older adults, including:

- **Preventing falls.** In April 2018, BCHD launched its Citywide Falls Reduction Strategy with community partners to reduce falls among older adults by 20 percent over ten years. The public health falls prevention strategy will focus on three major components: mapping where falls are occurring throughout the City using real-time hospital data; targeting fall prevention activities in hotspots—the areas of high fall rates; and educating the general public that falls are preventable and resources are available. In Baltimore City, nearly 5,000 older adults visited the emergency department (ED) or were hospitalized in 2017 due to falls.<sup>39</sup> The average cost of hospitalizations each year due to falls is \$39,000 or \$60 million annually.<sup>40</sup> Falls-related ED visits in Baltimore City are more than 20 percent higher than the statewide average and the city's rate of fall-related hospitalizations is 55 percent greater.<sup>41</sup>

- **A connected ecosystem.** To address the needs of our rapidly growing population of older adults, BCHD is committed to enhancing the “no wrong door” service delivery model. The Weinberg Foundation awarded a \$500,000 grant to a partnership between the United Way’s 211 Call Center and BCHD to expand its information and assistance service system. The goal of this project is to enhance care coordination for older adults, by allowing them to remain independent and age in their communities. This system will track services to individuals, stem duplication of efforts, support efficient referrals and follow-up, and enhance connections among partnering agencies.
- **Senior Centers as Neighborhood Hubs.** Senior centers serve as focal points or one-stop shops for older adults to access services directly from within their community. This includes access to meal services, healthcare, educational opportunities, and a variety of social and recreational activity. Despite a decrease in funding, the City’s 14 centers served over 55,000 seniors last year by focusing on strategies that expand partnerships and innovation. Waxter Wisdom uses theatrical presentations as an educational vehicle to present the historic contributions of African American men and women. Fitness classes provided at senior centers ensure that older adults have the resources to address chronic conditions that may otherwise exacerbate and rob them of their physical independence and ability to live a long and healthy life.
- **City-wide strategy.** BCHD was awarded an \$85,000 grant from the Stulman Foundation to develop a city-wide strategy to care for older adults in Baltimore, and BCHD will launch the strategy in early 2019. Like the Youth Health and Wellness Plan, this strategy will tie together efforts across the city and present a blueprint for ensuring that our most vulnerable seniors have access to the comprehensive care and community that they need.

## Challenges and Aspirations

- **Older Americans Act.** The Older Americans Act (OAA) was created to ensure that preference is given to providing services to older persons with the greatest economic and social need. Baltimore City’s seniors tend to be older, more disabled, and lower income than seniors in other Maryland jurisdictions. Seventeen percent of Baltimore City older adults live below the Federal Poverty Level versus 8 percent of Maryland’s older adults statewide.<sup>42</sup> In Baltimore City, 84 percent of older adults have a disability, compared to 69 percent for Maryland older adults statewide.<sup>43</sup> BCHD thus serves a larger population with much greater need than counterpart jurisdictions. Maryland’s OAA Title III funding formula does not adequately account for Baltimore’s seniors, and we have proposed revisions that would make it equitably responsive to our population’s needs.

## ***Public Health Infrastructure***

**Background:** BCHD provides essential public health services, including communicable disease tracking, education and prevention, STD treatment, non-emergency medical transport, emergency preparedness and response, restaurant inspections, and animal control. Our staff, from our animal control officers, to our sanitarians, and outbreak investigators, has tackled emergencies ranging from Legionella, pneumonia, measles, and Ebola investigations to transporting patients to life-saving treatment during severe weather. These activities are core to Baltimore City's health and safety.

### **Accomplishments/Progress/Update**

- **HIV Prevention and Education.** In the fall of 2015, BCHD secured two grants totaling \$18 million to bring HIV prevention and treatment to underserved populations. The White House has acknowledged Baltimore's leadership in this area, and Baltimore was one of a handful of cities to join the Fast Track Cities coalition to end AIDS by 2030. Our HIV team will continue to partner with community and provider groups to provide education and treatment in one of the largest collaborations to combat HIV.

BCHD's IMPACT Campaign (the Initiative to Maximize Prevention, Access, Care, and Treatment) is a prevention and care campaign prioritizing same-gender-loving men and transgender communities of color. In addition to supporting the provision of HIV care and HIV pre-exposure prophylaxis (PrEP) through provider training and peer navigation, IMPACT includes social innovation and community outreach activities led by BCHD, with the goal of reducing social stigma and medical mistrust in LGBTQ communities of color. IMPACT's social innovation comprises three initiatives: Baltimore in Conversation, Project Presence, and Baltimore in Action.

- Baltimore in Conversation focuses on fostering more holistic sexual health for queer people of color by building empathy through storytelling.
- Project Presence uses photographic portraits narrating the stories of queer individuals of color as a medium to address social stigma. The photo exhibition has rotated through buildings and galleries across Baltimore.
- Baltimore in Action is the culminating event of the IMPACT Campaign. It convenes Baltimore's healthcare providers, members and allies of the LGBTQ community, social service providers, businesses, and community-based organizations to co-create a citywide HIV prevention and care plan. Using the triumphs, challenges, and barriers identified from Baltimore in Conversation, the plan aims to improve access to and delivery of prevention and care services with an approach that is community-driven, human-centered, and socially conscious.

BCHD has hosted the Know Your Status Ball annually for the last eight years. This event is aimed at the House and Ball community, which is made up of

gay and transgender individuals. Each year, approximately 600 individuals attend the event, with hundreds of people volunteering for HIV testing. The ball attendees are statistically at the highest risk for contracting HIV and are often stigmatized in other health settings. There is a higher HIV detection rate at the event than with typical outreach methods. Those who test positive are linked with primary care. BCHD is one of the only health departments in the country to host this type of event.

- **Increasing access to HIV/AIDS treatment.** While the Affordable Care Act (ACA) has improved access to health insurance and Medicaid, many of our residents with HIV/AIDS need additional support. BCHD provides clinical and support services for people living with HIV/AIDS and their contacts. Through these efforts, BCHD has linked over 1,400 patients to primary care, an important step in stopping the transmission of HIV. In 2015, the Maryland Department of Health recognized this program staff with two statewide awards, “Most Encounters with HIV Positive Clients” and “Most Referrals to HIV Primary Care.” BCHD provides HIV-related medical and support services to over 10,000 clients living in Baltimore City and the five surrounding counties.
- **Vaccines.** Baltimore City has one of the highest rates of student immunizations in the country, and BCHD holds regular clinics—both before school starts and throughout the year—to ensure that all students are immunized.<sup>44</sup> BCHD led partners in developing the Baltimore Statement on Childhood Vaccinations through a coalition of pediatric chiefs and chairs and the Maryland Chapter of the American Academy of Pediatrics. The statement highlighted BCHD’s unequivocal message regarding the safety and effectiveness of childhood vaccines and affirms Baltimore’s commitment to protecting its youth from preventable illness.
- **Public Health Preparedness.** BCHD is responsible for stewarding the City through any major public health emergency. BCHD trains staff and, during times of emergency, convenes and communicates with the City’s healthcare infrastructure, and organizes drills and exercises so that the city can effectively respond to a range of public health threats. In 2017, BCHD developed new preparedness plans and conducted multiple trainings to enhance the BCHD’s response capabilities.

BCHD’s preparedness work proved valuable in response to an emergency shelter need following a two-alarm high rise apartment fire on Easter in 2017. More than 170 residents were displaced and an emergency shelter was opened for five days and supported by city agencies. BCHD, including its nurses, was ready to respond and provided health and medical assistance to residents impacted by the fire. Shelter nurses helped residents obtain emergency prescription medication refills, arranged transportation to dialysis facilities, connected residents to behavioral health support, and relocated pets.

- **Acute Communicable Diseases.** BCHD responds to emerging diseases like the Zika virus; performs essential core public health activities that include investigation and surveillance of foodborne illness, animal bites/rabies, and other infectious diseases such as Legionnaire's disease; and tracks HIV, syphilis, gonorrhea, chlamydia, and other sexually-transmitted diseases. BCHD is responsible for the surveillance of over 60 types of reportable communicable diseases and outbreaks and provides technical assistance and education to hospitals, long-term care facilities, day care providers, and other constituencies.
  - In 2017, BCHD investigated more than 550 reportable disease cases, over 35 outbreaks, and over 1,100 potential rabies exposures. Outbreaks occur in many settings, including restaurants, hospitals, schools, and daycares, and the health impact of a reportable disease is often significant. In 2017, BCHD triaged over 170 calls for Zika testing from physicians and investigated multiple cases.
  - In 2017, BCHD continued to work with city, state, and federal agencies to lead the City's response to the Zika virus. BCHD's Zika plan was based on a three-pronged approach: mosquito surveillance and response to standing water complaints; case investigation; and public education. In collaboration with partner agencies, BCHD responded to multiple confirmed cases of Zika in 2016 and 2017.
- **Environmental Inspection Services.** BCHD performs three core components of environmental inspections: plan review, food control, and ecology. Plan Review is the first stop for most facilities looking to obtain a license. New food service facilities or facilities under new ownership, including swimming pools and tattoo establishments, must submit plans and undergo an initial plan review inspection prior to license approval. Food Control conducts routine inspections for food service facilities and temporary food service facilities. In addition, the food control staff conducts complaint investigations for food service facilities and food-borne outbreak investigations. Over 5,000 food establishments in Baltimore City require regulatory inspections. The ecology section conducts routine inspections of tattoo establishments, swimming pools, spas, and school cafeterias. The ecology staff also conducts complaint investigations for nuisances such as mosquitoes, odors, noise, early morning trash collection, and indoor smoking in public buildings.

Environmental inspection staff protects public health by ensuring that the City's food service establishments observe food safety laws and regulations to minimize risk of the transmission of a food-borne illness. Inspection staff works with owners and operators to demonstrate and explain proper procedures for serving food in a safe and hygienic manner. This process aims to support businesses so that they can provide the best possible service to Baltimore's residents and also helps create a healthier city. BCHD provides online public access to inspection reports, because we believe that providing information directly to residents allows them to make the best choices possible. BCHD responds to over 1,600 environmental complaints annually.

- **Social Club Task Force.** The Social Club Task Force was established over 15 years ago as an inter-agency task force to target hot spots identified by police districts during the late evening hours. BCHD's inspectors are an integral part of this task force, as it often takes the lead on inspections. Over the last 15 years, BCHD conducted inspections on a bi-weekly or monthly basis. Under the Violence Reduction Initiative, BCHD now conducts this outreach weekly, allowing more facilities to be inspected during their regular hours of operation.
- **Animal Control and Shelter.** BCHD staff work tirelessly to protect the health not only of Baltimore's human residents but also of our animal residents. BCHD enforces city and state codes, rules, and regulations and investigates animal neglect and cruelty cases to protect Baltimore's human and animal residents. Animal abuse can be a predictor of abuse of humans; this amplifies the importance of intervening in these cases. To support this, BCHD advocated for important legislation passed in late 2015 to ban dog-fighting paraphernalia. BCHD receives an average of 23,000 complaints annually and investigates approximately 5,000 animal endangerment cases and nearly 1,200 animal bite or exposure cases every year. BCHD also works with BPD to serve warrants in cases where animals are involved. Baltimore Animal Rescue and Care Shelter (BARCS) is a 501(c)(3) non-profit organization contracted to provide sheltering and care services. BARCS provides care for over 12,000 animals every year and has increased the live release rate significantly over the past decade; in 2007, the live release rate was 50 percent, in 2017, the rate was 89 percent.
- **Clinical Services.** BCHD manages several clinics that serve the population of Baltimore City. These include a Sexually Transmitted Disease (STD) clinic, HIV and Hepatitis C clinic, Tuberculosis (TB) clinic, and dental clinic. BCHD's clinics also host a PrEP program that provides medication to prevent HIV to those at high risk of infection and HIV directly observed therapy to HIV patients who need additional support to remain adherent to HIV therapy. BCHD also has a clinical lab that supports the clinics and other BCHD programs by providing STD testing services. The TB clinic treats all patients with active TB in the city and conducts TB investigations. More than 9,000 patients receive care through BCHD communicable disease clinics each year.

Additionally, BCHD operates clinical services to provide comprehensive reproductive health services to uninsured and underinsured adults and teens. Clients receive education on reproductive health and family planning services, pregnancy tests, and a variety of contraceptive methods. In addition, they are offered testing/treatment for STDs, cervical cancer screening, breast/testicular screening exams, and health education. No one is refused service due to financial hardship, and each year over 7,000 patients are served.

- **Immunizations.** BCHD works to eliminate morbidity and mortality due to vaccine-preventable disease through targeted health education and clinical administration of vaccines for children and adolescents. This is done through

clinical services offered at two clinics and several community outreach sites. In addition, BCHD oversees targeted community outreach, operates the Baltimore Immunization Registry, and manages outreach to Hepatitis B-positive mothers to ensure Hepatitis B vaccinations for infants.

- **Field Health Services.** To provide safe and reliable medical transport for residents—many of whom are elderly or handicapped—BCHD coordinates transportation to non-emergency medically necessary medical appointments for eligible Medicaid patients. Through management of a call center that schedules these rides, BCHD provides over 16,000 medically fragile patients with approximately 120,000 rides annually.

## Challenges and Aspirations

- **Infrastructural support for Public Health.** It is said that “Public health saved your life today, you just don’t know it.” The role of public health infrastructure in protecting the health and safety of Baltimore’s residents cannot be understated: public health infrastructure prevents the spread of deadly diseases, promotes wellbeing and mental health, enhances quality of life, reduces violent crime, and empowers our most vulnerable. Despite this, public health is often an unsung hero and funding for public health infrastructure is in constant jeopardy.

Every component of public health infrastructure faces budget cuts each year and BCHD and our counterparts across the country are asked to do more with less. Without greater infrastructural investment, gains will be short-lived, evidence-based interventions will be unsustainable, and critical services will be unavailable for our most vulnerable residents.

- **Funding for emergency preparedness.** After the September 11<sup>th</sup> attacks and the 2001 anthrax attacks, the paramount importance of public health preparedness was clear. The federal government supported building local public health capacity to train staff, plan for emergencies, and respond to them. Every year, BCHD is involved in or leads responses to various emergencies, whether stemming from infectious diseases, dangerous weather, or a variety of other urgent events, and we advocate for continued funding to robustly prepare for emergencies and outbreaks, including emerging infectious diseases, natural disasters, and biological, chemical, nuclear, and radiological events. Cuts to the Prevention and Public Health Fund, and to other preparedness programs are a major threat to national security. Over the past six years, BCHD’s preparedness staffing has decreased significantly due to federal funding reductions. The decreases severely limit BCHD’s capacity to respond to any sustained emergency. A sustained increase in funding that restores BCHD’s capacity is necessary to ensure that BCHD can respond in a frontline manner to public health threats and emerging infections to protect Baltimore City residents.
- **Funding for clinic safety net.** The decrease in state and federal funding is not limited to the emergency preparedness program; it extends to many of

the safety net programs our vulnerable citizens depend on. The Affordable Care Act was intended to provide all citizens access to health insurance and healthcare. While there have been some successes, many of our very low-income, vulnerable citizens rely on our grant-funded safety net programs, such as tuberculosis control, syphilis and gonorrhea testing, and family planning clinics. Failure to support essential public health services will dramatically impact visible public health measures and the lives of all our citizens.

## ***Population Health and Health in All Policies***

**Background:** Where we live, work, and play is the major driver of health outcomes and, as the public health authority for the City, BCHD is leading the way on initiatives that address the “upstream” factors of health—the social determinants—from housing to food to transportation to education.

We view health as foundational to every issue—unhealthy children cannot learn in school, and unhealthy adults cannot be a productive part of the workforce. As we examine critical issues—the economy, public safety, education—health is an essential driver of all of them.

This is particularly significant in Maryland, where we are already leading the way on public health due to the establishment of global budgeting. Global budgeting shifts virtually all the hospital revenue from a “fee-for-service” model to a global payment model, incentivizing hospitals to work in partnership with other providers and the community to prevent unnecessary hospitalizations and readmissions. The goal of the model is to promote quality healthcare, improve patient health, and lower costs. As a result, it creates incentives for treating the whole person and focusing on the intersection of health with other policy priorities.

BCHD works closely with local healthcare providers, including hospitals and federally qualified health centers, to identify shared priorities, like behavioral health. From creating a stabilization center to tracking patients who are the highest utilizers of care, coordination with our healthcare partners is critical to ensuring that patients are receiving essential public health services. As the neutral convener, BCHD is positioned to coordinate citywide initiatives and collaborations that involve competing hospital systems and other health organizations.

### **Accomplishments/Progress/Update**

Our current initiatives include:

- **Establishment of a new clinic located at 1200 East Fayette Street.** In August, 2015, the City of Baltimore purchased a clinical building located at 1200 East Fayette Street to relocate the Eastern Health District Clinic. Renovations will begin in spring 2018 and BCHD anticipates opening the new facility by the end of 2018 or early 2019. The new clinic will provide additional clinical space that will allow us to increase services we offer. Additional services being added include medication-assisted treatment to

help patients with substance use and opioid addiction and expanded care management services. It also will allow BCHD to deliver services in a modern building, expand clinical and health/wellness activities, and increase the number of residents served. It will provide a respectful and reassuring environment for our residents and reduce stigma about receiving services. We plan to focus on the whole person and provide wellness activities, such as community support groups, yoga, and cooking classes.

- **Accountable Health Community.** In May 2017, in partnership with all of the Baltimore City hospitals and federally qualified health centers, BCHD led a successful citywide proposal to develop an Accountable Health Community (AHC). BCHD was awarded \$4.3 million in April 2017 to design and implement a model that will enable more than 40,000 patients in Baltimore City to access screening, referral, and navigation to essential community resources on an annual basis.

As Medicare and Medicaid beneficiaries make up nearly 60 percent of the total population in Baltimore, the AHC is committed to identifying and addressing the health-related social needs of Baltimore City's Medicare and Medicaid beneficiaries via clinical-community linkages that will impact total health care costs, reduce utilization, and improve health outcomes for this vulnerable population.

This project will both address Medicaid beneficiaries' health-related social needs as well as build an infrastructure to support navigation to social services. The pilot phase will launch in the summer of 2018 and full implementation will begin in the fall of 2018.

- **Local Health Improvement Council (LHIC).** The LHIC, led by BCHD, is a coalition of representatives from Baltimore City healthcare systems, community-based organizations, faith-based institutions, businesses, foundations, academic institutions, and other sectors who convene to align population health agendas and resources, establish strategic health priorities, and drive improved health outcomes at the population level. LHIC members serve as key advisors and implementation partners with respect to the design and execution of *Healthy Baltimore 2020*.
- **High Utilizer Taskforce.** In September 2015, BCHD convened over 100 hospital and healthcare leaders to discuss behavioral health priorities and coordination of case management services for high utilizers. This work has evolved into a High Utilizer Taskforce that addresses a significant issue facing hospitals and service providers: post-discharge placement for patients with multiple illnesses who are often experiencing homelessness and/or suffering from behavioral health issues. The Taskforce is finalizing a guide for hospital staff to understand discharge options and is also piloting a framework for care management with CRISP (Maryland's health information exchange), to be launched with Mercy Hospital, Health Care for the Homeless, and Weinberg Housing Resource Center.

- **Emergency department convenings.** Since 2015, BCHD has convened all of the city's emergency departments (EDs) to plan a path forward to address opioid use disorder and overdose and to discuss best practices, ranging from buprenorphine induction to care coordination. BCHD has worked with all 12 EDs to establish a set of discharge principles for patients that include co-prescribing of naloxone for all patients at risk for opioid overdose. In addition, with the help of a behavioral health consulting firm, the Mosaic Group, eight EDs began implementing Screening, Brief Intervention and Referral to Treatment (SBIRT). Currently, eight EDs offer buprenorphine from the ED, with connections to same-day or next-day referral to ongoing, outpatient treatment.
- **Business Advisory Group.** In October 2016, BCHD launched a Business Advisory Group in order to solicit advice from the business community and support for BCHD initiatives that aim to improve health in the city. BCHD's Business Advisory Group is comprised of nearly 30 representatives from Baltimore's leading companies, including T. Rowe Price, Under Armour, and Legg Mason. Since its inception, the Business Advisory Group has proved time and again to be a key partner in promoting health and well-being for all residents and employees in Baltimore.

Working with these business partners and many community-based organizations, BCHD launched a citywide wellness challenge, *The Billion Steps Challenge*, to encourage all residents and employees in Baltimore City to get active by walking. BCHD and its partners established a goal of a billion walking steps and seek to reach that goal by hosting challenge events, creating an online inventory designed to amplify other walks, runs, and wellness events, and partnering with workplace wellness programs to encourage taking their activities into the community.

In addition, the Business Advisory Group was an important partner in the development and launch of the Worksite Wellness designations. The Worksite Wellness program highlights companies in the city that provide resources and implement policies that encourage healthy lifestyles. Worksites are recognized as a "Baltimore City Well Workplace" for being leaders in promoting nutrition, physical activity, mental health, and substance abuse prevention at their worksites.

- **Health in all policies.** Health touches every issue. For example, if the City is considering implementing bike paths, or placing an incinerator into the community, the health impact should be considered in decision-making. In spring 2017, BCHD brought a public health perspective to technology and innovation through the launch of TECHHealth (Transforming Engineering for Civic Health), an initiative that deploys coders, designers, and innovators to develop solutions to public health challenges. BCHD identified a series of problems and engaged local community-based entrepreneurs to create novel solutions. One success story is Bad Batch. BCHD worked with Code in the Schools to develop a real-time alert system warning opioid users of geographic spikes in nonfatal overdoses. Reflecting BCHD's philosophy that a

leading 21<sup>st</sup> century health department must intersect with multiple industries, TECHhealth leverages Baltimore's rich technology community to modernize public health interventions and deliver effective services on behalf of residents.

## Challenges and Aspirations

- **Unified approach to care coordination and alignment.** While BCHD has continued to convene stakeholders around care coordination, social needs integration, and several other key population health issues, the true integration of public health and healthcare is still evolving. To that end, we look to deepen partnerships with our hospital and healthcare partners—including the potential alignment of their community benefits strategies with citywide health priorities—to ensure that all residents benefit from a comprehensive approach to health.
- **Moving the needle on health outcomes.** In launching *Healthy Baltimore 2020*, BCHD is also developing a dashboard to track each of the equity objectives and targets laid out in the plan. These targets build upon ongoing epidemiology work—including our Neighborhood Health Profiles, which provide snapshots of key health outcomes in each city neighborhood—as well as input from key community stakeholders. The dashboard will go live in summer of 2018 and be publicly available and enable ongoing feedback on the progress of *Healthy Baltimore 2020*.
- **Engaging the private sector.** Building upon the success of BCHD's Business Advisory Group as well as TECHhealth, we will continue to engage private sector partners in program expansion and innovation. We believe that public health should be at the table not only as a public service but also as an engine of workforce development and business efficiency and we look forward to engaging our many partners in enabling that vision.

## Conclusion

While Baltimore City faces several public health challenges, we also have invaluable assets: one of the strongest healthcare infrastructures in the country, invested community members and partners, and a willingness—born of necessity—to test and implement new, innovative approaches to keep our citizens healthy. As the City's health authority, BCHD is fortunate to work with excellent partners and leaders in every sector—government, business, community advocacy, healthcare, faith-based, and more—all of whom share a deep commitment to ensuring the health of our citizens.

*Thank you for your partnership in ensuring that all of Baltimore's citizens are healthy and well.*

## References

- <sup>1</sup> Baltimore City Health Department. 2017 Neighborhood Health Profiles. Available at: <https://health.baltimorecity.gov/stats-and-data>. Baltimore, MD: Baltimore City Health Department; Maryland Department of Health. Maryland Vital Statistics Annual Report 2016, Table 50, Age Adjusted Death Rates for Selected Causes by Political Subdivision, 2014-2016. Baltimore, MD: Maryland Department of Health.
- <sup>2</sup> Robert Wood Johnson Foundation. County Health Rankings & Roadmaps. Available at: <http://www.countyhealthrankings.org/app/maryland/2017/rankings/baltimore-city/county/outcomes/overall/snapshot>. Princeton, NJ: Robert Wood Johnson Foundation.
- <sup>3</sup> U.S. Census Bureau. 2012-2016 American Community Survey 5-Year Estimates, Table CP03, Comparative Economic Characteristics. Suitland, MD: U.S. Census Bureau.
- <sup>4</sup> Centers for Disease Control and Prevention. Effectiveness in Disease and Injury Prevention Estimate National Spending on Prevention 1988, *Morbidity and Mortality Weekly Report*, July 24, 1992. Available at: <https://www.cdc.gov/mmwr/preview/mmwrhtml/00017286.htm>. Atlanta, GA: Centers for Disease Control and Prevention; McGinnis, J. Michael, Williams-Russo, Pamela, and Knickman, James R. The Case For More Active Policy Attention to Health Promotion. *Health Affairs*, Volume 21, No.2, March-April, 2002. Available at: <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.21.2.78>. Project HOPE.
- <sup>5</sup> Baltimore City Health Department. 2017 Neighborhood Health Profiles.
- <sup>6</sup> Robert Wood Johnson Foundation. County Health Rankings & Roadmaps.
- <sup>7</sup> Maryland Department of Health. 2016 Baltimore City HIV Annual Epidemiological Profile, data reported through June 30, 2017: Table 1 – Adult/Adolescent HIV Diagnoses during 2016, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, reported through 6/30/2017; Figure 2 – Trends in Living HIV Cases, 1985-2016, reported through 6/30/2017; Table 13 – Adult/Adolescent Living HIV Cases with and without AIDS by Sex at Birth, Race/Ethnicity, and Country of Birth, Alive on 12/31/2016, and reported through 6/30/2017. Race estimate was calculated by dividing the number for Black-only by the number for Total. Available at: <https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx>. Baltimore, MD: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health.
- <sup>8</sup> Maryland Department of Health. 2016 Maryland HIV Annual Epidemiological Profile, data reported through June 30, 2017: Section III, June 30, 2017 Adult/Adolescent HIV Case rate by Jurisdiction 2016, reported through 6/30/2017. Baltimore, MD: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health.
- <sup>9</sup> Maryland Department of Health. 2016 Baltimore City HIV Annual Epidemiological Profile, data reported through June 30, 2017: Table 1 – Adult/Adolescent HIV Diagnoses during 2016, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, reported through 6/30/2017; Figure 2 – Trends in Living HIV Cases, 1985-2016, reported through 6/30/2017; Table 13 – Adult/Adolescent Living HIV Cases with and without AIDS by Sex at Birth, Race/Ethnicity, and Country of Birth, Alive on 12/31/2016, and reported through 6/30/2017. Race estimate was calculated by dividing the number for Black-only by the number for Total. Available at: <https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx>. Baltimore, MD: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health.
- <sup>10</sup> U.S. Census Bureau. 2012-2016 American Community Survey 5-Year Estimates, Table DP05: ACS Demographic and Housing Estimates. Baltimore, MD, accessed 1/31/2018. Suitland, MD: U.S. Census Bureau, American FactFinder.
- <sup>11</sup> Maryland Department of Health. 2016 Baltimore City HIV Annual Epidemiological Profile, data reported through June 30, 2017: Table 1 – Adult/Adolescent HIV Diagnoses during 2016, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, reported through 6/30/2017; Figure 2 – Trends in Living HIV Cases, 1985-2016, reported through 6/30/2017; Table 13 – Adult/Adolescent Living HIV Cases with and without AIDS by Sex at Birth, Race/Ethnicity, and Country of Birth, Alive on 12/31/2016, and reported through 6/30/2017. Race estimate was calculated by dividing the number for Black-only by the number for Total. Available at: <https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx>. Baltimore, MD: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health.
- <sup>12</sup> Maryland Department of Health. 2014 Youth Risk Behavior Survey Results, Maryland High School Survey, Baltimore City Summary Tables - Weighted Data. Available at: <https://phpa.health.maryland.gov/ccdpc/Reports/Pages/yrbs.aspx#baltcity>. Baltimore, MD: Maryland Department of Health.
- <sup>13</sup> Maryland Department of Health. 2014 Youth Risk Behavior Survey Results, Maryland Middle School Survey, Baltimore City, Summary Tables - Weighted Data. Available at: <https://phpa.health.maryland.gov/ccdpc/Reports/Pages/yrbs.aspx#baltcity>. Baltimore, MD: Maryland Department of Health.
- <sup>14</sup> Maryland Department of Health. Maryland State Health Improvement Process, Emergency Department Visit Rate due to Asthma, 2014, data trend, accessed 1/31/2018. Available at: <http://ship.md.networkofcare.org/ph/>. Baltimore, MD: Maryland Department of Health.
- <sup>15</sup> Maryland Department of Health. Maryland Vital Statistics 2016 Report, Table 21A: Number and Percentage of Births of Low Birth Weight by Maternal Race, Hispanic Origin, Region, and Political Subdivision, Maryland, 2016. Available at: <https://health.maryland.gov/vsa/Pages/reports.aspx>. Baltimore, MD: Vital Statistics Administration, Maryland Department of Health.
- <sup>16</sup> U.S. Centers for Disease Control and Prevention. National Vital Statistics Reports, Volume 67, Number 1, Births: Final Data for 2016, Table 23. Births, by birthweight (grams) and by age and race and Hispanic origin of mother: United States, 2016. Atlanta, GA: U.S. Centers for Disease Control and Prevention.
- <sup>17</sup> Child and Adolescent Health Measurement Initiative, 2014. Adverse Childhood Experiences among Baltimore & Maryland's Children. Baltimore, MD: Child and Adolescent Health Measurement Initiative, Data Resource Center.
- <sup>18</sup> Maryland Department of Health. Maryland Behavior Risk Factor Surveillance System, Query: Column = Tobacco: Current smoker (smoked at least 100 cigarettes in their lifetime and currently smoke), Row = Demographics: County, Years Requested: 2014, accessed 01/25/18. Available at: <https://phpa.health.maryland.gov/ccdpc/Reports/Pages/brfss.aspx>. Baltimore, MD: Maryland Department of Health.
- <sup>19</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2016 on CDC WONDER Online Database, released December, 2017. Data are from the Multiple Cause of Death Files, 1999-2016, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Data represent 2016 overdose mortality rates by county for counties considered to have "large central metro" urbanization. Fatal overdose was defined as: Drug poisonings (overdose) Unintentional (X40-

X44), Suicide (X60-X64), Homicide (X85), Undetermined (Y10-Y14) and Alcohol poisonings (overdose) (X45, X65, Y15). Accessed on 4/11/18. Available at: <http://wonder.cdc.gov/ucd-icd10.html>. Atlanta, GA: Center for Disease Control and Prevention.

<sup>20</sup> Maryland Department of Health, Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, Data update through 3rd quarter 2017, Table 1. Available at: [https://bha.health.maryland.gov/OVERDOSE\\_PREVENTION/Pages/Data-and-Reports.aspx](https://bha.health.maryland.gov/OVERDOSE_PREVENTION/Pages/Data-and-Reports.aspx). Baltimore, MD: Maryland Department of Health.

<sup>21</sup> Substance Abuse and Mental Health Services Administration. 2012-2014 National Surveys on Drug Use and Health: Substate Estimates, Percentages, Table 21: Dependence or Abuse of Illicit Drugs or Alcohol in the Past Year among Individuals Aged 12 or Older, by State and Substate Region: Percentages, Annual Averages Based on 2012, 2013, and 2014 NSDUHs. Rockville, MD: Substance Abuse and Mental Health Services Administration.

<sup>22</sup> Abrams, M. T., Vanderwerker, L. C., Smith, J. K., & Arbelaez, J. J. (2016, February 9). Opioid use disorders in Baltimore City: Prevalence and treatment rates. Available at: <http://www.hilltopinstitute.org/publications/OpioidUseDisordersInBaltimoreCity-Feb2016.pdf>. Baltimore, MD: The Hilltop Institute, UMBC.

<sup>23</sup> Maryland Department of Health. Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, data update through 3rd quarter 2017, Table 1. Available at: [https://bha.health.maryland.gov/OVERDOSE\\_PREVENTION/Pages/Data-and-Reports.aspx](https://bha.health.maryland.gov/OVERDOSE_PREVENTION/Pages/Data-and-Reports.aspx). Baltimore, MD: Maryland Department of Health.

<sup>24</sup> Substance Abuse and Mental Health Services Administration. 2012-2014 National Surveys on Drug Use and Health: Substate Estimates, Percentages, Table 21: Dependence or Abuse of Illicit Drugs or Alcohol in the Past Year among Individuals Aged 12 or Older, by State and Substate Region: Percentages, Annual Averages Based on 2012, 2013, and 2014 NSDUHs. Rockville, MD: Substance Abuse and Mental Health Services Administration.

<sup>25</sup> Maryland Department of Health, Behavioral Health Administration. Drug and Alcohol-Related Intoxication Deaths in Maryland Data update through 1st quarter 2015. Table 6. Available at: [https://bha.health.maryland.gov/OVERDOSE\\_PREVENTION/Documents/Quarterly%20data%202015%20merged%20file\\_v2.pdf](https://bha.health.maryland.gov/OVERDOSE_PREVENTION/Documents/Quarterly%20data%202015%20merged%20file_v2.pdf). Baltimore, MD: Maryland Department of Health.

<sup>26</sup> Ibid.

<sup>27</sup> U.S. Census Bureau. Population Estimates Program, Population and Housing Unit Estimates, Population estimates, July 1, 2016, (V2016). Suitland, MD: U.S. Census Bureau.

<sup>28</sup> Maryland Hospital Association. Maryland's Behavioral Health Crisis. Available at: <http://www.mhaonline.org/docs/default-source/infographics/2016-behavioral-health-infographic---baltimore-city.pdf>. Elkridge, MD: Maryland Hospital Association.

<sup>29</sup> Substance Abuse and Mental Health Services Administration. 2012-2014 National Surveys on Drug Use.

<sup>30</sup> Bronson 2017, Drug use, dependence, and abuse among state prisoners and jail inmates, 07-09. Available at: [https://www.bjs.gov/content/pub/pdf/imhprpji1112\\_sum.pdf](https://www.bjs.gov/content/pub/pdf/imhprpji1112_sum.pdf). Washington, DC: Bureau of Justice Statistics.

<sup>31</sup> National Institute on Drug Abuse. Principles of drug addiction treatment: A research-based guide. 3rd ed. Bethesda (MD): National Institute on Drug Abuse, National Institutes of Health.

<sup>32</sup> BCHD analysis of data provided by Maryland Department of Health Vital Statistics Administration.

<sup>33</sup> Maryland Department of Health. 2015 Youth Risk Behavior Survey Results, Maryland High School Survey, Baltimore City Summary Tables - Weighted Data. Available at: <https://phpa.health.maryland.gov/ccdc/Reports/Pages/yrbs.aspx#baltcity>. Baltimore, MD: Maryland Department of Health.

<sup>34</sup> Centers for Disease Control and Prevention. 1991-2015 High School Youth Risk Behavior Data Survey. Available at: <http://nccd.cdc.gov/youthonline/>. Atlanta, GA: Centers for Disease Control and Prevention.

<sup>35</sup> Asthma Control Program, 2011. Jurisdiction Profile: Asthma in Baltimore City. Available at:

[https://phpa.health.maryland.gov/mch/documents/asthma\\_control/Profile\\_BaltimoreCity.pdf](https://phpa.health.maryland.gov/mch/documents/asthma_control/Profile_BaltimoreCity.pdf). Baltimore, MD: Asthma Control Program, Maryland Department of Health.

<sup>36</sup> Maryland Department of the Environment. Annual Childhood Lead Registry Reports, Child Blood Lead Surveillance in Maryland Annual Reports, 2000, 2015: Updated 2016 (167 cases with EBL $\geq$ 10) vs. 2000 (2,198 cases with EBL $\geq$ 10). Baltimore, MD: Lead Poisoning Prevention Program, Maryland Department of the Environment.

<sup>37</sup> Ibid. Table Two: Blood Lead Testing of Children 0-72 Months of Age by Jurisdiction in 2016.

<sup>38</sup> Office of Adolescent Health. Adolescents and Tobacco: Trends. Available at: <https://www.hhs.gov/ash/oah/adolescent-development/substance-use/drugs/tobacco/trends/index.html>. Rockville, MD: Office of Adolescent Health, U.S. Department of Health and Human Services.

<sup>39</sup> Chesapeake Regional Information System for our Patients (CRISP). B'FRIEND Initiative Dashboard at CRISP, 2017 ED visits for falls. Accessed 4/3/2018. Confidential Tableau dashboards developed by CRISP, using confidential Maryland Health Services Cost Revision Commission Inpatient and Outpatient Case Mix Data with CRISP EID. Columbia, MD: Chesapeake Regional Information System for our Patients.

<sup>40</sup> Chesapeake Regional Information System for our Patients (CRISP). B'FRIEND Initiative Dashboard at CRISP, 2016-2017 hospitalizations for falls; WISQARS Cost of Injury Reports, 2010 Nonfatal Hospitalized Injuries, both sexes, ages 65-85+, United States, accessed 4/3/2018. The \$60 million statistic was generated by multiplying an average of 1,551 falls-related hospitalizations in Baltimore per year by \$39,000 average medical cost for falls-related hospitalizations. Columbia, MD: Chesapeake Regional Information System for our Patients.

<sup>41</sup> Maryland Department of Health. 2013 Statistics on Injury-related Emergency Department Visits, Hospitalizations and Deaths; Tables 15 and 17, Injuries in Maryland. Available at: [https://phpa.health.maryland.gov/ohpetup/Documents/Maryland%202013%20Injury%20Book\\_final.pdf](https://phpa.health.maryland.gov/ohpetup/Documents/Maryland%202013%20Injury%20Book_final.pdf). Baltimore, MD: Maryland Department of Health.

<sup>42</sup> US Census. 2012-2016 American Community Survey 5-Year Estimates, Table DP03, Selected Economic Characteristics. Suitland, MD: U.S. Census Bureau.

<sup>43</sup> US Census, 2012-2016 American Community Survey 5-Year Estimates, Table S1810, Disability Characteristics. Suitland, MD: U.S. Census Bureau.

<sup>44</sup> Baltimore City Health Department (BLISS Project) and Baltimore City Public Schools (Infinite Campus), October 3, 2017 unpublished immunization data; Centers for Disease Control and Prevention, 2017. 2016-17 School Year Vaccination Coverage Dashboard. Accessed 5/4/18. Available at:

<https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-dashboard/2016-17.html>. Atlanta, GA: Centers for Disease Control and Prevention.

# **Exhibit B**

## **to Dzirasa Declaration**



# Employee Handbook

**Baltimore City Health Department**

**1001 E. Fayette Street • Baltimore, Maryland 21202**

**Bernard C. "Jack" Young, Mayor**

**Letitia Dzirasa, M.D., Commissioner of Health**

**Niela Magwood-Phoenix, Human Resource Director**

## TABLE OF CONTENTS

Introduction	
City of Baltimore Civil Services Rule 40	2
Equal Employment Opportunity /1 Harassment	3
Drug and Alcohol Free Work Place	5
Work Place Violence	5
Confidentiality/ HIPAA- Health Insurance Portability and Accountability Act	8
Telephone Usage	9
Electronic Communications	9
Responsibilities of Public Health Employees	12
Ownership of Material	13
Personal Beliefs and Partisan Political Activity	13
Personnel Records	13
Smoking Policy	14
Personal Appearance	14
Work Hours	14
Payroll	15
Identification Badges	16
Reimbursable Expenses	16
Leave Policies	17
Family Medical Leave Act (FMLA)	19
Inclement Weather	20
Employee Benefits	21
Employee Manual Receipt Acknowledgement	25

*Any corrections, additions, or comments regarding the content of the Employee Manual should be forwarded, in writing to the BCHD Human Resources Office at 1001 E. Fayette Street, Baltimore. MD 21202.*

**RULE 40. STANDARDS OF CONDUCT AND PERFORMANCE**

- A. Employees shall perform the duties and responsibilities of their job classifications, in accordance with reasonable job performance standards established by their superiors.
- B. Employees who are in formal training or apprenticeship programs shall complete all technical requirements of the programs within the time periods allowed.
- C. Employees shall report to work on time as scheduled, and shall follow all established rules and policies for leave.
- D. Employees shall obtain and retain all licenses, certificates and other personal qualifications legally required to perform the duties of their positions.
- E. Employees shall be businesslike, helpful and courteous to the general public, clients, co-workers and superiors, exercising due discretion and patience at all times.
- F. Employees shall comply with the federal, state and local laws prohibiting illegal discrimination, harassment and breach of confidentiality.
- G. Employees shall abstain from the use of alcohol, drugs or other chemical substances which would interfere with the performance of their duties or which would pose an unacceptable risk of injury or loss to the City.
- H. Employees shall report their work accurately and honestly, consistent with all professional, municipal, agency and legal requirements, without obstruction of any review, verification or investigation of their work.
- I. Employees shall observe and protect the City's property rights, and shall follow all rules requiring authorization for the use of City funds, labor and property.
- J. Employees shall refuse gifts made in the course of work or in connection with work when such gift could appear to be made for personal gain or in exchange for favoritism or better treatment. Employees shall comply with all established laws, regulations and orders dealing with ethics and conflicts of interest.
- K. Employees may not engage in political activity during work hours, may not use the City positions to interfere with a political nomination or election, and may not coerce any other state or local employee to contribute anything of value to any political cause.

L. Employees shall conduct themselves at all times in a manner becoming of a City employee, and shall not bring scandal, expense or annoyance upon the City through crime, conflict of interest, failure to pay just debts, or other improper or notorious behavior.

Within his or her authority, the appointing officer may prescribe standards of performance to apply to all incumbents of positions in a specified class. Such standards shall note the quantity and quality of service ought fairly to be expected, the manner in which the service should be rendered, and the regulations which should be observed in the performance of services.

The appointing officer shall take disciplinary actions for all employees who violate the performance standards listed above. Such disciplinary action shall include training, counseling, oral or written reprimand, oral or written warning, suspension, demotion, discharge or any other actions authorized by law, appropriate to the severity of the violation. Demotion, suspension for more than 30 days, and discharge shall be performed only in compliance with Rule 56 of the Commission

### **EQUAL EMPLOYMENT OPPORTUNITY**

As part of our ongoing commitment to equal employment opportunity, the City of Baltimore adopts the following policy and procedures to ensure compliance with local, state, and federal laws prohibiting discrimination in employment. The concepts of equal opportunity and fair treatment are core values of Baltimore City government, and City agencies constantly strive to promote a professional work environment that is free from unlawful discrimination and harassment.

This policy applies to all City employees, including full and part-time, probationary, seasonal, temporary, at-will, as well as elected officials and their appointed staff. Additionally, independent contractors, vendors, volunteers and visitors must refrain from engaging in behavior that violates this policy.

#### **1. Commitment to inclusion and non-Discrimination**

The City of Baltimore understands that the success of every City agency depends on the ability to attract and retain the best available talent and to help those individuals reach their fullest potential. Accordingly, the City remains firmly committed to equal employment opportunity for all employees and job applicants and to developing a highly talented and diverse workforce that can deliver the best possible services to the citizens of Baltimore.

City agencies will base all employment decisions individual merit, qualifications, experience and skills, without regard to such factors as race, color, age, national origin, ancestry, marital status, sexual orientation, gender, religion, veteran status, physical or mental disability, genetic information, gender identity or expression or any other status protected by law. They will ensure equal opportunity in all aspects of employment, including recruitment, hiring, termination, discipline, transfers, training and career development, work assignments, promotions and demotions, compensation, benefit administration and all other terms and conditions of employment. All forms of unlawful discrimination are strictly prohibited.

Through the implementation of this policy, the City aims to create a diverse and inclusive workplace in which all employees feel they belong and can make meaningful contributions to City government. By fostering a level playing field for all employees, the City enhances the progress of individuals and the community they serve.

## 2. Prohibition: Against harassment and sexual harassment

All employees have a right to work in an environment free from the demoralizing effects of unlawful harassment. For this reason, harassment based on race, color, age, national origin, ancestry, marital status, sexual orientation, gender, religion, veteran status, physical or mental disability, genetic information, gender identity or expression or any other status protected by law will not be tolerated. Inappropriate harassing behavior may include, but is not limited to, verbal abuse, slurs and negative stereotyping, offensive jokes and comments, threatening or intimidating behavior, the display or circulation of offensive objects and materials (including offensive graffiti, photographs, cartoons, texts and emails) and any other behavior meant to mistreat someone because of his or her race, color, religion, ethnicity, national origin, gender, marital status, age, disability, sexual orientation, gender identity or expression or veterans status. This policy also prohibits sexual harassment. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, sexually suggestive or offensive language or other sexual conduct that unreasonably interferes with an individual's work performance or creates an intimidating, hostile or offensive work environment. Examples of sexual harassment include, but are not limited to:

- repeated and unwelcome sexual advances or requests for sexual favors;
- offensive comments, jokes and innuendo;
- sexually graphic or degrading comments about appearance;
- sexually offensive gestures, whistling and leering;
- offensive physical contact (such as patting, grabbing, pinching or brushing up against someone); and
- displaying or circulating sexually suggestive objects and materials (including inappropriate photographs, cartoons, posters, texts and emails).

Under no circumstances may a supervisor or manager:

- 1) offer or provide an employment benefit in exchange for sexual favors; or
- 2) take (or threaten to take) an adverse employment action because someone refused to perform a sexual favor.

Employees are expected to conduct themselves in a professional manner at all times while they are working, whether on or off City property or outside regular work hours. The policy also applies during work-related business and social events.

## 3. Consequences for violations

The City's policy is one of zero-tolerance for discrimination and harassment. Accordingly, any employee found in violation of this policy will be subject to disciplinary action, up to and including discharge from employment.

In addition, any vendor, contractor, volunteer or visitor who engages in behavior prohibited by this policy will be so advised and asked to immediately cease the offending behavior. If compliance is not forthcoming, the City may terminate its relationship with the individual and/or remove the person from City property.

#### 4. Reporting and complaint procedures

Everyone in City government has a shared responsibility for creating and maintaining a workplace that is free of discrimination and harassment. To that end, all employees are responsible for conducting themselves professionally and for reporting violations of this policy. Supervisors at all levels are responsible for ensuring full compliance with this policy in their respective work areas. Any supervisor who has knowledge of discriminatory or harassing behavior and fails to correct and/or report it will be subject to disciplinary action, up to and including discharge from employment. Concerns about discrimination or harassment should be brought to the attention of a supervisor or manager, an HR Representative or an Equal Opportunity Compliance (EOC) Officer assigned to the agency. Where a complaint is first received by a supervisor, the supervisor shall promptly refer the matter to an HR Representative or an EOC Officer. The City encourages prompt reporting so that potential problems can be addressed before a situation escalates. To facilitate prompt reporting, individuals may bring a complaint either orally or in writing. Agencies shall investigate concerns about harassment and discrimination and take prompt and effective corrective action where appropriate. Individuals asked to participate in the investigation of a complaint, including the complainant, will be expected to give their full cooperation until the matter has been resolved.

#### 5. No retaliation

This policy strictly prohibits retaliation against any individual for having: 1) made a complaint of discrimination or harassment; 2) opposed discrimination or harassment at work; or 3) participated in a complaint investigation. Anyone found to have engaged in retaliation in violation of this policy will be subject to disciplinary action, up to and including discharge from employment. In the case of a non-employee found to have engaged in retaliation, the City may direct the individual to cease the retaliatory behavior, terminate its relationship with the individual and/or remove him or her from City property. Concerns about retaliation should be immediately reported to a supervisor, an agency HR Representative or an EOC Officer. Agencies shall promptly investigate such concerns and take appropriate corrective action when necessary.

### **DRUG AND ALCOHOL FREE WORK PLACE**

On November 18, 1988, Congress passed the Drug-Free Workplace Act of 1988. The new law requires grantees of Federal agencies to certify that they will provide drug-free workplaces. Baltimore City Health Department prohibits the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance. Actions will be taken against employees for violating this prohibition up to and including dismissal.

As a condition of employment, each employee of the City of Baltimore subject to this Act will:

- Abide by the terms of this statement;
- Notify the appointing authority of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- Follow the substance abuse policy

Any employee who is in need of assistance for drug or alcohol abuse is encouraged to contact the City's Employee Assistance Program at 410-396-1859.

### **WORK PLACE VIOLENCE**

A city employee may not bring weapons to any Baltimore City work location, without expressed written approval by the employee's department head for each weapon. Employees of City contractors are prohibited from bringing any weapon to any City work location without approval of the contracting department. A weapon is any device, which is designed, intended, or regularly used to inflict harm on persons or animals. Written requests for permission to bring weapons to work must include a description of the weapon, the reasons for having the weapon at work, and proposed storage arrangements.

#### **Avoiding Opportunities for Physical Attack**

Potentially violent persons should be closely observed and monitored. Such persons should not be left alone where they can become immersed in their problems, angry or hysterical. Suspicious persons should not be left alone to wander around the building or grounds.

No employees should be left alone with a potentially violent person. Employees who are working with high-risk persons should be sure to have help available in person or by phone. If two persons are involved in an intense argument, the mere presence of a neutral third party may discourage threats of violence. Disruptive persons should be escorted to private areas away from onlookers and be given a place to sit down. Angry or potentially violent persons should be seated away from the door to a room to assure that others can escape.

Employees who are most likely to be confronted with violence should be trained in techniques used to avoid violence. The Civil Service Training Division will offer regular classes on preventing and handling workplace violence. Special classes can also be arranged upon request.

If an employee has become involved in a non-criminal dispute with family members or neighbors and the employee has obtained an "Order of Protection" or an "Injunction Against Harassment" or a similar court order, the employee should be instructed to include the employee's work location as well as place of residence in the order. The employees should notify his or her supervisor of the issuance of such an order and provide a description of the individual cited in the order.

Work sites should be reasonably secured, often with areas planned with barriers, locked doors, and means of escape. Security devices should be checked regularly to insure they are working correctly. Alarms, television monitors, intercoms, panic buttons (both built-in and portable), electric latch devices or electronic key devices may be required.

## **Removing Motivations for Violence**

Along with avoiding the opportunity for physical attack, employees should avoid antagonizing others and creating hard feelings. Defusing a potentially violent person requires a lot of self-control, tact, judgment, and patience. Some suggestions are:

- Remain calm and try to keep everyone else calm and businesslike.
- Avoid a win-lose situation, especially in front of spectators.
- Let the person sit down, relax, and calm down in private.
- Listen to what the employee or citizen has to say without arguing or challenging.
- Do not be critical, judgmental, or sarcastic.
- Encourage calm discussion, focusing on the person's problem or objective.
- Offer a few solutions to see if the person can manage his or her problem.
- If any solution might be possible, offer help when ample time is available.
- If any threat of violence is made, warn the person that threats of violence are taken seriously and are not acceptable.
- Surrender property during a robbery.
- Agree to the person's demands (even temporarily) if possible.

## **When Someone Becomes Violent**

When a person commits an act of violence, which causes personal injury or serious property damage, the Police Department 911 number should be called immediately.

Obviously, if an armed crime is in progress, persons should make every effort to escape and protect themselves. In self-defense, persons may need to hide, create diversions or traps, invent weapons, signal for help, or disable their attacker.

An unarmed violent person should be restrained only if intervention is physically possible and likely to succeed, and only if the person poses a risk of major injury or damage. For example, two employees may decide to stop a violent person from assaulting another person, or from destroying very valuable records or systems, or from dismantling working safety equipment controls. However, employees should refrain from attempting physical restraints if a violent person is damaging items that are inexpensive and replaceable.

## **Violence Committed By City Employees**

If an employee is potentially violent, the supervisor must refer the employee to the Employee Assistance Program. If any employee has been traumatized by violence, the employee should be referred to the Employee Assistance Program, as well.

Employees who perform acts of violence or threaten violence will be subject to disciplinary action up to and including termination, as provided for in Section 350 of the Personnel Manual and Rule 56 of the Civil Service Commission.

Employees who are potentially violent should not be allowed to return to their work site for any reason after they are dismissed. Supervisors should gather all personal items belonging to such employees and arrange for the employee to pick them up later at another location

### **Supervisor Responsibilities**

- Monitor all cases where a subordinate deals with potentially violent persons and provide assistance and training whenever necessary.
- Refer injured employees to the Clinic with an Employee Incident Report.
- Refer violent or potentially violent employees to the EAP and not allow them to return to work without EAP approval.
- Take appropriate disciplinary action immediately. If an employee becomes violent or threatening, the supervisor should reprimand, warn, suspend, or even recommend the employee for termination, depending on the seriousness of the case. In the first case of an actual assault, a suspension is usually warranted; this will allow an appropriate cooling off period and will allow the EAP time to arrange a thorough evaluation.
- Allow leave, if necessary. The supervisor may authorize vacation or personal leave. If approved by the EAP, the supervisor may also authorize sick leave for the employee. Employees who exhaust all leave but are found unfit for duty and are receiving therapy should be marked SX on the payroll. The EAP will authorize return to work only if they have assurances from the employee and clinicians that the employee will not become violent or threaten violence and is fit for duty.
- Document all threats of violence and acts of violence.
- Refer victims of violence and other traumatic incidents to the EAP for counseling, if necessary.
- Plan, maintain, and secure the physical work site, including access security, communications, emergency escape, and electronic monitoring if required.
- Conduct background investigations of potential employees.

### **Reporting Violence**

The police emergency "911" number should be called whenever anyone exposes an unauthorized weapon on a Baltimore City work site, especially if the person is angry or discusses revenge. Wherever possible, a written description should be made, identifying the person, the business he or she had with the department, the nature of the incident and any information about his or her residence or place of work. Criminal charges against the person may be necessary if the incident involved injury to another person or property, or if other measures such as disciplinary action or counseling are not effective or possible.

All incidents of violence should be reported to the agency or department head, and to the EAP Director-at 396-3813. The Civil Service EAP Director and the Director of Safety will review each incident. Both will be available for consultation with City managers and both may investigate and make recommendations to prevent future violence.

Where major violence erupts, the Director of Personnel will assemble a task force including

members of the affected department, the Mayor's Office, the Police Department, the Department of Personnel, the Law Department, and other departments as needed.

Families of employees who are victims of violent attacks should be notified in person, if the victim is not able to notify his or her family personally. Supervisors should conduct thorough investigations after violent incidents, insuring that all witnesses and victims have been debriefed. Accurate summary information should be told to the other employees in the same work location as soon as possible.

All public information about violent incidents at a City workplace should be released only through the agency's public information officer.

### **CONFIDENTIALITY**

As an employee of Baltimore City Health Department, you may not have access to strictly confidential material.

Client information is strictly confidential and must be safeguarded. Client information may not be disclosed or shared with anyone other than those designated by the Baltimore City Health Department. Client information may only be disclosed or shared for purposes directly connected with your assignments for the Baltimore City Health Department. "Disclose" means communication of client information, including an acknowledgement that information exists.

Employees of the Health Department must agree to comply with and be bound by all applicable provisions of state and federal law concerning confidential information (including Maryland Annotated Code Article 88A, Section 6; Code of Maryland Regulations 07.01.07; Maryland Annotated Code, Health General Article, State Government Article, Title 10, Subtitle 6; and Federal "Confidentiality of Alcohol and Drug Abuse Patient Records" Regulations, Part 2). Employees also understand that sharing or disclosing such information unlawfully could result in discharge from the Baltimore City Health Department, fines up to \$5000, civil liability for actual damages, and/or imprisonment for up to 90 days.

If a Department employee has a relative or friend that is a client, the client needs to know that the employee will not know confidential information from medical records without the client's consent. Employees shall avoid handling the medical records of relatives and friends whenever possible, and shall not read these records under any circumstances.

### **HIPAA- Health Insurance Portability and Accountability Act**

The Health Insurance Portability and Accountability Act, HIPAA, is federal legislation that requires all health care entities to standardize certain electronic healthcare transactions and identifiers; to ensure the privacy rights of patients; and to ensure security protections to maintain the confidentiality of personal health information. This law, passed in 1996, is the first time the federal government mandated minimum privacy and security standards to safeguard patients' health information. The charge is for Congress and the Department of Health and

Human Services (HHS) to pass new rules to simplify the administrative burden and reduce costs of the health care system. For additional information or assistance with HIPAA, please contact the Human Resources Office at 410-396-1420.

## **TELEPHONE USAGE**

### **Voice Mail Greetings**

If you have office voicemail, it is very important to record a business appropriate greeting that identifies the location and person the caller has reached. Whenever you expect to be out of the office for an extended period of time, whether going on vacation for a week or simply spending the day in meetings, it is important to change the greeting to reflect your availability.

### **Personal Local and Long Distance Calls**

City offices and buildings have telephones for employee usage as defined by the department. The telephones are intended solely for City business. Therefore employees should limit usage of City telephones to authorized City business.

Employees should not make personal long-distance calls using Baltimore City Health Department telephones, except in emergencies. Emergencies must be reported to the immediate supervisor.

## **ELECTRONIC COMMUNICATIONS**

This document sets forth the policy of the Mayor and City Council of Baltimore with respect to access, disclosure, and recording of electronic communications created, received, or stored through the use of hardware, equipment, software, or systems owned or leased by the City. The purpose of this policy is to explain the ownership of the electronic communications created, received, or stored on the City's electronic communications systems and to inform users of the systems about their rights and duties with respect to electronic communications.

The policy applies to e-mail, voice mail, facsimile machines, Internet access, and computers that are part of the electronic communications systems of the City. This policy applies to all people who use the City's systems and may be changed by the City, in its discretion, without prior notice. This policy is in addition to and not in replacement of any other policy or code of conduct of the City or its agencies.

### **Definitions**

Electronic Communications - Including, but are not limited to, messages, transmissions, records, files, and software, whether in electronic form or hardcopy. Users - All people using the City's systems including, but not limited to, City employees, public officials, contractors, consultants, state, and quasi-public employees.

## **Use of Electronic Communications**

The City encourages the use of electronic communications to enhance efficiency. All electronic communications created, received, or stored on the City's electronic communications systems are the sole property of the City and not the author or the recipient. Electronic communications include, but are not limited to, messages, transmissions, records, files, and software, whether in electronic form or hardcopy. Any violation of this policy may lead to disciplinary action, up to and including discharge from employment or contract.

The use of the City's electronic communications systems is solely for the business uses and purposes of government and is limited to City employees, public officials, contractors, and consultants. Government business uses include, but are not limited to, the dissemination of information concerning City recognized events and charities, such as the Combined Charities Campaign and Baltimore Reads. However, the City reserves the sole right to determine the access of charities to the systems. Any non-government business use or intentional misuse of the City's systems is a violation of this policy.

Non-government business uses include, but are not limited to:

- Sending lengthy private messages;
- Sending political messages;
- Operating a business for personal financial gain; and
- Purchasing goods or services for private use.

Intentional misuse includes, but is not limited to, receiving, displaying, storing, or transmitting threatening or sexually-explicit images, messages, or cartoons as well as epithets or slurs based upon race, ethnic or national origin, gender, religious affiliation, disability, or sexual orientation and harassing, offensive, discriminatory, or defamatory communications or images without a government business purpose. It also includes attempting to access a secure database, whether private or public, without permission. The City's systems may be used for minor, incidental personal uses, as determined by its agencies that are not intentional misuses. Personal uses shall not directly or indirectly interfere with the City's business uses, directly or indirectly interfere with another user's duties, or burden the City with more than a negligible cost.

## **Privacy and Security**

All users should be courteous and respect the privacy of others, but no one can rely upon an expectation of privacy or confidentiality for any electronic communication on the City's systems, including minor incidental personal uses. Users are not permitted to defeat any security measure instituted on the City's systems. Users shall not disclose their passwords unless authorized by the City or disclosure is necessary to support the business of the government.

The City reserves and will exercise the right to access, to intercept, to record, and to disclose any and all communications on the City's electronic communications systems, including minor incidental personal uses, at any time, with or without notice to anyone, unless prohibited by law or privilege. The City also reserves the right to monitor compliance with this policy by accessing, intercepting, recording, or disclosing any communication, including minor incidental

personal uses, unless prohibited by law or privilege. The City's rights may be exercised during or after normal working hours and even if the electronic communications appear to have been deleted from the systems. The use of a City password shall not restrict the City's right to access electronic communications.

Users shall not access, retrieve, or record any electronic communications other than those that they have been granted prior authorization to access, to retrieve, or to record. The unauthorized interception of a communication strictly is prohibited and is a violation of this policy. In addition, a communication or any use of a communication that violates federal, state, or local law is a violation of this policy and may subject the user to personal civil liability or criminal prosecution.

Electronic communications on the City's systems may constitute public records as defined by the Maryland Access to Public Records Act, Sections 10-611, et seq., State Government Article of the Annotated Code of Maryland, and may be subject to public disclosure. The City attempts to evaluate all requests for disclosure in accordance with the required and permitted exemptions from disclosure under the Act and applicable law, but it cannot ensure that any communication will not be disclosed.

### **Internet Use**

If a user has been granted Internet access through the City's systems, then the user shall only access the Internet for government business uses and shall accurately identify himself or herself at the outset as a City employee, public official, contractor, or consultant and shall not use a false identity. Certain communications on the Internet may be protected by copyright law or may contain other forms of intellectual property protection. Users shall not download data designated as protected by copyright law or other forms of intellectual property protections without prior authorization. Communications protected by law or privilege immediately shall be deleted from the City's systems, unless they are licensed or authorized for the user.

### **Policy Violations**

Violations of the policy governing electronic communications may result in restriction of access to the City of Baltimore technology resources. In addition, progressive disciplinary action may be applicable under Civil Service Rule 40, Standards of Conduct and Performance, and Rule 56, Cause for Discharge, Demotion, or Suspension.

### **End of Use**

User's access to the City's systems shall cease when one of following occurs:

- Termination of employment.
- Lay-off of an employee.
- Leave of absence of an employee.
- End of a public official's term.
- Termination of a contractor or consultant's relationship with the City.

### **Notification and Responsibility**

All users, including contractors and consultants, shall be notified of this policy and shall agree to comply with its terms as a condition for access of the City's systems, by signing a copy of the Acknowledgment form appended to this policy. Supervisors shall be responsible for determining who among the City employees that they supervise users are and for ensuring that the employees who are users sign a copy of the Acknowledgement Form appended to this policy. A copy of the acknowledgement shall be retained in the individual's personnel file.

As a user of the Mayor and City Council of Baltimore's electronic communications systems, I understand that the sole purpose of the systems, including e-mail, voice mail, facsimile machines, Internet access, and computers, is to support the business of the government and that all electronic communications are the property of the City and not the author or the recipient. I agree not to access or to retrieve any electronic communication other than those that I have been granted prior authorization to access or to retrieve.

The City reserves and will exercise the right to review, to audit, to intercept, to access, and to disclose all matters on the City's electronic communications systems at any time, with or without notice to its users. Such rights may be exercised during or after normal working hours and even if the electronic communications appear to have been deleted from the systems. Employees should have no expectation as to the privacy or confidentiality of any electronic communication. Any violation of the policy by may subject an employee to disciplinary action, up to and including discharge from employment or contract.

### **RESPONSIBILITIES OF PUBLIC HEALTH EMPLOYEES**

The Commissioner of Health has the authority to designate any class of employees, or individual employee, as essential personnel as required providing coverage during a health or life-threatening event. Events that may be deemed emergent are inclement weather, threats of terrorism, terrorism incidents, disease outbreaks, or any other public health threat. In accordance with Administrative Manual, when the Mayor calls liberal leave for inclement weather, essential employees must report. Those that do not report will be marked "X" (absent without pay) on the payroll.

Essential employees should plan to arrive at their work site by 9:00 a.m. If it's impossible to do so, employees must call their immediate supervisor. Managers and supervisors are asked to use their discretion in the approval of leave for non-essential employees. If you should require additional information or clarity regarding this policy speak with your immediate supervisor.

### **OWNERSHIP OF MATERIAL**

All information that you write, develop, receive or compile, including but not limited to publications, articles, speeches, reports, manuals, etc., during the performance of your duties at the Health Department automatically becomes our property, whether or not written, developed,

or compiled in your home or in your offices, and whether done during business hours or during other time.

### **Consulting and Honoraria**

If you are asked to consult with others or to speak at a conference as a representative of the Health Department you must obtain prior approval from the Commissioner of Health, Deputy Commissioner, or Assistant Commissioner. All monetary compensation you earn as a representative of the Health Department shall be paid by the Health Department. This includes, but is not limited to, compensation paid for speaking engagements, written work, and attendance at events.

### **Outside Business Interests**

Personal business interests or outside employment should not interfere with your job performance or otherwise create a conflict of interest. Improper outside activities include, but are not limited to: working for a competing organization or business; using the Health Department's time, facilities or equipment to engage in another business or occupation; engaging in an outside activity which results in you losing time from work, presents the appearance of a conflict, or distracts you from performing satisfactorily.

### **PERSONAL BELIEFS AND PARTISAN POLITICAL ACTIVITY**

The Health Department recognizes that we have a diverse staff with a wide range of personal beliefs, values, and commitments. These beliefs, values, and commitments are a conflict of interest if they prevent you from fulfilling your job responsibilities or have offended a staff member. If you attempt to use the Health Department time and facilities for furthering them, or attempt to convince others of your personal belief after you have been asked to stop, disciplinary action will be taken up to and including termination.

### **PERSONNEL RECORDS**

Federal and state law requires the Health Department to keep certain employee records on file for a specific length of time. The Human Resources Department confidentially maintains these records in your official personnel file.

You may review the contents of your personnel files, by appointment, with a representative of the Human Resources Department present. Personnel records are the property of the Health Department. You may not alter, remove, add, or replace any documents in your file. You may not view the personnel records of any other employee, unless you are a member of the Senior Management Team or the direct supervisor of the employee whose record you wish to access.

Please help us to keep these files up to date by informing us of any changes in your marital status, address, number of dependents, insurance beneficiary, telephone number, and who to notify in the event of an emergency. Such information is critical to ensure that we are able to

administer your benefits and health insurance in an accurate and timely manner.

### **SMOKING POLICY**

To protect the health and safety of all employees, smoking is prohibited within the confines of the office building or other office space used for Health Department business. Smoking is not permitted on city property.

### **PERSONAL APPEARANCE**

The Baltimore City Health Department requires a professional tone and approach in its transactions with other city employees, clients, customers, partners, vendors, visitors, other government agencies and members of the public.

Baltimore City Health Department employees are to present a neat appearance and are not to wear torn, frayed, noticeable patched, excessively or unevenly faded, or threadbare clothing. Clothes are to be clean and pressed. Employees are not to wear athletic garb or any other clothing designed for purposes other than the work the employees perform.

Personal hygiene and cleanliness are also very important. Employees are expected to meet generally accepted standards of cleanliness and hygiene at all times, out of respect for their fellow workers and in the interest of public health.

For additional information, contact your immediate supervisor.

### **WORK HOURS**

The normal workday for most City employees begins at 8:30 a.m. and ends at 4:30 p.m., Monday through Friday. The lunch period is 40 minutes. Some agencies have different work hours because needs for service extend beyond the normal workday. The supervisor will tell the employee if the reporting time for work is other than normal hours.

In establishing a routine work schedule and the changing of an agreed upon work schedule, consideration is given to the following criteria:

1. the effect on productivity of the employee;
2. the ability of co-workers to accomplish their work;
3. the degree to which the accommodation is necessary to allow the employee to retain his or her job;
4. whether the arrangement is expected to be temporary or ongoing; and
5. whether a job description requires routinely working beyond the set parameters of operation and has received the approval of the immediate supervisor.

Except for illness, injury, or an emergency, all time off must be requested in advance. If the employee is scheduled to work but is unable to do so because of illness, injury, or an emergency, the employee must notify the supervisor or the person the supervisor has designated before the start of work or as soon afterwards as possible.

An absence is any failure to report for or remain at work as scheduled, regardless of reason. While absences do occur of valid reasons and the City provides for such emergencies, the City also expects its employees to maintain satisfactory attendance records.

The Attendance Monitoring and Analysis Program are designed to assist employees in maintaining satisfactory attendance. Under this program detailed attendance records are kept for each employee and are reviewed by supervisors on a regular basis. Supervisors are required to take specific actions in accordance with the attendance-monitoring program. An occasion of absence is any period of continuous absence for the same reason. In a case in which an employee has more than seven (7) occasions of absence in a 12-month period, the supervisor may take appropriate corrective action up to and including discharge.

An employee may request or a supervisor may suggest special counseling for excessive absenteeism. The Employee Assistance Program (EAP) will provide the counseling if necessary. However, receiving counseling will not curtail any planned disciplinary action proposed by the supervisor.

For additional information, contact your immediate supervisor.

### ***Working off-site***

In order for the Health Department to carry out its mission, employees may be stationed at different off-site locations. Working from other locations must be targeted to certain projects and the employee must spend time engaged in the principal activities that he or she is employed to perform.

## **PAYROLL**

The Baltimore City Health Department pays employees on a biweekly basis, subject to certain withholding taxes and other required deductions. Pay checks are issued bi-weekly on Friday and covers the period ending the previous Wednesday. You may elect to have your pay deposited into a bank account on each payday. If you choose direct deposit, you will receive a non-negotiable direct deposit statement listing the gross and net pay, itemized deductions, year-to-date earnings, and leave balance. To take advantage of direct deposit, fill out the appropriate form, which is available from the Human Resources Department. You are strongly encouraged to take advantage of direct deposit.

Employees will be issued paychecks on a bi-weekly basis for work performed. Paychecks will be issued on Friday, between 9:00 a.m. and 1:00 p.m. on pay weeks. Paychecks may be deposited directly in a financial institution or issued directly to the employee. You must authorize direct deposit in order for it to occur.

We will not release your paycheck to anyone other than you, except with your written authorization. Remember also that we are required by law to make deductions from your paycheck for federal and state withholding taxes, and for social security taxes (FICA). Also an

employee's check may be garnished for alimony, child support, etc, as required by court order.

*You may voluntarily authorize in writing additional deductions from your paycheck for your contribution to our benefit plans and other items permitted by the Health Department. It is your responsibility to be certain that all such deductions are correct.*

### ***Timesheets***

Timesheets are processed bi-weekly. You must turn in your timesheet on the first Wednesday following the end of the pay period. In January, payroll provides you with the annual schedule indicating the pay period ending and pay dates for the entire year. You can normally expect to receive your paycheck on Friday, unless that day falls on a holiday. If that day is a holiday, you will receive your paycheck on the last workday preceding the holiday.

### ***Overtime for Non-exempt Employees***

In accordance with the provisions of the Fair Labor Standards Act, nonexempt employees will be paid at one-and one half times their normal hourly rate for hours worked in excess of 40 hours in any week. Your department director must approve all overtime prior to working overtime. Exempt employees are not entitled to overtime wages. Please note that the memorandum of understanding for different unions may affect the overtime rate.

### ***Direct Deposit Plan***

An employee's net salary can be deposited directly in an employee's personal checking account rather than receive a paycheck. If the direct deposit method is chosen, the funds (salary) will be available for withdrawal at the start of banking hours on the designated payday, and the employee will receive the paycheck stub at the regular pay distribution time. To join this payment plan, obtain the application and instruction forms from the agency personnel office

## **IDENTIFICATION BADGES**

City employees are required to wear City identification badges at all times. Access to City buildings will only be allowed by showing proper identification. If proper identification is not shown, the employee will be required to sign in and out, pass through a metal detection device or be denied access to the building.

For additional information, contact the Human Resources Office 410-396-1420.

## **REIMBURSABLE EXPENSE**

Employees must maintain a record of expenses in order to be reimbursed for gas mileage and other out of pocket costs incurred while conducting official business. In-town reimbursable expenses include business related telephone calls, parking fees, and millage for personal vehicle

use. Out-of-town reimbursable expenses include hotel accommodations, meals, air fare, car fare, registration fees, car rental, job related telephone calls, faxes, toll, parking fees, and fuel purchase for car rental.

In-town travel/mileage expenses must be turned in for payment to the employee's immediate supervisor by the 1<sup>st</sup> of the month following the month where the expense was incurred. For example, if an employee has expenses in October, the expense report must be presented to the immediate supervisor by the 1<sup>st</sup> of November.

## LEAVE POLICIES

### *Vacation Leave*

Full-time permanent employees earn vacation leave at a set rate for each completed month of service. Part-time permanent employees earn vacation leave at a set rate for each completed 160 hours service. The rate at which employees earn vacation leave is based upon their length of continuous service, as follows:

Completed Years of Continuous Service	Days Earned per Month (or 160 hours)	Days Earned Per year (Full time Employees)
0-5	1	12
6-10	1 1/4	15
11-13	1 1/2	18
14-18	1 3/4	21
19 or more	2	24

The maximum number of vacation days that may be accumulated is modified by various union contracts. In most situations, no additional vacation leave will be credited after the employee accumulates the maximum allowable until the accumulation drops below the maximum limit. Vacation leave may not be used before it is earned. If the employee is serving the first probationary period, the employee may not use vacation leave until the probationary period has been successfully completed.

The employee must obtain approval from the supervisor before using vacation leave. Requests for vacation leave of one week or longer must be made one week in advance, and requests for vacation leave for less than 1 week must be made one workday in advance. Supervisors will normally approve all reasonable vacation leave requests but may refuse to grant leave when, in their judgment, agency needs cannot be met, or there is a pattern of abuse of leave.

For information for more information, contact the immediate supervisor.

### *Sick Leave*

Full-time permanent employees earn one day of sick leave for each completed month of service. Part-time permanent employees earn one day of sick leave for each completed 160 hours of service. There is no limit on the number of sick leave days that may be accumulated.

An employee may use accumulated sick leave when unable to report to work because of personal illness or injury. If an employee is unable to report to work, the employee must notify the supervisor (or the person the supervisor has designated) before the start of work or as soon afterwards as possible. Sick leave must be taken in increments of at least forty-five minutes.

All use of sick leave is subject to verification, including a physical examination by the Office of Occupational Medicine and Safety. Employees who misuse sick leave may be denied further use of this leave and are subject to disciplinary action.

For additional information, contact the immediate supervisor.

### ***Personal Leave***

Personal leave allows employees time off with pay for observing religious or personal holidays or for attending to personal business. Full-time employees earn  $\frac{1}{4}$  day of personal leave for each completed 160 hours of service.

The designated union or organization representing the classifications determines the maximum amount of unused personal leave days that may be accumulated. If the employee accumulates the maximum allowable number of personal leave days, no additional personal leave will be credited to the employee until the amount accumulated decreases to less than the maximum.

Personal leave may not be used before it is earned. It may, however, be taken in increments of 45 minute intervals. The employee must obtain approval from the supervisor before using personal leave, because personal leave is intended to be used for holidays or business that can be anticipated, personal leave requests must normally be made at least 3 workdays in advance.

For additional information, contact the immediate supervisor.

### ***Bereavement Leave***

If there is a death in the family, an employee may be granted up to 4 consecutive workdays off with pay. One day of leave with pay may be granted in the event of the death of other close relatives. The collective bargaining agreement for the classifications should be reviewed for the appropriate stipulations or modifications to this policy.

### ***Compensatory Time***

Compensatory leave is time off with pay granted to employees as compensation for work on a holiday, call-back work, or overtime work or more that 1 hour beyond the normal full time work shift or more than 1 hour beyond the normal full-time work week.

Compensatory leave is accumulated in units of  $\frac{1}{2}$  hour. The maximum amount of compensatory leave that may be accumulated for an "exempt" classified employee is 400 hours. The maximum amount of compensatory leave for a "non-exempt" classified employee is 240 hours. If the

employee accumulates the maximum allowable amount of compensatory leave, no additional compensatory leave may be accumulated until the amount decreases to less than the maximum.

### ***Military Leave***

Under the Uniformed Services Employment and Reemployment Rights Act (USERRA), the City is required to grant an unpaid leave of absence to any employee (probationary, seasonal, and temporary positions, and to permanent part-time and full time positions) who requests such leave in order to perform service in the uniformed services. It is the policy of the City to comply with USERRA and all other state, federal, and local laws. In case of any conflicts between this policy and federal, state, or local laws, state or federal law shall take precedence over the City's Military Policy.

There is no requirement that the employee have been employed for this City for any minimum period before the absence for military leave. USERRA also makes no distinction between voluntary and involuntary military service.

A full-time or part time permanent employee who is involuntarily ordered to active duty, active duty training, inactive-duty training, funeral honors duty, or engaging in field or coarse defense training as a Reserve of the armed forces or member of the National Guard in the armed forces of the United States of the National Guard during a national emergency or under Presidential authority:

- May use accrued vacation and personal leave and compensatory time while on active duty;
- Is not entitled to rights and benefits that are considered as a form of short-term compensation, such as accrued vacation. Employees do not earn or accumulate leave while on a leave of absence without pay for military service;
- Is entitled to continue life insurance, health insurance, and retirement system credit for the entire leave period;
- Is entitled to 15 workdays (120 hours) of paid military leave under 5 U.S.C. 6323 (a) each fiscal year for active duty training, or inactive duty training;
- If active military duty extends into a second or succeeding fiscal year, is entitled to accrue and use the 15 workdays of military leave, which accrue, at the beginning .of the second fiscal year and each succeeding fiscal year without return to City status.

### **FMLA – FAMILY MEDICAL LEAVE ACT**

The Family and Medical Leave Act of 1993 (FMLA) became effective August 5, 1993. Family and Medical Leave is any combination of vacation, personal leave, compensatory leave, approved unpaid leave, or, in some cases, sick leave.

An eligible employee may take up to 12 weeks of unpaid FMLA leave during a rolling twelve month period for any of the following reasons:

- The serious health condition of the employee
- The birth or care of an employee's newborn child
- The adoption or placement of a child with an employee for foster care
- The serious health condition of an employee's immediate family member (e.g. spouse,

- child or parent); or
- A “qualifying exigency” in connection with a family member’s active duty military services.

In addition to the basic FMLA leave entitlement, eligible employees may also take up to 26 weeks of leave per leave year for the care of a covered military service member or veteran with serious service connect injury or illness.

### **Employee Eligibility**

Employees are eligible to request Family and Medical Leave if they meet the following criteria:

- Employed with the City for at least 12 months; and
- Work at least 1,250 hours of service during the 12-month period immediately preceding the commencement of the leave.

### **Requesting Family and Medical Leave**

If you are interested in taking Family and Medical Leave, you should ask for this leave as far in advance as possible, particularly if the absence is to be prolonged, such as leave for childbirth, for the care of a newborn, or adoption of a child. This will give the agency time to make necessary adjustments, such as finding someone to fill in temporarily or changing work assignments.

You may use the following for Family and Medical Leave:

- Vacation;
- Personal leave;
- Compensatory leave; and
- Leave without pay.

Sick leave may be used as detailed in this policy. The total leave used may not be more than 12 weeks (or 60 work days) in the 12-month period beginning with your first use of any leave request, paid or unpaid, related to Family and Medical Leave. Requests for additional paid leave are subject to normal leave policies determined by the head of the agency for which you work.

Applications for FMLA may be ordered from the BCHD-Human Resources Office. A decision will be sent, in writing, to the employee from the Health Department Human Resources Director.

### **Verifying the Need For Leave**

Your supervisor may request verification of the reasons for your Family and Medical Leave request. However, if you use paid leave as Family and Medical Leave, you are only required to comply with the City's certification requirements for the type of paid leave being used. If you wish to add unpaid Family and Medical Leave period, the certification requirements provided for in this policy will apply as of the first day of the total Family and Medical Leave period.

## **Continuation of Benefits**

Agencies may authorize alternating unpaid leave in units of five or fewer days with paid leave in units of five or more days in order to extend the salary status of employees on Family and Medical Leave.

If you exhaust all paid leave, you are out of pay status. When this happens, you must continue to pay your share for any continuation of City health, prescription drug, and vision coverage. To continue your benefits while out of pay status, you must make arrangements with the Employee Benefits Division. Agencies may also request extended sick leave (see your agency Human Resources Generalist of call 410-396-1420).

## **INCLEMENT WEATHER**

All department/agency heads or their designees must designate essential employees by classifications and names to the Office of the Labor Commissioner. Agencies are responsible for maintaining written records (rosters and supplemental memos) of employees' designations. Employees, who are newly hired, promoted, transferred, reassigned, or whose positions changed by other personnel actions, should be notified of their essential or non-essential designation within 30 days of their employment status change.

In addition, the agency/department head must designate an employee and a telephone number for receiving calls and granting leave when the Inclement Weather Policy has been invoked. Some City facilities are open on weekends and holidays. The Mayor must approve closures or delayed openings of these sites before any announcement is released.

Department/agency heads are responsible for distributing the Inclement Weather Policy to all employees. In addition to the policy distribution, communication on employees' designations and the inclement weather codes of Code A and Code B is essential for employees' understanding and adherence to the Inclement Weather Policy.

The City of Baltimore dedicated phone line for emergency announcements is **410-361- 9200** (this includes inclement weather opening and closings).

## **EMPLOYEE BENEFITS**

### **Holidays**

The City offices are officially closed for business on eleven (11) annual Holidays. Permanent full-time employees not scheduled to work on these dates will receive regular pay. A permanent part-time employee will receive his/her regular rate of pay as holiday compensation, providing the observance of the holiday falls on the employee's regular scheduled workday.

The observance of a scheduled City holiday may be altered by action of the Board of Estimates. A Board action effectively amends this policy for that particular calendar year. A holiday which

falls on Saturday will be observed the preceding Friday; a holiday which falls on Sunday will be observed the following Monday

Date	Observed Holiday
January 1	New Year's Day
Third Monday in January	Martin Luther King's Birthday
Third Monday in February	President's Day
Friday before Easter	Good Friday
Last Monday in May	Memorial Day (Observed)
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day Observed
November 11	Veterans Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day

*\* Unless the State of Maryland designates another day for observance of that legal holiday in which case the date designated by the State of Maryland becomes the holiday.*

*Observation of Election Days*

All general elections i.e., in which a member of the U.S. Congress is to be elected, will be observed as a City holiday. A general election is scheduled on the Tuesday immediately following the first Monday of November in even numbered year, e.g., 2000, 2002 2004,etc. City offices will be officially closed for business on the day of a general election.

A permanent full-time employee not required to work on this day will receive his-her regular rate of pay. A permanent part-time employee will receive his or her regular rate of pay providing the observance of the holiday falls on the employee's regularly scheduled workday.

**Health**

Approximately 45,000 permanent full-and part-time employees and retirees are eligible to receive benefits through any of their (effective January 1, 2003) Health Care Plans offered by the City which includes CareFirst Blue Cross Blue Shield, United HealthCare, and Kaiser Permanente. Employer/employee cost sharing arrangements are established through the collective bargaining process and are contained in Memoranda of Understanding between the City and various employee unions and associations. The City determines retirees' cost sharing arrangements.

The City provides dental coverage for the majority of its eligible permanent full-and part-time employees. CareFirst BlueCross BlueShield administers both options - The Dental Network (DMO) and the CareFirst Dental PPO. Both plans cover all preventive, basic and major services. The two plans will vary in choice of providers, premium cost to participate and out-of-pocket costs when dental care is received.

CareFirst Dental PPO offers more choice to use the full CareFirst dental network consisting

of over 260 dentists in Baltimore City and over 2600 dentists in Maryland. Employees who use an in-network dentist will receive considerable savings due to the plan's pre-negotiated fees. They may also use dentists who are not part of the CareFirst dental network and still receive a plan benefit.

*To request a Benefits Handbook, contact Employee Benefits at (410) 396-5830.*

### **Vision**

The City provides an Optical/Vision Program for all eligible full-and part-time employees and certain retirees. Under the program, eligible employees and retirees can receive one (1) eye examination and one (1) pair of glasses, if necessary, every twenty-four (24) months. The plan is funded fully by the City, with no cost sharing between the employer and employees and retirees.

For more information about your Vision Benefits call (410) 396-3777.

### **Life Insurance**

The City provides Basic Life and Accidental Death & Dismemberment (AD & D) Insurance for approximately 25,000 active employees and 8,000 retirees. Benefits and eligibility for each particular program vary by union affiliation. The Prudential Insurance Company of America provides these benefits under contract with the City. The City pays all premiums, with no cost sharing between the employer and employee. In addition, the City offers its employees an

Optional Life Insurance and AD & D program, also through Prudential; wherein the employee may select the level of coverage desired and subsequently pays all associated premiums. For more information about your Life Insurance Benefits, please call (410) 396-5307.

### **Tuition Reimbursement**

The purpose of the Tuition Reimbursement Program is to provide assistance to employees and help defray the direct cost of approved courses and certain administrative fees. The program is available to all full-time and part-time permanent employees.

The Tuition Reimbursement form should be completed and submitted at the time of registration or during the first two weeks of the semester. The reimbursement form can be obtained through your personnel officer of your department. You can only attend Maryland State certified accredited colleges or universities, and you must obtain a "c" or better for reimbursement. You are allowed ~credits per semester.

The only courses that will be reimbursed are those that are job related, or towards the attainment of a job related degree. Reimbursement is depending on union affiliation. Once you have completed the semester, you must submit to the Human Resources Administrator, a copy of your grades and proof of payment.

*NOTE: Your immediate supervisor and your agency head must approve tuition Reimbursement before you can receive reimbursement. An agency can deny any reimbursement due to lack of funding, as the funds for reimbursement comes from your agency budget. -An employee is required to remain a city employee for 1 year after reimbursement, if the employee fails to remain with the city for the 1 year required, they can requested to repay any reimbursed funds received.*

### **Deferred Comp**

The City sponsors a Section 457 Deferred Compensation Plan, which is available to eligible permanent full-and part-time employees. The Plan is administered by MECU and offers participants a choice of a number of mutual funds. Participants can choose from several payout options once they separate from service with the City. In accordance with the Memoranda of Understanding between the City and various unions, the City pays the Plan's administrative fees (including the salaries of two dedicated full-time employees) and the participants pay the investment management fees.

### **Dependent Care**

The City offers Dependent Care Flexible Spending Accounts (FSA) to eligible full-and part-time employees. Through the FSA, participating employees are able to pay on a pre-tax basis for certain qualifying expenses incurred as a result of care provided to a child or an elderly parent. A participating employee is able to contribute to the FSA a minimum of \$120 per year up to a maximum of \$5,000 per year.

### **C.O.B.R.A.- Consolidated Omnibus Budget Reconciliation Act**

#### **Continuation of Health Benefits**

The Consolidated Omnibus Budget Reconciliation Act or C.O.B.R.A. went into effect July 1, 1986. City employees, retirees and their dependents who have experienced a qualifying event have the option of continuing their insurance benefits at full costs plus and administrative charge within a designated period.

#### **Eligibility for Continuation of Coverage**

The qualified beneficiary must notify the Department of Personnel, Employee Benefits Division, 201 E. Baltimore Street, Suite 500, Baltimore, Maryland 21202 in writing of a divorce, legal separation, Medicare entitlement or dependent child's loss of coverage within 60 days of the qualifying event. Proper COBRA election forms will be forwarded for completion and processed accordingly through Employee Benefits Division-COBRA section.

## Employee Manual Receipt Acknowledgment

I have received my copy of the Employee Handbook for the Baltimore City Health Department [hereafter "Department"]. It is my responsibility to read and understand the matters set forth in this Manual. It is a guide to Department policies and procedures.

I understand that no statement contained in this Manual creates any guarantee of continued employment or creates any obligation, contractual or otherwise, on the part of the Department. I will rely on any promises, statements or representations to the contrary only if they are in writing and signed by an authorized member of the Department's management.

I understand and acknowledge that the Department has the right, without prior notice, to modify, amend or terminate policies, practices, and other institutional programs within the limits and requirements imposed by law.

Baltimore City Health Department  
Human Resources Office

---

Employee's Name Printed

---

Employee's Signature

Date

---

Witness Signature



**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

vs.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and

U.S. DEPARTMENT OF HEALTH AND HUMAN  
SERVICES,

*Defendants.*

Case No. 1:19-cv-01672

DECLARATION OF  
DR. ADENA GREENBAUM

**DECLARATION OF DR. ADENA GREENBAUM, MD, MPH,  
IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION**

I, Dr. Adena Greenbaum, MD, MPH, declare that, if called upon, I would testify to the following:

1. I am the Assistant Commissioner overseeing the Bureau of Clinical Services & HIV/STD Prevention Services within the Division of Population Health & Disease Prevention in the Baltimore City Health Department. I entered this position in August 2016.
2. The City Health Department is committed to public-health measures that reduce social inequalities and ensure the well-being of every Baltimorean. To accomplish this, the Department dedicates significant efforts and resources to building trust in communities that historically have been marginalized and disenfranchised. Baltimore is also home to a high number of people who have experienced trauma; it has high rates of poverty and violent crime, both of which tend to affect communities of color more than other groups.

3. As a result of historical marginalization and community trauma, some cross-sections of the Baltimore population have been distrustful of both medical providers and government. And when segments of a population don't trust government to provide healthcare in the population's best interest, it can harm public health as a whole.

4. To combat these forces and advance the health of every Baltimorean, the Health Department has adopted a public-health philosophy that prioritizes breaking down stigma associated with particular diseases, conditions, or groups of people, developing relationships with community-based organizations, building trust with individuals in targeted communities, and providing judgment-free and trauma-informed care. Our work is designed to effectuate this public-health philosophy; for years we have painstakingly implemented it to build trust with formerly marginalized communities.

5. I am familiar with the new rule promulgated by the U.S. Department of Health and Human Services, entitled "Protecting Statutory Conscience Rights in Health Care; Delegations of Authority" ("the Rule").

6. If the Rule allows City Health Department health professionals and staff broad and unqualified rights to refuse to provide or facilitate services, it will jeopardize all our work toward judgment-free and trauma-informed public health; contradict the City's public-health philosophy; and set the Health Department back years in its efforts to advance and defend the well-being of every person in Baltimore, with effects that will ripple beyond the city limits.

*About Me*

7. I am an infectious-disease physician, board certified in both Internal Medicine and Infectious Disease.

8. I attended Johns Hopkins School of Public Health, where I earned a Master's in Public Health degree in May 2007.

9. I also attended Johns Hopkins School of Medicine, completing my M.D. degree in May 2008.

10. I completed an Internal Medicine Residency in June 2011 at Johns Hopkins Hospital Internal Medicine Residency Program, and an Infectious Disease Fellowship at Johns Hopkins School of Medicine in June 2016.

11. Before entering my current position at the Baltimore City Health Department, I was an Epidemic Intelligence Service Officer in the Influenza Division at the Centers for Disease Control and Prevention.

12. My full curriculum vitae is attached to this declaration as Exhibit A.

13. In my role as Assistant Commissioner, I oversee the various clinics, services, and programs described below. I lead a staff of about 150 personnel and am responsible for an annual budget of about \$20 million.

14. I am responsible for hiring staff for the clinics, services and programs described below. Most city job openings are listed on a central website and describe the open positions in the most general of terms. An applicant learns of the specific job duties of the position and the services that he or she would be asked to provide only during the interview for the position. Thus it is possible that applicants who would object to providing certain services or treating some subpopulations would not know that the job required them to perform those services for those people until at least partway through the hiring process. A rule requiring the City nevertheless to hire persons to perform services they have no intention of performing would be completely unworkable given the size of our clinic staff and the lack of redundancy (or the funding to create such redundancy).

*The Field of Public Health*

15. In order to grasp the value of the various clinics, programs, and initiatives at the Baltimore City Health Department—as well as the devastating harm that can result under broad exemptions from requirements to provide equal care—it is important to understand the field of public health, as distinguished from individual medicine.

16. Unlike the role of medical care in our health system, where professionals diagnose and treat individual health problems, public health deals with preventing disease and promoting health at the community or population level.

17. One way to measure the success or failure of a public-health program is by using statistics, of which some key ones include: disease incidence (the number of new cases of a particular disease within a population in a given time period), disease prevalence (the number of individuals within a population who have a particular disease at a given time), and mortality rates (the number of deaths due to a disease divided by the total population). Thus, where individual medicine concerns disease treatment and care for an individual patient, public health emphasizes the health and well-being of a community.

18. In public health we focus not only on how to diagnose and treat diseases, but also on how to prevent them in the first place. We aim to prevent the spread of infectious diseases throughout a community or population and prevent the development of medical conditions or illnesses like heart disease or obesity. Sometimes this means that the public is not aware of our public-health interventions—for example, ensuring that food is inspected so that the food supply is safe, or establishing regulations ensuring safe air and water quality.

19. Our former Commissioner of Health was fond of putting it this way: Public health saved your life today—you just didn't know it.

20. Thus, though the clinics, programs, and initiatives of the Baltimore City Health Department indeed provide individuals with medical services (testing, diagnosis, and treatment), those efforts also serve a broader public purpose of disease prevention and promotion of a healthy population generally. To bring about large-scale health improvements most effectively and efficiently, programs should be targeted to serve communities that are most at risk and might have challenges gaining access to other parts of the healthcare system. Public-health efforts thus tend to focus on populations of the homeless or those who otherwise lack secure housing; the impoverished; those without support systems in place; individuals who engage in risky behavior such as sex workers or those with substance addictions; and otherwise vulnerable communities. These populations can also be distrustful of government and the medical system. Improved population-health results can take years or even decades to obtain. Any disruption in these efforts, especially through interference that impedes public-health efforts in marginalized communities, can set programs back years, if not decades. And those setbacks could threaten the broader population with devastating harms, including increased prevalence of tuberculosis, HIV, sexually transmitted diseases, teen pregnancies, infant deaths, and opioid overdoses.

*Clinical Services*

21. The Bureau of Clinical Services & HIV/STD Prevention Services of the Baltimore City Health Department operates STD, HIV, Hepatitis C, Pre-Exposure Prophylaxis (PrEP), Buprenorphine, Dental, and Tuberculosis Clinics in two physical locations open during standard business hours. We also offer additional mobile-clinic services using two vans. It is my hope that the Health Department will have enough resources to offer evening and weekend clinic hours in the future.

22. The clinics are funded in part by federal financial assistance administered through the U.S. Department of Health and Human Services either directly or as passed through the State of

Maryland. This includes funds under the Public Health Services Act, the Ryan White HIV/AIDS Program, and grants from the Centers for Disease Control and Prevention.

23. Together, the clinics provide outpatient services at low or no cost to Baltimore residents. In 2017, there were 14,000 clinic visits. In 2018, there were over 16,000 visits.

24. The clinics employ around 10–12 nurse practitioners, one physician's assistant, four nurses, six clerical staff, two social workers, five case managers, two peer navigators, two medical directors, two deputy medical directors, two managers, two full-time doctors, two part-time doctors, and two additional case managers who drive the van mobile clinics.

25. All the nurse practitioners, nurses, doctors, and the two case managers who drive the mobile-clinic vans are contracted employees through Johns Hopkins University. In addition, the vans used for the mobile clinics are owned by Johns Hopkins. The contracted employees are, from the perspective of anybody visiting a clinic, indistinguishable from city employees. They are employed under annual contracts that, as a matter of course and historical practice, continue to be renewed each year. Johns Hopkins posts announcements for Health Department job openings separately from other openings, specifically noting that successful applicants will be contracted to the Baltimore City Health Department. The majority of contracted employees serve only in the Health Department clinics; they do not rotate or fill positions at Johns Hopkins's facilities. Two of the nurse practitioners spend 20 percent of their hours at a Johns Hopkins clinic. There are no signs in the city clinics to indicate that Johns Hopkins employees staff the clinics, and there is no mention of Johns Hopkins on the clinics' websites. In my capacity as Assistant Commissioner, I supervise hiring decisions over these contract positions and I supervise and direct the contracted employees, managing their job duties and assignments. I am responsible for their day-to-day activities and for the standard procedures that govern the

provision of medical services for which they are employed. I also have the ability to initiate personnel actions against them through Johns Hopkins's human-resources framework.

26. Clinical Services currently administers two subgrants of HHS funds: one Ryan White Part A subgrant, and one for TB elimination. Clinical Services does not presently have a staff member assigned to ensure compliance with the terms and conditions of these subgrants.

27. STD/HIV Prevention currently administers over 50 subgrants of federal funds from HHS. These subgrants support outreach, HIV and STD surveillance and prevention, behavioral health, and other programs.

*STD Clinic*

28. The STD Clinic offers walk-in services, similar to an urgent-care facility. The clinic offers testing and treatment—including follow-up visits—for chlamydia, gonorrhea, and syphilis. We also diagnose and treat trichomonas, bacterial vaginosis, and herpes. We offer referrals to key services in the community, including pregnancy testing, prenatal care, substance-abuse treatment, mental health, and immunizations.

*HIV Clinic*

29. The HIV Clinic is a continuity clinic for approximately 350 patients living with HIV. The clinic offers HIV-related care in addition to general medical care specifically for those living with HIV. For some patients, the HIV Clinic is their source of primary care. The clinic provides services to patients so long as they wish to continue coming back.

30. Although the Health Department is interested in dispensing medication at its HIV Clinic, it does so only in very limited capacity at this time. Instead, most patients are given prescriptions and referred to a local pharmacy of their choice. If a patient does not have insurance or pharmacy coverage for a medication or cannot afford a co-pay, the Health

Department may cover the cost of the medication through Ryan White funding as the payor of last resort.

31. The Bureau of Clinical Services also runs the Directly Observed Therapy Program for residents who have been diagnosed with HIV but struggle with adhering to their medication regimens. Program staff visit patients to watch them take their medications. They can also provide reminder calls and help coordinate medication refills and travel to medical appointments.

#### *Hepatitis C Clinic*

32. The Hepatitis C Clinic treats patients diagnosed with Hepatitis C, using 8–12 week courses of medication. Clinic staff also ensure that patients stay up to date on their laboratory testing, and perform a blood test three months after the course of treatment is complete to ensure Hepatitis C cure. If these tests confirm that a patient has been cured of Hepatitis C—which occurs in 90 percent of cases—the clinic staff send a letter stating that the patient is cured to the patient and the patient’s primary-care provider, if applicable.

33. This course of treatment for Hepatitis C is relatively new, and at nearly \$100,000 for some therapies, it can be cost prohibitive. Many primary-care clinics do not offer Hepatitis C treatment. Thus, many patients come to the clinic for treatment that they cannot receive from their primary-care provider.

#### *PrEP Clinic*

34. The PrEP Clinic prescribes PrEP and Post-Exposure Prophylaxis (PEP) to patients who are referred to the clinic. PrEP and PEP are used to prevent contraction of HIV either before or after coming into contact with the virus.

35. PrEP is relatively new and not necessarily widely available throughout Baltimore. There may be limited options for some patients to obtain PrEP or PEP. Therefore the Health

Department's PrEP Clinic is a last resort for some Baltimore residents and plays an important role in combatting the HIV/AIDS epidemic in the region.

36. The PrEP Clinic does not distribute medication, but either provides prescriptions for PrEP or links patients to the Gilead Advancing Access Program, which provides PrEP and PEP free of charge for some patients.

37. PrEP Clinic staff follow up with patients and monitor their health at least every three months while they are on PrEP medication.

#### *Buprenorphine Clinic*

38. The City's Buprenorphine Clinic offers medication-assisted treatment for drug addiction to combat the growing opioid crisis. The clinic prescribes buprenorphine in its sublingual form; patients place the medication under their tongues and wait 5–10 minutes for it to dissolve.

39. The Health Department established the Buprenorphine Clinic in May 2018 in response to the worsening opioid epidemic. Buprenorphine treatment is offered in the mobile clinics to serve areas most affected by the opioid crisis.

40. Special certification requirements to prescribe buprenorphine and regulatory limits on the number of patients for whom a provider can prescribe restrict the maximum number of patients that a facility can serve. This, combined with other barriers to care faced by many suffering from opioid addiction, mean that the City Health Department's clinic is a healthcare resource of last resort for many Baltimoreans.

*Tuberculosis Clinic*

41. The Tuberculosis Clinic manages the complex task of containing and treating tuberculosis in Baltimore. The Health Department is the governmental entity responsible for coordinating TB response whenever a case is reported.

42. When a positive TB diagnosis is reported to the Health Department, the TB Clinic manages the 6–9 month treatment of the patient. Treatment might include a short quarantine following the initial diagnosis while the patient remains infectious. Typically patients are no longer infectious after two weeks on therapy. The logistics of this quarantine and the strictly scheduled course of treatment for TB raise particular complexities among Baltimore’s transient, imprisoned, and homeless populations. It can also be difficult to provide treatment for and quarantine of people who lack robust support networks, are undocumented residents, or cannot get time off work or cannot afford to take the time off. Sometimes the Health Department has no choice but to pay for hotel rooms to provide the best protection for public health. Last year, for the first time in many years, the Health Department was forced to exercise its authority to have a patient with TB involuntarily committed because the patient refused to comply with the quarantine.

43. The TB Clinic also conducts investigations of each of the 20–30 cases of TB reported annually in Baltimore. Staff members attempt to contact anybody with whom the infected patient came into close contact while contagious.

44. The Baltimore City Health Department is responsible for controlling TB in the city and ensuring that all patients are treated to avoid TB outbreaks. TB is an airborne infection and has the potential to cause large outbreaks. Therefore, diagnoses and treatment of active cases and

investigation of TB transmission are key public-health activities undertaken by the Health Department.

*Mobile Clinics*

45. The mobile clinics offer STD, HIV, and Hepatitis C testing and treatment, as well as buprenorphine treatment, wound care, and naloxone distribution. The mobile clinic provides services to patients who use drugs and are often marginalized and may not have access to or seek out care elsewhere. These mobile task forces are an essential part of the City's public-health strategy because they allow the Health Department to reach historically marginalized and distrustful communities that are most affected by the various health challenges facing Baltimore.

*Dental Clinic*

46. The Dental Clinic provides dental care to certain subpopulations on the basis of available federal funding. The clinic provides pediatric dental services through Head Start, services to patients living with HIV through Ryan White funding, services to pregnant women through Medicaid reimbursement, and services to seniors through Medicare reimbursement. The clinic also offers emergency dental care.

*Laboratory*

47. Clinical Services also runs an STD-testing laboratory, which processes all STD testing for the Health Department, as well as some testing for outside partner organizations.

*HIV/STD Prevention Services*

48. The nonclinical programs that I oversee in HIV/STD Prevention Services complement the Clinical Services programs as part of the City Health Department's overall public-health philosophy. Staff in these programs conduct administrative, surveillance, field, outreach, and educational functions that are essential to reducing stigma and other barriers to care, building community trust and relationships, and maintaining public health. Programs within HIV/STD

Prevention Services receive federal financial assistance administered through the U.S. Department of Health and Human Services—including funds from the Centers for Disease Control and Prevention, and Ryan White funding. HIV/STD Prevention Services also receives funds from the State of Maryland.

49. Partner Services teams ensure that patients newly diagnosed with HIV or syphilis are connected to treatment and providers who specialize in HIV or syphilis healthcare. They ensure that patients with syphilis are adequately treated. The teams also identify and interview the sexual partners of patients who are diagnosed with HIV or syphilis to assess and control the spread of those diseases.

50. The Bureau's outreach teams operate in two vans (which are different from the clinical vans) to attend health fairs, community events, visit drug-treatment centers, and reach other targeted locations to provide education and STD testing.

51. The Bureau's Linkage to Care team connects people living with HIV who are not in care to healthcare providers for HIV treatment, and also connects people with chronic Hepatitis C to healthcare providers so that they may be assessed for treatment. The Linkage to Care team connects these people with providers in the area, either within the Health Department's system or at another facility.

52. The Social Innovations program uses outreach and social media to reduce stigma and build community engagement around HIV and STD prevention. For example, the Baltimore in Conversation campaign uses storytelling and community conversations to build a movement to reduce stigma about sexual health and sexual identity.

53. HIV/STD Prevention Services also provides testing kits to providers and facilities around Baltimore.

54. The Health Department subgrants HHS funds to various community partners through HIV/STD Prevention Services. These subgrants tend to fund educational efforts in Baltimore, including one campaign called Undetectable = Untransmittable, which educates the community about safe sex for people living with HIV, addresses the stigma associated with HIV, and involves the community in HIV-prevention messaging.

*Baltimore's Philosophy, Successes, and Challenges*

55. The Health Department has made significant progress in addressing public-health challenges in recent years. Though Baltimore still has relatively high rates of STDs, we've accomplished reductions in the number of new HIV infections, established model Linkage to Care programs, and integrated programs with our mobile clinics to reach new demographic groups.

56. The City has made great progress in stemming the spread of HIV and improving access to treatment. For example, in 2008 there were 794 new HIV diagnoses. In 2017 that number dropped to 231. Reported HIV diagnoses, AIDS diagnoses, and AIDS deaths are the lowest they have been since the 1980s, early in the AIDS crisis. Continuing on our current path would establish Baltimore as a success story in fighting the HIV epidemic.

57. This progress is at least in part because of the Department's philosophy of meeting people where they are; we reach out to previously marginalized and ignored communities and offer judgment-free care. This philosophy is borne out in various techniques such as our flexibility, trauma-informed approach, and status-neutral programs—each explained more fully below. Through these strategies, we develop community relationships built on trust and begin to break down the social barriers that can prevent certain subpopulations from seeking out or accepting healthcare services from the City.

58. Trauma-informed care starts with understanding the various types of trauma that many Baltimoreans have experienced. In part because of Baltimore's relatively high rates of poverty and crime, individuals who often have the greatest need and the most to gain from the Health Department's services have a high likelihood of having experienced some physical, psychological, or emotional trauma. Without informed sensitivity to those experiences and their lasting effects, Health Department providers and personnel might inadvertently cause those in need of care to relive their trauma, might trigger sensitivities based on past trauma events, or might fail to build trusting provider-client relationships that are so crucial to our success. Trauma-informed care allows providers and others to empower patients and encourages communities and individuals that have suffered trauma (and who tend to face the greatest public-health challenges) to seek out and accept care.

59. Staff in the Bureau of Clinical Services & HIV/STD Prevention Services have undergone training in trauma-informed care, and more training is planned. Trauma-informed care manifests throughout the provision of services, starting with something as simple as providing more than two checkboxes for gender on intake forms, to showing understanding when paperwork might be out of order, to considering how a physician conducts a physical exam for a person who exhibits psychological or emotional effects from past sexual or violent trauma.

60. We also try to make it as easy as possible for a person to visit the City's clinics. Because the clinics provide care at no cost to patients, they are safety-net services for people who have nowhere else to turn. And the clinics do not impose any rules on the patients that might deter them from seeking care. For example, the clinics do not cancel appointments when a patient shows up late, like many private providers might. Through the lens of the Health Department's overall philosophy, this lets patients know that the City is there for them, for

whatever they need, even when others might turn them away. This establishes trust and keeps patients coming back and recommending the Health Department's services to their communities.

61. In addition, the Health Department's clinics display notices to patients that they will receive care without discrimination on the basis of their race, color, national origin, age, gender, sexual orientation, gender identity or expression, physical or mental disability, religion, ethnicity, language, or inability to pay.

62. The clinics also pride themselves on the philosophy of providing judgement-free care, helping patients feel comfortable to be themselves and unashamed of any behaviors or life experiences that might be stigmatized in other settings. It is only then that we are able to truly assess patients' needs and help provide them with the resources that they need to stay healthy.

63. Another emerging line of thinking that pairs with the City's judgment-free-care philosophy is the notion of a status-neutral health approach. Traditionally, public-health agencies and organizations have offered a range of wraparound social services to people diagnosed with HIV, often through Ryan White funding. Those services may include housing assistance, transportation, and referral to other medical services such as mental-health services or substance-abuse treatment, in addition to the necessary medical care. Access to these services certainly affects an individual's health and well-being. It also affects the overall public health. For example, people living with HIV who do not have stable housing might struggle to take their medication on schedule, and as a result their HIV will be difficult to control. They are thus more likely to pass HIV to others, affecting the public health of the community. But if they are provided with housing, which was their main barrier to taking their medication, and can now control their HIV infection and have an undetectable HIV viral load, they are much less likely to transmit HIV to others and the public health of the community is more protected.

64. Though effective at containing existing infections, this traditional approach of providing services only to those who are HIV-positive ignores those who are at risk for HIV. For example, these individuals may be experiencing housing insecurity, food insecurity, substance abuse, or mental-health issues. And it's these issues that might place them at higher risk for contracting HIV. But because they have been historically neglected by governmental programs, they might not trust the services that government does offer to them, compounding their risk factors. Even worse, I have heard of people so desperate to obtain wraparound support services that they actually want to contract HIV so that they are no longer excluded from those programs.

65. If we can address these socioeconomic issues or other health issues, we may prevent more people from becoming infected with HIV. Therefore, a status-neutral health approach calls for providing support services to members of high-risk communities before they are diagnosed with HIV or an STD. These communities include those without housing or support networks, sex workers, and people with drug addictions. Providing wraparound services to these communities is, in some cases, just as important and effective as providing PrEP. Building trust and providing stigma-free care are essential in order to move forward with a status-neutral approach to HIV prevention. The Department is currently working on building its status-neutral approach toward HIV prevention.

66. By continuing to advance these philosophies, we will continue to make improvements to public health in Baltimore. But there remain significant crises for us to combat.

67. Baltimore is at a tipping point in fighting the HIV epidemic: much of our progress could be undone if we do not keep up our current pace. And while numbers of new HIV infections are declining in Baltimore, other STDs are on the rise. In 2017, there were 7,636 cases

of chlamydia in Baltimore. Chlamydia is the disease most commonly reported to the CDC. In 2017, Baltimore also had the highest number of gonorrhea cases than it has had in any of the previous nine years. In 2017, there were over 4,231 cases of gonorrhea in Baltimore, compared with 3,198 in 2008. Nationally, the number of gonorrhea cases increased 67% between 2013 and 2017.

68. Gonorrhea is of particular public-health concern: it is increasingly resistant to drug treatment. The STD Clinic currently follows treatment guidelines in treating gonorrhea, which include two-drug therapy: ceftriaxone, an injection, and azithromycin, a pill. It is the last known effective outpatient treatment. Should this therapy become ineffective, gonorrhea infection might require inpatient hospital therapy for treatment. If that comes to pass, the cost to the Health Department, the medical system, and public-health entities everywhere would be exorbitant, and it would be difficult, if not impossible, for the City to stem the spread of the infection. It is crucial that the City prevent a new drug-resistant strain of gonorrhea from developing within Baltimore, and we must prepare to contain any strain that develops elsewhere and makes its way to our region.

69. In 2017, Baltimore had 210 primary and secondary syphilis cases—a rate of 34.3 per 100,000 population. This is substantially higher than national rates of 5-8 per 100,000 population.

70. Congenital syphilis is also a significant concern. Congenital syphilis occurs when a woman is infected with syphilis while she is pregnant and she passes it to the fetus or later to the newborn child. Congenital syphilis can lead to premature birth, miscarriage, stillbirth, and long-term health consequences in infants, including birth defects, blindness, deafness or meningitis. There were 10 cases of congenital syphilis in Baltimore City in 2017. Each instance of

congenital syphilis is considered a seminal event, meaning that it medically should not have occurred, and formal investigations are triggered in each case.

71. According to analysis by the Centers for Disease Control and Prevention, racial and ethnic minority groups and LGBTQ people are affected by social disparities in access to healthcare that lead to higher rates of STDs. In the United States, the reported rate of chlamydia in black women, for example, is 5 times the rate of white women, and the rate in black men is 6.6 times the rate in white men. Or take syphilis: Nationally, the majority of syphilis cases occur among men who have sex with men, a trend that is also seen in Baltimore.

72. In Baltimore, the HIV epidemic further highlights social disparities in our public-health system. Roughly 83 percent of Baltimore residents living with HIV are black, but only about 61 percent of the total Baltimore population is black. And over half of those living with HIV in Baltimore are gay men, bisexual men, or other men who have sex with men. The City Health Department will not be able to continue making progress in the fight against HIV and other STDs without the meet-them-where-they-are philosophy that allows us to reach these historically stigmatized and marginalized communities.

*Harms Created by the New Rule*

73. The new Rule will be costly and difficult, and in some respects even impossible, for the Bureau of Clinical Services & HIV/STD Prevention Services to implement. Because the Bureau's work is highly targeted and because it renders the same types of services every day, a provider or staff member objecting to assisting provision of a service or to helping a particular patient demographic would necessarily refuse to perform a significant portion of his or her job duties. Without being able to fill that position with someone willing to perform critical job duties, the Health Department's only alternative would be to double-staff the clinics. That, however, is essentially impossible. New positions can be challenging to create. We do receive

some city funds and private grant funds, but they are not enough to cover the cost of additional staffing. The bulk of funding is through the U.S. Department of Health and Human Services.

74. Staffing burdens would be made even worse because of the specialized training requirements in some of our clinics. To prescribe buprenorphine, for example, medical professionals are legally required to undergo specialized training. And once certified, providers may treat only up to a maximum number of patients depending on the level of certification. Similarly, TB treatment is highly specialized and new nurses must train for up to six months before they can provide the full spectrum of care for TB patients. Accommodating staff refusals in either the Buprenorphine Clinic or the TB Clinic would thus create a gap in services before new staff could be put in place—assuming that funding could even be secured for new staff. And in the interim, patients could suffer, overdoses might increase, or TB cases could increase in Baltimore, potentially leading to a TB outbreak.

75. The subgrantee-compliance certification that the Rule appears to require would also create unmanageable administrative burdens. Most of the programs with subgrants have staff who are assigned to ensure compliance with terms and conditions of the subgrants. These terms, consistent with existing federal law, ensure that federal funds are being used appropriately. But were federal law to require that the Health Department review the internal personnel policies and procedures of all subgrantees, it would subject our staff to an enormous burden. Such a rule would require our staff to investigate not only the uses of federal funds as is common practice, but also the way in which each subgrantee organization interacts with its employees—a subject beyond the expertise of the Health Department staff who currently oversee subgrantee compliance. The Health Department's workload would increase significantly, and it may be

impossible in some instances to obtain assurances that an organization handles its internal human-resources matters in compliance with the Rule.

76. Though many of the Health Department's subgrants are awarded to large, sophisticated organizations such as Johns Hopkins University that may be more likely to be able to provide assurances of internal policies, it is the Department's growing strategy to work with small, community-based subgrantees.

77. These smaller organizations tend to be new and have very few, if any, paid staff members. The small subgrantee organizations allow the Health Department to use a more nuanced, flexible approach in protecting and improving public health. The nature of these organizations complements the Health Department's philosophy by allowing those who implement the Department's programs to become familiar with and trusted by the community.

78. But because of their inexperience and lack of resources, these small organizations sometimes lack processes that would allow the Health Department to ensure that their internal personnel policies comply with the Rule.

79. Aside from the administrative challenges of implementing the Rule, if patients were turned away from Baltimore City Health Department services under the Rule, the individual harms would be drastic. And if the Rule requires clinics to display notices that staff may refuse service, it would undermine the Department's efforts to build trust and create a safe, judgment-free environment.

80. Because the Health Department's clinics are often facilities of last resort for Baltimore's most at-need residents, those turned away or scared away from its services would go without necessary medical care. And even those who have access to healthcare elsewhere sometimes choose to come to the Health Department for some services because they are too

embarrassed to seek those services from their primary-care providers. That fear of stigma is precisely why the City offers judgment-free care, and the experience of being denied treatment could make that fear worse.

81. Baltimoreans' health and very lives are at stake. Without treatment, syphilis and gonorrhea may lead to infertility. Syphilis also causes blindness, pelvic inflammatory disease (causing extreme pain in women), miscarriages, stillbirths, and disabilities in infants. And HIV and Hepatitis C, if left untreated, can be deadly.

82. In addition, denials of care create psychological harms, particularly in those patient populations that are vulnerable because of past traumas.

83. These harms become more pronounced on a broader scale. If a provider or staff member at the Health Department were to turn an individual away because of a religious or moral objection to either the services sought or the individual's identity, it would inherently communicate a sense of judgment to the individual. Refusing to serve certain people would thus lead them to lose trust in the City and be reluctant to seek care in the future, and would give the Health Department a poor reputation in hard-to-reach communities.

84. The progress that the Health Department has made in preventing and treating HIV and STDs could be undone by a rule allowing refusals to provide care, setting our public-health efforts back by 20 or 30 years.

85. What is more, if the Baltimore City Health Department were to lose federal financial assistance through an enforcement action under the Rule, it would cripple our ability to provide all but the most minimal of services. Nearly all the funding for programs that I oversee comes from the U.S. Department of Health and Human Services.

86. Baltimore has seen firsthand the effects of service interruptions in underserved communities. In the early 1990s, federal funding to the City's STD clinics was reduced, decreasing the number of medical professionals and outreach personnel on staff. This, combined with the rise of crack-cocaine use and housing displacement of many poor residents, led to a 500 percent increase in syphilis infections across Baltimore.

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was executed on June 11 2019, in the State of Maryland.

  
Dr. Adena Greenbaum, MD, MPH

**THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

v.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES,

*Defendants.*

Civil Case No. 1:19 cv 01672

**DECLARATION OF RAJESH  
GULHAR**

**DECLARATION OF RAJESH GULHAR**

I, Rajesh Gulhar, declare that, if called upon, I would testify to the following:

1. I am the Chief of Employee Benefits Division of the Department of Human Resources, an agency of the Mayor and City Council of Baltimore ("the City" or "Baltimore"), a Plaintiff in this case. I lead the Division which manages all health and pharmacy benefits for employees and retirees of the City.

2. Currently there are approximately 12,000 City and Police Department of Baltimore City ("BPD") employees, and 37,000 retirees (and families) receiving health care and pharmacy benefits from the City. At least one employee or retiree lives in every state in the United States and Washington, D.C. with the exception of Louisiana. Moreover, the City's health and pharmacy coverage extends throughout the United States wherever members may need to access care, regardless of their listed primary residence.

3. I am familiar with the new rule promulgated by the U.S. Department of Health and Human Services, entitled Protecting Statutory Conscience Rights in Health Care; Delegation of Authority.

*My Background*

4. I obtained a Bachelors Degree in Economics and Political Science at Delhi University, in India, and thereafter earned a Masters Degree in Economics also from Delhi University. In addition, I have successfully completed a management and leadership training program at Johns Hopkins University sponsored by Montgomery County.

5. I joined the City of Baltimore's Department of Human Resources (DHR) as the Chief of the Employee Benefits Office on May 9, 2016.

6. I am responsible for managing the comprehensive benefits program offered to City and BPD employees and retirees, including self-insured medical plans, dental plans, basic and optional life insurance, and prescription drugs plans, vision, flexible spending accounts, wellness and preventative care programs, and COBRA benefits. I am also responsible for ensuring the City's benefits programs comply with Federal and State laws and regulations, and contractual agreements, while maintaining consistency with the City's fiscal policies.

7. My work history has given me experience with administering and managing fully-insured and self-insured health benefits plans.

8. Prior to working for the City, I served as Director of Employee Benefits and Director of Risk Management for Alachua County, Florida from 2013 to 2016. I was a Health Consultant from 2010 to 2013. I was a Risk Manager for Montgomery County, Maryland from 1985 to 2009. I was and Health and Risk Management Specialist for AON Consulting from 1984 to 1985. I worked as Assistant Risk Manager/Benefits Manager Care and Quality International

from 1981 to 1984. I also worked as an underwriter for Kemper Insurance Group from 1978 to 1981.

*Baltimore City Office of Employee Benefits in the Department of Human Resources*

9. The City of Baltimore maintains equal-employment policies that protect all employees and retirees. All of the City's and BPD's employment decisions are made without regard to race, color, age, national origin, ancestry, marital status, sexual orientation, gender, religion, veteran status, physical or mental disability, genetic information, gender identity or expression, or any other status protected by law. The City and BPD ensures equal opportunity in all aspects of employment, including hiring, work assignments, promotions and demotions, compensation, transfers, training and career development, discipline, and termination.

10. In its contracts with outside entities for the provision of healthcare services, the Office of Employee Benefits routinely includes nondiscrimination language requiring that the entity abides by equal-employment practices in accordance with the City's and BPD's own policies.

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was executed on June 6 2019, in the State of Maryland.

Rajesh Gulhar  
Rajesh Gulhar

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

vs.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and

U.S. DEPARTMENT OF HEALTH AND HUMAN  
SERVICES,

*Defendants.*

Case No. 1:19-cv-01672

DECLARATION OF CHIEF JAMES U. MATZ

**DECLARATION OF CHIEF JAMES U. MATZ  
IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION**

I, James Matz, declare that, if called upon, I would testify to the following:

1. I am a Battalion Chief of Emergency Medical Services (EMS) for the Fire Department of Baltimore City. I entered my current position in May of 2013.
2. I have worked for the Fire Department of Baltimore City in various positions since 1996. Prior to becoming a Battalion Chief of Emergency Medical Services, I was an EMS Operations Field Chief for four years.
3. The mission of EMS, and of the Fire Department as a whole, is to save and protect lives by providing a safe, effective, and timely response to medical crises in our community.

4. EMS responds to emergency (911) calls and transports patients to appropriate medical care using a fleet of 36 emergency medical vehicles (20 are advanced life support units and 16 are basic life support units). We serve a geographic area of 92 square miles with a daytime population exceeding 1,000,000 and a residential population of more than 620,000.

5. Baltimore City has one of the busiest EMS departments per capita in the United States. Calls for emergency medical services are unusually high in Baltimore and have been increasing over the past several years.

- a. Between FY2015 and FY2016, Fire/EMS transports in Baltimore increased by nearly 5,918 patients, and the City saw an additional 2,972 patient transports between FY2016 and FY2017.
- b. In FY2017, EMS received an all-time high of 154,621 calls for emergency transport and transported 100,894 people to area hospitals.
- c. In FY2018, EMS received 153,232 calls for transport, only a slight decline from the prior year.

6. EMS covers the cost of emergency transport through payments from patient insurance. The majority of our payments come from Medicaid and Medicare. For FY2018 transports, Fire/EMS received a total of \$19,243,494 in payments, \$14,790,374, of which came from Medicaid or Medicare. Thus, approximately 76 percent of our EMS budget is funded by Medicaid or Medicare.

7. In order to help reduce strain on our overburdened emergency systems, EMS partners with the University of Maryland to administer a two-year pilot program for Mobile Integrated Healthcare in West Baltimore. Mobile Integrated Healthcare is a community-based health care solution for areas with a high volume of preventable or unnecessary ambulance trips and limited

access to regular health care. The program provides rapid-response care to “low-acuity” patients (those who need treatment but not in an emergency room setting) and assists in maintaining individuals’ health at their homes. This model has improved healthcare access for underserved populations and reduced the strain on overburdened emergency systems. The program is funded by a \$668,200 grant through the University of Maryland, which in turn receives funding for this program from the federal Medicaid program through the Maryland Health Services Cost Review Commission.

8. I am familiar with the new rule promulgated by the U.S. Department of Health and Human Services, entitled “Protecting Statutory Conscience Rights in Health Care; Delegations of Authority” (“the Rule”).

9. In my professional judgment, based on years of experience and training in emergency response, the Rule will create an impossible dilemma for Baltimore EMS and will endanger the lives of the people we serve.

10. If any employee on a medic unit decided, at the scene of a call, that they could not perform their job for religious, moral, or “other” reasons, the results could be catastrophic.

11. Every employee working on our medic units performs an essential emergency response function designed to give people the care they need as quickly as possible. In an emergency, response times can mean the difference between life and death.

12. For example, the Rule appears to say that a paramedic may refuse to transport a woman experiencing an ectopic pregnancy. Similarly, if an ambulance driver were to arrive on the scene and assert an objection to participating in the treatment of someone they thought was transsexual, an IV drug user, or for any other reason, the Rule appears to require EMS to prioritize the driver’s objection over the urgent medical needs of the patient in question. There is

no way for EMS to accommodate such refusals without serious risk to the life of the patients and to the public health. Calling a second medic unit to a scene would strain resources in a system that is already overburdened and would cause a potentially fatal delay for the patient.

13. EMS cannot deploy additional medic units to a scene to accommodate employee refusals of service without seriously compromising our mission of saving lives; nor does EMS have available funding to double-staff existing medic units. Even if the funding existed for additional staff, the medic units are designed for small response teams and cannot safely carry additional staff to accommodate refusals of service.

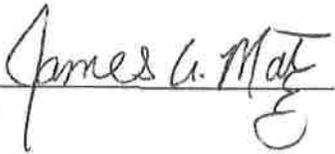
14. Because of the nature of emergency response, EMS cannot possibly accommodate employee refusals of service in advance. In many cases, EMS staff do not know what they will find at the scene of a call until they arrive. Many 911 calls are made by strangers who see someone in distress; we transport patients who are unconscious or who cannot communicate with us.

15. Regardless of what or who they encounter at the scene of a call, our employees have a professional ethical duty to provide patients with the best possible care. One of the founding principles of emergency response is never abandoning a patient.

16. On the other hand, if EMS chooses to follow its ethical obligations rather than accommodate employee refusals, the Rule puts the entire emergency response system at risk. Baltimore is home to many poor residents who rely on government-funded medical care. Over two-thirds of our costs are covered by reimbursement from Medicaid and Medicare. A finding of non-compliance under the Rule could mean the loss of those funds, which would require dramatic cutbacks in services. Inevitably, a reduction in service would cause longer response times, and a corresponding increase in lives lost.

I declare under penalty of perjury that the foregoing is true and correct and that this

Declaration was executed on June 10 2019, in the State of Maryland.

James U. Matz 

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MARYLAND**

MAYOR AND CITY COUNCIL OF BALTIMORE,

*Plaintiff,*

vs.

ALEX M. AZAR, II, in his official capacity as  
SECRETARY OF HEALTH AND HUMAN  
SERVICES; and U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES,

*Defendants.*

Case No. 1:19-cv-01672

DECLARATION OF SUZANNE SANGREE

**DECLARATION OF SUZANNE SANGREE, ESQ.  
IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION**

I, Suzanne Sangree, declare that, if called upon, I would testify to the following:

1. I am a member of the Maryland State Bar, admitted to practice before this Court, employed by the Baltimore City Department of Law as Senior Public Safety Counsel and Director of Affirmative Litigation, and am counsel to Plaintiff in this action.

2. Attached hereto as Exhibit A is a true and correct copy of the Centers for Disease Control and Prevention, *HIV Infection Risk, Prevention, and Testing Behaviors Among Men Who Have Sex With Men--National HIV Behavioral Surveillance, 23 U.S. Cities, 2017*, HIV Surveillance Special Report 22 (Feb. 2019), <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>

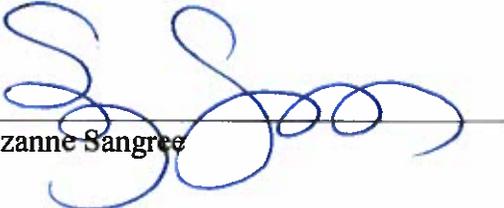
3. Attached hereto as Exhibit B is a true and correct copy of Baltimore City Health Department Press Release, *Baltimore City Awarded \$5 Million SAMHSA Grant to Implement Community-based Trauma Informed Care in West Baltimore* (Sept. 15, 2016), <https://health.baltimorecity.gov/news/press-releases>.

4. Attached hereto as Exhibit C is a true and correct copy of HHS Trauma Informed Care Toolkit, <https://www.acf.hhs.gov/trauma-toolkit#chapter-6>.

5. Attached hereto as Exhibit D is a true and correct copy of Wendy Chavkin, et al., *Conscientious Objection and Refusal to Provide Reproductive Healthcare: A White Paper Examining Prevalence, Health Consequences' and Policy Responses*, 123 Int'l J. Gynecol. & Obstet. 3 at S53 (2013).

6. Attached hereto as Exhibit E is a true and correct copy of Jennifer Frost et al, *Return on Investment: A Fuller Assessment of the Benefits and Cost Savings of the US Publicly Funded Family Planning Program*, Wiley Periodicals, Inc. (2014).

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was executed on June 12, 2019, in the State of Maryland.

  
Suzanne Sangree

# **Exhibit A**

to Sangree Declaration



Number 22

**HIV Infection Risk, Prevention, and Testing Behaviors  
Among Men Who Have Sex With Men  
National HIV Behavioral Surveillance  
23 U.S. Cities, 2017**



This HIV Surveillance Special Report is published by the Behavioral and Clinical Surveillance Branch of the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, Georgia.

This HIV Surveillance Special Report is not copyrighted and may be used and copied without permission. Citation of the source is, however, appreciated.

### Suggested citation

Centers for Disease Control and Prevention. *HIV Infection Risk, Prevention, and Testing Behaviors Among Men Who Have Sex With Men—National HIV Behavioral Surveillance, 23 U.S. Cities, 2017*. HIV Surveillance Special Report 22. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019. Accessed [date].

**On the Web:** <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

### Confidential information, referrals, and educational material on HIV infection

CDC-INFO

1-800-232-4636 (in English, en Español)

1-888-232-6348 (TTY)

<https://wwwn.cdc.gov/dcs/ContactUs/Form>

### Corresponding author

Susan Cha, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC, 1600 Clifton Rd, NE, MS E-46, Atlanta, GA 30333. Telephone: 404-718-5486; Fax: 404-639-8640; E-mail: [lx13@cdc.gov](mailto:lx13@cdc.gov).

### Acknowledgments

This report was prepared by the following CDC staff and contractors: Susan Cha, Mingjing Xia, Teresa Finlayson, Catalinn Sionean, Anna Teplinskaya, Elana Morris, Kristin Haeger, Dafna Kanny, and Cyprian Wejnert, for the National HIV Behavioral Surveillance (NHBS) Study Group

We thank the NHBS participants and the DHAP editorial staff (Michael Friend) for their effort in making this report possible.

### NHBS Study Group

**Atlanta, GA:** Pascale Wortley, Jeff Todd, David Melton

**Baltimore, MD:** Colin Flynn, Danielle German

**Boston, MA:** Monina Klevens, Rose Doherty, Conall O'Cleirigh

**Chicago, IL:** Stephanie Masiello Schuette, David Kern, Antonio D. Jimenez

**Dallas, TX:** Jonathon Poe, Margaret Vaaler, Jie Deng

**Denver, CO:** Alia Al-Tayyib, Melanie Mattson

**Detroit, MI:** Vivian Griffin, Emily Higgins, Mary-Grace Brandt

**Houston, TX:** Salma Khuwaja, Zaida Lopez, Paige Padgett

**Los Angeles, CA:** Ekow Kwa Sey, Yingbo Ma

**Memphis, TN:** Shanell L. McGoy, Meredith Brantley, Randi Rosack

**Miami, FL:** Emma Spencer, Willie Nixon, David Forrest

**Nassau-Suffolk, NY:** Bridget Anderson, Ashley Tate, Meaghan Abrego

**New Orleans, LA:** William T. Robinson, Narquis Barak, Jeremy M. Beckford

**New York City, NY:** Sarah Braunstein, Alexis Rivera, Sidney Carrillo

**Newark, NJ:** Barbara Bolden, Afework Wogayehu, Henry Godette

**Philadelphia, PA:** Kathleen A. Brady, Chrysanthus Nnumolu, Jennifer Shinefeld

**Portland, OR:** Sean Schafer, E. Roberto Orellana, Amisha Bhattari

**San Diego, CA:** Anna Flynn, Rosalinda Cano

**San Francisco, CA:** H. Fisher Raymond, Theresa Ick

**San Juan, PR:** Sandra Miranda De León, Yadira Rolón-Colón

**Seattle, WA:** Tom Jaenicke, Sara Glick

**Virginia Beach, VA:** Celestine Buyu, Toyah Reid, Karen Diepstra

**Washington, DC:** Jenevieve Opoku, Irene Kuo

**CDC:** Behavioral Surveillance Team

# Contents

---

<b>Commentary</b>	4
<b>Technical Notes</b>	8
<b>References</b>	10
<b>Tables</b>	
1 Selected characteristics of men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	11
2 HIV prevalence among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	13
3 HIV testing among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	14
4 Setting of most recent HIV test among men who have sex with men and who were tested for HIV during the 12 months before interview—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	15
5 Sexual behavior with female and male sex partners in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	16
6 Sexual behavior with male partners in the 12 months before interview among men who have sex with men, by partner type—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	17
7 Anal sex with the most recent sex partner during the 3 months before interview among men whose last sex partner was male—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	18
8a Receipt of HIV prevention in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	19
8b Receipt of HIV prevention in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	20
9 Diagnosis of sexually transmitted infections among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	21
10 Drug use in the 12 months before interview and binge drinking in the 30 days before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	22
11 Additional outcomes among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	23
12 Receipt of HIV care and treatment among self-reported HIV-positive men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017	24
<b>Appendix: Measurement Notes</b>	25
<b>Participating Metropolitan Statistical Areas, 2017</b>	28
<b>Addendum: National HIV Prevention Progress Indicators</b>	29
A1 High-risk sexual behavior among men who have sex with men at risk for HIV infection—National HIV Behavioral Surveillance, 2011, 2014, and 2017	30

## Commentary

---

Lowering the annual number of new HIV infections is a major HIV prevention goal [1]. This goal can be achieved by implementing three important strategies for reducing HIV infections: (1) intensifying HIV prevention efforts in communities where HIV is most heavily concentrated, including gay, bisexual, and other men who have sex with men (hereafter referred to as MSM); blacks or African Americans (hereafter referred to as blacks); Hispanics or Latinos; and people who inject drugs (PWID); (2) expanding efforts to prevent HIV infection by using a combination of effective, evidence-based, scalable approaches; and (3) educating the general public about the threat of HIV infection and how to prevent it. State and local health departments, as well as federal agencies, are expected to monitor progress toward HIV prevention goals [1].

The Centers for Disease Control and Prevention (CDC) National HIV Behavioral Surveillance (NHBS) serves as a key component of a high-impact prevention approach to reducing the spread of HIV in the United States [2] by providing data for monitoring behaviors among populations at risk of acquiring or transmitting HIV infection, and identifying the populations for whom scientifically proven, cost-effective, and scalable interventions are most appropriate. NHBS also helps state and local health departments in areas with high HIV prevalence to monitor risk behaviors, HIV testing, use of prevention programs, and HIV prevalence in three populations at high risk of HIV infection: MSM, PWID, and heterosexual adults at increased risk for HIV [3, 4].

Male-to-male sexual contact continues to be the most common route of HIV transmission in the United States among adults and adolescents, accounting for approximately 70% of the HIV infections diagnosed in 2017, including those attributed to male-to-male contact and injection drug use [5]. This report summarizes findings from the fifth NHBS data collection among MSM, which was conducted in 2017. Data from previous MSM cycles of NHBS have been published elsewhere [6–9].

The report provides descriptive, unweighted data that can be used to describe HIV infection among MSM and the percentages reporting specific risk

behaviors, HIV testing, and participation in prevention programs. Monitoring these outcomes is useful for assessing risk behaviors and the use of prevention efforts over time and for identifying new HIV prevention opportunities for this population.

### REPORT CHANGES

CDC routinely assesses NHBS reports to ensure the content and methods best meet the information needs of the nation. The following reporting changes were made from the previous NHBS report on MSM [9]:

- Outcomes are no longer reported by HIV-positive unaware and HIV-positive aware participants; instead, all HIV-positive participants are presented in a single category.
- This report includes 23 metropolitan statistical areas (MSAs). In 2017, 23 MSAs collected NHBS data among MSM.
- Table 7 no longer includes the most recent sexual encounter with a male partner, but rather, any anal sex in the three months before interview with the most recent sex partner, if that sex partner was male.
- Table 8b is added to include MSA-specific receipt of HIV prevention.
- Diagnosis of genital warts or HPV was revised to diagnosis of genital warts (Table 9).
- Hallucinogen use (past 12 months) was removed (Table 10).
- Noninjection prescription opioid use (past 12 months) was added (Table 10).
- A visit to health care provider about HIV was changed from within 3 months after diagnosis to within a month after diagnosis (Table 12).

Some modifications to measure definitions are made routinely to more accurately or more precisely describe the outcome or characteristic of interest; measure definitions are described in the appendix of this report. Additionally, Table 11 is designed as a flexible reporting mechanism to respond to emerging issues; the outcomes presented in this table vary with each report.

## TABLE ORGANIZATION

The tables in this report are ordered by content. Tables 1 and 5–11 are stratified by HIV status; that is, data are presented separately for HIV-negative participants and HIV-positive participants (HIV status was determined from the NHBS HIV test result). A small percentage of the sample (8%) could not be classified by HIV status because they had no valid NHBS HIV test result; that is, they did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had a negative NHBS HIV test result. For data completeness, data from these participants are reported in a “No valid NHBS HIV test result” column (Table 1) or row (Tables 5–11).

## HIGHLIGHTS

### Demographic Characteristics, HIV Prevalence, and HIV Testing

This report describes data from 10,104 MSM who participated in NHBS in 2017, of whom 39% were aged 29 years or younger, and 35% were white, 30% black, and 26% Hispanic or Latino (Table 1). Of HIV-positive participants, 28% were aged 29 years or younger, 22% were white, 49% were black, and 22% were Hispanic or Latino. Overall, 77% of participants had more than a high school education and 81% had a household income above the federal poverty level; 83% of participants had health insurance and 86% had visited a health care provider in the 12 months before interview. A small percentage of the sample reported being homeless (8%) or incarcerated (5%) in the 12 months before interview. Among HIV-positive participants, 13% reported being homeless and 7% incarcerated in the past 12 months.

In 2017, 23% of 9,299 participants with a valid NHBS HIV test result tested positive for HIV (Table 2). HIV prevalence increased with increasing age: 14% (18–24 years), 19% (25–29 years), 24% (30–39 years), 31% (40–49 years), and 32% (50–60 years). By race and ethnicity, HIV prevalence was 39% among blacks, 30% among American Indian or Alaska Natives, 20% among Native Hawaiian or other Pacific Islanders, 19% among Hispanics or Latinos, 15% among whites, and 9% among Asians.

CDC recommends that persons at increased risk of HIV infection, including sexually active MSM, undergo HIV testing at least annually [10]. Among

participants who did not report a previous HIV-positive test result or who had received their first HIV-positive test result less than 12 months before interview, 77% reported that they had been tested for HIV in the 12 months before interview, and 95% reported that they had ever been tested (Table 3). These data are consistent with continued increases in HIV testing among MSM participating in NHBS with 62% in 2008 [6], 66% in 2011 [7], 71% in 2014 [9], and 77% in 2017 reporting an HIV test in the previous 12 months.

Among participants who reported being tested for HIV during the 12 months before interview, 62% reported their most recent test was performed in a clinical setting while 31% reported being tested in a nonclinical setting such as HIV counseling and testing site, HIV street outreach program or mobile unit, syringe services program, or at home (Table 4). Testing in nonclinical settings varied by race and ethnicity: 34% of black MSM and 38% of Hispanic MSM reported their most recent HIV test was conducted in a nonclinical setting, while 25% of white MSM reported a nonclinical setting for their most recent HIV test.

### Sexual Behaviors

Among MSM, condomless vaginal or anal sex with females was reported similarly by HIV-positive participants (6% vaginal, 2% anal) and HIV-negative participants (8% vaginal, 3% anal) (Table 5). Condomless anal sex with male partners was also reported similarly by HIV-positive MSM (72%) and HIV-negative MSM (72%). HIV-positive participants reported condomless anal sex with main male partners (44%) and casual male partners (49%) at a similar rate to HIV-negative participants (main: 47%; casual: 47%) (Table 6). Among MSM whose last sex partner was male, 24% of HIV-positive and 21% of HIV-negative participants reported having both insertive and receptive condomless anal sex in the three months before the interview (Table 7).

Although other prevention methods may have been used such as preexposure prophylaxis (PrEP), the reporting of condomless vaginal or anal sex with female partners and condomless anal sex with male partners (Tables 5–7) is a concern. Despite the existence of other HIV prevention options, correct and consistent condom use is one of the primary means of protection from HIV and other infections [11, 12].

The high percentages of participants who engaged in condomless sex underscore the importance of using effective, evidence-based scalable combination HIV prevention strategies among MSM at increased risk for HIV infection that include access to and use of condoms, PrEP, risk-reduction counseling, and HIV testing [2, 13].

### Receipt of HIV Prevention

The receipt of free condoms and participation in HIV individual- or group-level behavioral interventions are reported in Table 8. Overall, 70% of participants reported receiving free condoms and 31% reported participating in an HIV behavioral intervention. The percentages of MSM who received condoms were similar across HIV status (74% HIV-positive; 70% HIV-negative); however, the percentage of MSM who reported participating in an HIV behavioral intervention was highest for HIV-positive participants (40%) in general, and for younger-aged HIV-positive MSM in particular (47% of 18–24 year olds; 50% of 25–29 year olds).

In 2014, CDC released clinical guidance recommending the use of PrEP for persons at increased risk of acquiring HIV, including MSM [13]. The majority of HIV-negative MSM reported previously hearing about PrEP (85%), particularly among younger age groups (18–24 years: 83%; 25–29 years: 89%). One in four HIV-negative MSM reported taking antiretroviral medicines at any point in the past 12 months to prevent HIV infection but there were notable racial/ethnic differences: whites (31%), Asians (31%), Native Hawaiian or other Pacific Islanders (25%), Hispanics or Latinos (21%), blacks (19%), and American Indian or Alaska Natives (14%).

### Sexually Transmitted Infections

Sexually transmitted infections (STIs) can increase the likelihood of acquiring and transmitting HIV [14]. The percentage of MSM who reported a diagnosis of any bacterial STI (chlamydia, gonorrhea, or syphilis) during the 12 months before interview was 19% overall, and was higher among HIV-positive MSM (26%) than HIV-negative MSM (18%). Percentages of reported lifetime diagnosis of genital warts (12%) and genital herpes (10%) were also higher among HIV-positive MSM than among HIV-negative MSM (6% for both genital warts and genital herpes) (Table 9).

Since 2000, rates of reported primary and secondary syphilis have been steadily increasing, primarily attributable to increased cases among MSM; MSM who are HIV-positive account for almost half of reported primary and secondary syphilis cases with known HIV-status [15]. In the current NHBS cycle, 13% of HIV-positive MSM reported being diagnosed with syphilis during the 12 months before interview compared with 5% of HIV-negative MSM.

### Drug and Alcohol Use

Drug and alcohol use, particularly binge drinking, injection drug use, and methamphetamine use, have been associated with sexual risk behavior among MSM [16]. Binge drinking prevalence was more common among HIV-negative MSM (45%) than among HIV-positive participants (32%). Use of any injection drugs was reported more often by HIV-positive MSM (5%) than by HIV-negative MSM (2%). The most common noninjection drugs reported by HIV-positive MSM were marijuana, cocaine, and methamphetamine; for HIV-negative MSM, commonly reported noninjection drugs were marijuana, cocaine, and ecstasy (Table 10). Noninjection use of prescription opioids was reported by 6% of HIV-positive and 6% of HIV-negative MSM.

### Additional Outcomes

Table 11 presents data on additional outcomes related to the risk of HIV transmission and acquisition among MSM. Outcomes reported in Table 11 are of current relevance to HIV among MSM and may not be reported in future reports.

The median number of male sex partners reported in the 12 months before interview was 4 (Q1–Q3: 2–10) among HIV-positive participants and HIV-negative participants.

Giving or receiving money or drugs in exchange of sex is a recognized risk factor for HIV infection [17]. In 2017, 9% of MSM reported giving or receiving things like money or drugs in exchange for sex with a male casual partner in the 12 months before interview. The percentage of participants reporting exchange of sex with a male casual partner was higher among HIV-positive participants (15%) than HIV-negative MSM (8%).

Condomless sex with an HIV-discordant partner at last sex was commonly reported among MSM (18%). More than a quarter of HIV-positive MSM (26%)

and 16% of HIV-negative MSM reported sex without a condom during the most recent sexual encounter with a partner of different or unknown HIV status.

### **Receipt of HIV Care and Treatment**

Achieving viral suppression through antiretroviral treatment can improve clinical outcomes and reduce the likelihood of transmitting HIV to others [18]. In 2015, a national goal for linkage-to-care changed from increasing the percentage of persons with newly diagnosed HIV linked to care within 3 months of diagnosis to increasing the percentage of linkage to care within one month of diagnosis [1]. In 2017, among self-reported HIV-positive MSM, 97% reported having ever visited a health care provider for HIV, 72% reported that they did so within one month after diagnosis, and 90% reported visiting a health care provider for HIV care in the six months before interview. Current use of antiretroviral therapy was reported by 92% of self-reported HIV-positive MSM (Table 12).

## Technical Notes

---

NHBS conducts rotating cycles of biobehavioral surveys among MSM, PWID, and heterosexual adults at increased risk of HIV infection [3]; data are collected in annual cycles from one risk group per year so that each population is surveyed once every three years. The same general eligibility criteria are used in each cycle: age 18 years or older, current residence in a participating city, no previous participation in NHBS during the current survey cycle, ability to complete the survey in either English or Spanish, and ability to provide informed consent. In addition to these basic NHBS eligibility criteria, participation in the 2017 NHBS cycle was limited to persons who (1) were male at birth, (2) reported their gender as male, and (3) reported oral or anal sex with a male partner during their lifetime. Only participants who reported having oral or anal sex with another man in the past 12 months were counted toward the required sample size of current MSM.

A standardized questionnaire is used to collect information about behavioral risks for HIV infection, HIV testing, and use of HIV prevention services. The anonymous, in-person survey is administered by a trained interviewer using a portable computer. All participants are offered an anonymous HIV test, which is linked to the survey data through a unique survey identifier.

Activities for NHBS were approved by CDC [19, 20] and by applicable institutional review boards (IRBs) in each participating city.

### PARTICIPATING CITIES

State and local health departments eligible to participate in NHBS are among those whose jurisdictions include an MSA or a specified division with high prevalence of HIV. In 2017, NHBS was conducted in 23 MSAs (see list at the end of the report), which represented approximately 59% of all persons living with HIV in urban areas with a population of at least 500,000 at year's end 2016 [5].

Throughout this report, MSAs and divisions are referred to by the name of the principal city.

### SAMPLING METHOD

Participants in the 2017 NHBS cycle were recruited using venue-based, time-space sampling (VBS) [21]. The primary steps were identifying venues frequented by MSM, determining the best time for sampling at each venue and the number of sampling events to be conducted each month, and recruiting men at the sampling event [9].

### DATA COLLECTION

Persons recruited for the interview were escorted to a private area for eligibility screening. For those who met eligibility requirements, trained interviewers obtained informed consent and conducted face-to-face interviews, which took approximately 30 minutes and consisted of questions concerning participants' demographic characteristics, HIV testing history, sexual and drug use behaviors, STI testing and diagnosis, and use of HIV prevention services and programs. As a token of appreciation for the time spent taking part in the interview, participants received \$20–\$30 (amount determined locally). For participants who consented to the anonymous testing for HIV, STI, or hepatitis, local testing procedures were followed, and an additional incentive was provided.

HIV testing was performed for participants who consented; blood specimens were collected for rapid testing in the field or laboratory-based testing. A non-reactive rapid test result was considered HIV-negative; a reactive rapid test result was considered HIV-positive if supported by a second rapid test or supplemental laboratory-based testing. Participants received \$10–\$50 for HIV testing (amount determined locally).

Each participating city's goal was to interview 500 eligible men who also reported having sex with another man in the 12 months before the interview.

### DATA ANALYSIS

This surveillance report presents descriptive data; no statistical tests were performed. In addition, these data are cross-sectional; we did not attempt to infer causal relationships. Reported numbers fewer than

12, and percentages based on these numbers, should be interpreted with caution because the numbers are considered unreliable.

Data for this report are not weighted. The purpose of this report is to provide a detailed summary of surveillance data collected as part of the NHBS 2017 cycle; unweighted data provide an efficient and transparent way to do so. Further, unweighted analysis allows for detailed reporting of outcomes among small subgroups of the population of interest.

Inclusion for this report is limited to participants who (1) were eligible for and consented to the interview and (2) reported having sex with another man in the 12 months before interview.

In total, 45,098 men were approached for participation at 588 venues; 13,852 persons were screened to participate in NHBS in 2017. Of those, 3,002 persons did not meet NHBS eligibility criteria or did not provide consent and were excluded from the survey. An additional 90 interviews were excluded from this report due to incomplete survey data, survey responses of questionable validity, or data lost during electronic upload. Finally, 656 eligible persons who completed interviews but did not report having sex with a male in the 12 months before interview were excluded from this report.

The full analysis sample for this report includes 2017 NHBS cycle participants who consented to and completed the survey (n=10,104, Table 1). Additional inclusion criteria were applied for certain analyses of HIV infection and of HIV-associated behaviors; details of each analysis sample can be found in the footnotes of each table.

## References

---

1. National HIV/AIDS strategy for the United States—updated to 2020. <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/overview/>. Published July 2015. Accessed January 28, 2019.
2. CDC. High-Impact HIV Prevention: CDC’s approach to reducing HIV infections in the United States. <http://go.usa.gov/p9xw>. Published August 2011. Accessed January 28, 2019.
3. Gallagher KM, Sullivan PS, Lansky A, Onorato IM. Behavioral surveillance among people at risk for HIV infection in the U.S.: the National HIV Behavioral Surveillance System. *Public Health Rep* 2007;122(suppl 1):32–38.
4. DiNenno EA, Oster AM, Sionean C, Denning P, Lansky A. Piloting a system for behavioral surveillance among heterosexuals at increased risk of HIV in the United States. *Open AIDS J* 2012;6(suppl 1):169–176. doi:10.2174/1874613601206010169.
5. CDC. *HIV Surveillance Report, 2017*; vol. 29. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed January 28, 2019.
6. CDC. HIV risk, prevention, and testing behaviors among men who have sex with men—National HIV Behavioral Surveillance System, 21 U.S. cities, United States, 2008. *MMWR* 2011;60(SS-14):1–34.
7. CDC. HIV risk, prevention, and testing behaviors—National HIV Behavioral Surveillance System: men who have sex with en, 20 U.S. cities, 2011. *HIV Surveillance Special Report 8*. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published September 2014. Accessed January 28, 2019.
8. CDC. Human immunodeficiency virus (HIV) risk, prevention, and testing behaviors—United States, National HIV Behavioral Surveillance System: men who have sex with men, November 2003–April 2005. *MMWR* 2006;55(SS-6):1–16.
9. CDC. HIV infection risk, prevention, and testing behaviors among men who have sex with men—National HIV Behavioral Surveillance System, 20 U.S. cities, 2014. *HIV Surveillance Special Report 15*. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published January 2016. Accessed January 28, 2019.
10. DiNenno EA, Prejean J, Irwin K, et al. Recommendations for HIV screening of gay, bisexual, and other men who have sex with men—United States, 2017. *MMWR* 2017;66(31):830–832.
11. Smith DK, Herbst JH, Zhang X, Rose CE. Condom effectiveness for HIV prevention by consistency of use among men who have sex with men in the United States. *J Acquir Immune Defic Syndr* 2015;68(3):337–344.
12. Johnson WD, O’Leary A, Flores SA. Per-partner condom effectiveness against HIV for men who have sex with men. *AIDS* 2018;32(11):1499–1505.
13. CDC, US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection—2017 update: a clinical practice guideline. <https://www.cdc.gov/hiv/pdf/guidelines/cdc-hiv-prep-guidelines-2017.pdf>. Published March 2018. Accessed January 28, 2019.
14. CDC [Workowski KA, Bolan GA]. Sexually transmitted diseases treatment guidelines, 2015. *MMWR* 2015;64(3):1–137.
15. CDC. Sexually transmitted disease surveillance 2016. [https://www.cdc.gov/std/stats16/CDC\\_2016\\_STDS\\_Report-for508WebSep21\\_2017\\_1644.pdf](https://www.cdc.gov/std/stats16/CDC_2016_STDS_Report-for508WebSep21_2017_1644.pdf). Published September 2017. Accessed January 28, 2019.
16. Vosburgh HW, Mansergh G, Sullivan PS, Purcell DW. A review of the literature on event-level substance use and sexual risk behavior among men who have sex with men. *AIDS Behav* 2012;16(6):1394–1410.
17. Moyer VA, U.S. Preventive Services Task Force. Screening for HIV: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med* 2013;159(1):51–60.
18. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1–infected adults and adolescents. <http://go.usa.gov/vdGA>. Updated October 25, 2018. Accessed January 28, 2019.
19. CDC. Guidelines for defining public health research and public health non-research—revised October 4, 1999. <http://www.cdc.gov/od/science/integrity/docs/defining-public-health-research-non-research-1999.pdf>. Published October 1999. Accessed January 28, 2019.
20. Protection of Human Subjects, CFR 45, Part 46. <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>. Revised January 2009. Accessed January 28, 2019.
21. MacKellar D, Gallagher K, Finlayson T, Sanchez T, Lansky A, Sullivan PS. Surveillance of HIV risk and prevention behaviors of men who have sex with men—a national application of venue-based, time-space sampling. *Public Health Rep* 2007;122(Suppl 1):39–47.

**Table 1. Selected characteristics of men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	HIV-negative <sup>a</sup>		HIV-positive <sup>b</sup>		No valid NHBS HIV test result <sup>c</sup>		Total	
	No.	%	No.	%	No.	%	No.	%
<b>Age at interview (yr)</b>								
18–24	1,273	17.9	201	9.2	99	12.3	1,573	15.6
25–29	1,792	25.2	408	18.8	167	20.7	2,367	23.4
30–39	2,098	29.4	659	30.3	250	31.1	3,007	29.8
40–49	983	13.8	436	20.1	128	15.9	1,547	15.3
≥50	979	13.7	470	21.6	161	20.0	1,610	15.9
<b>Race/ethnicity</b>								
American Indian/Alaska Native	49	0.7	21	1.0	4	0.5	74	0.7
Asian	192	2.7	18	0.8	19	2.4	229	2.3
Black/African American	1,672	23.5	1,059	48.7	294	36.5	3,025	29.9
Hispanic/Latino <sup>d</sup>	2,002	28.1	479	22.0	137	17.0	2,618	25.9
Native Hawaiian/Other Pacific Islander	32	0.4	8	0.4	3	0.4	43	0.4
White	2,774	38.9	480	22.1	295	36.6	3,549	35.1
Multiple races	365	5.1	100	4.6	48	6.0	513	5.1
<b>Education</b>								
Less than high school	173	2.4	103	4.7	17	2.1	293	2.9
High school diploma or equivalent	1,307	18.3	563	25.9	131	16.3	2,001	19.8
Some college or technical degree	2,314	32.5	827	38.0	227	28.2	3,368	33.3
College degree or more	3,329	46.7	680	31.3	430	53.4	4,439	43.9
<b>Household income<sup>e</sup></b>								
At or below the federal poverty level	1,145	16.1	602	27.7	123	15.3	1,870	18.5
Above the federal poverty level	5,926	83.2	1,558	71.7	671	83.4	8,155	80.7
<b>Health insurance</b>								
Yes	5,823	81.7	1,915	88.1	669	83.1	8,407	83.2
No	1,291	18.1	256	11.8	135	16.8	1,682	16.6
<b>Visited a health care provider, past 12 months</b>								
Yes	5,977	83.9	2,044	94.0	709	88.1	8,730	86.4
No	1,145	16.1	130	6.0	96	11.9	1,371	13.6
<b>Homeless,<sup>f</sup> past 12 months</b>								
Yes	507	7.1	273	12.6	40	5.0	820	8.1
No	6,618	92.9	1,901	87.4	765	95.0	9,284	91.9
<b>Incarcerated,<sup>g</sup> past 12 months</b>								
Yes	306	4.3	154	7.1	30	3.7	490	4.8
No	6,819	95.7	2,019	92.9	774	96.1	9,612	95.1

**Table 1. Selected characteristics of men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017 (cont)**

	HIV-negative <sup>a</sup>		HIV-positive <sup>b</sup>		No valid NHBS HIV test result <sup>c</sup>		Total	
	No.	%	No.	%	No.	%	No.	%
<b>City</b>								
Atlanta, GA	328	4.6	164	7.5	19	2.4	511	5.1
Baltimore, MD	236	3.3	138	6.3	43	5.3	417	4.1
Boston, MA	330	4.6	25	1.1	73	9.1	428	4.2
Chicago, IL	295	4.1	98	4.5	146	18.1	539	5.3
Dallas, TX	406	5.7	97	4.5	21	2.6	524	5.2
Denver, CO	437	6.1	60	2.8	33	4.1	530	5.2
Detroit, MI	312	4.4	158	7.3	41	5.1	511	5.1
Houston, TX	371	5.2	113	5.2	21	2.6	505	5.0
Los Angeles, CA	409	5.7	109	5.0	7	0.9	525	5.2
Memphis, TN	180	2.5	93	4.3	59	7.3	332	3.3
Miami, FL	301	4.2	93	4.3	4	0.5	398	3.9
Nassau-Suffolk, NY	139	2.0	11	0.5	11	1.4	161	1.6
New Orleans, LA	272	3.8	71	3.3	42	5.2	385	3.8
New York City, NY	368	5.2	83	3.8	49	6.1	500	4.9
Newark, NJ	121	1.7	40	1.8	7	0.9	168	1.7
Philadelphia, PA	330	4.6	195	9.0	15	1.9	540	5.3
Portland, OR	321	4.5	62	2.9	40	5.0	423	4.2
San Diego, CA	423	5.9	134	6.2	14	1.7	571	5.7
San Francisco, CA	362	5.1	84	3.9	21	2.6	467	4.6
San Juan, PR	247	3.5	29	1.3	5	0.6	281	2.8
Seattle, WA	374	5.2	88	4.0	46	5.7	508	5.0
Virginia Beach, VA	232	3.3	108	5.0	39	4.8	379	3.8
Washington, DC	331	4.6	121	5.6	49	6.1	501	5.0
<b>Total</b>	<b>7,125</b>	<b>100</b>	<b>2,174</b>	<b>100</b>	<b>805</b>	<b>100</b>	<b>10,104</b>	<b>100</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance.

Note. "Past 12 months" refers to the 12 months before interview.

<sup>a</sup> Participants with a valid negative NHBS HIV test result.

<sup>b</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>c</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

<sup>d</sup> Hispanics/Latinos can be of any race.

<sup>e</sup> Poverty level is based on household income and household size.

<sup>f</sup> Living on the street, in a shelter, in a single-room-occupancy hotel, or in a car.

<sup>g</sup> Having been held in a detention center, jail, or prison for more than 24 hours.

**Table 2. HIV prevalence among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	HIV-positive <sup>a</sup>		Total No.
	No.	%	
<b>Age at interview (yr)</b>			
18–24	201	13.6	1,474
25–29	408	18.5	2,200
30–39	659	23.9	2,757
40–49	436	30.7	1,419
≥50	470	32.4	1,449
<b>Race/ethnicity</b>			
American Indian/Alaska Native	21	30.0	70
Asian	18	8.6	210
Black/African American	1,059	38.8	2,731
Hispanic/Latino <sup>b</sup>	479	19.3	2,481
Native Hawaiian/Other Pacific Islander	8	20.0	40
White	480	14.8	3,254
Multiple races	100	21.5	465
<b>City</b>			
Atlanta, GA	164	33.3	492
Baltimore, MD	138	36.9	374
Boston, MA	25	7.0	355
Chicago, IL	98	24.9	393
Dallas, TX	97	19.3	503
Denver, CO	60	12.1	497
Detroit, MI	158	33.6	470
Houston, TX	113	23.3	484
Los Angeles, CA	109	21.0	518
Memphis, TN	93	34.1	273
Miami, FL	93	23.6	394
Nassau-Suffolk, NY	11	7.3	150
New Orleans, LA	71	20.7	343
New York City, NY	83	18.4	451
Newark, NJ	40	24.8	161
Philadelphia, PA	195	37.1	525
Portland, OR	62	16.2	383
San Diego, CA	134	24.1	557
San Francisco, CA	84	18.8	446
San Juan, PR	29	10.5	276
Seattle, WA	88	19.0	462
Virginia Beach, VA	108	31.8	340
Washington, DC	121	26.8	452
<b>Total</b>	<b>2,174</b>	<b>23.4</b>	<b>9,299</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance (footnotes only).

Note. Data include all participants with a valid NHBS HIV test result.

<sup>a</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>b</sup> Hispanics/Latinos can be of any race.

**Table 3. HIV testing among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	Ever tested		Tested in past 12 months <sup>a</sup>		Total No.
	No.	%	No.	%	
<b>Age at interview (yr)</b>					
18–24	1,309	90.1	1,145	78.8	1,453
25–29	1,976	96.1	1,693	82.3	2,057
30–39	2,380	97.2	1,922	78.5	2,448
40–49	1,101	97.2	822	72.6	1,133
≥50	1,105	95.1	743	63.9	1,162
<b>Race/ethnicity</b>					
American Indian/Alaska Native	54	96.4	37	66.1	56
Asian	200	95.2	157	74.8	210
Black/African American	2,112	95.7	1,721	78.0	2,206
Hispanic/Latino <sup>b</sup>	2,095	94.6	1,683	76.0	2,215
Native Hawaiian/Other Pacific Islander	37	97.4	30	78.9	38
White	2,917	95.5	2,317	75.8	3,056
Multiple races	413	96.7	343	80.3	427
<b>City</b>					
Atlanta, GA	366	96.8	307	81.2	378
Baltimore, MD	294	95.1	224	72.5	309
Boston, MA	393	98.0	297	74.1	401
Chicago, IL	414	96.3	344	80.0	430
Dallas, TX	420	94.4	340	76.4	445
Denver, CO	438	92.8	347	73.5	472
Detroit, MI	367	88.4	260	62.7	415
Houston, TX	400	95.5	309	73.7	419
Los Angeles, CA	428	98.2	368	84.4	436
Memphis, TN	230	91.3	199	79.0	252
Miami, FL	302	92.9	241	74.2	325
Nassau-Suffolk, NY	139	93.3	101	67.8	149
New Orleans, LA	307	97.2	245	77.5	316
New York City, NY	410	96.9	342	80.9	423
Newark, NJ	127	96.2	111	84.1	132
Philadelphia, PA	382	96.2	319	80.4	397
Portland, OR	339	93.9	249	69.0	361
San Diego, CA	423	95.7	356	80.5	442
San Francisco, CA	378	99.2	323	84.8	381
San Juan, PR	241	92.7	169	65.0	260
Seattle, WA	406	97.4	331	79.4	417
Virginia Beach, VA	275	95.2	213	73.7	289
Washington, DC	392	97.0	330	81.7	404
<b>Total</b>	<b>7,871</b>	<b>95.4</b>	<b>6,325</b>	<b>76.6</b>	<b>8,253</b>

Note. Data include all participants who did not report a previous HIV-positive test result and participants who received their first HIV-positive test result less than 12 months before interview.

<sup>a</sup> "Past 12 months" refers to the 12 months before interview.

<sup>b</sup> Hispanics/Latinos can be of any race.

**Table 4. Setting of most recent HIV test among men who have sex with men and who were tested for HIV during the 12 months before interview—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	Clinical setting <sup>a</sup>		Nonclinical setting <sup>b</sup>		Total No.
	No.	(%)	No.	(%)	
<b>Age at interview (yr)</b>					
18–24	607	53.0	425	37.1	1,145
25–29	1,041	61.5	537	31.7	1,693
30–39	1,252	65.1	560	29.1	1,922
40–49	543	66.1	235	28.6	822
≥50	491	66.1	207	27.9	743
<b>Race/ethnicity</b>					
American Indian/Alaska Native	20	54.1	12	32.4	37
Asian	102	65.0	49	31.2	157
Black/African American	982	57.1	589	34.2	1,721
Hispanic/Latino <sup>c</sup>	926	55.0	644	38.3	1,683
Native Hawaiian/Other Pacific Islander	24	80.0	3	10.0	30
White	1,630	70.3	572	24.7	2,317
Multiple races	223	65.0	85	24.8	343
<b>City</b>					
Atlanta, GA	165	53.7	119	38.8	307
Baltimore, MD	167	74.6	36	16.1	224
Boston, MA	268	90.2	20	6.7	297
Chicago, IL	270	78.5	60	17.4	344
Dallas, TX	184	54.1	132	38.8	340
Denver, CO	251	72.3	69	19.9	347
Detroit, MI	161	61.9	80	30.8	260
Houston, TX	175	56.6	117	37.9	309
Los Angeles, CA	147	39.9	212	57.6	368
Memphis, TN	127	63.8	54	27.1	199
Miami, FL	91	37.8	137	56.8	241
Nassau-Suffolk, NY	68	67.3	23	22.8	101
New Orleans, LA	152	62.0	78	31.8	245
New York City, NY	256	74.9	71	20.8	342
Newark, NJ	36	32.4	67	60.4	111
Philadelphia, PA	121	37.9	172	53.9	319
Portland, OR	183	73.5	54	21.7	249
San Diego, CA	265	74.4	76	21.3	356
San Francisco, CA	214	66.3	98	30.3	323
San Juan, PR	43	25.4	100	59.2	169
Seattle, WA	241	72.8	74	22.4	331
Virginia Beach, VA	108	50.7	55	25.8	213
Washington, DC	241	73.0	60	18.2	330
<b>Total</b>	<b>3,934</b>	<b>62.2</b>	<b>1,964</b>	<b>31.1</b>	<b>6,325</b>

Abbreviation: HMO, health maintenance organization (footnotes only).

*Note.* Data report setting of most recent HIV test. Data exclude participants who did not report an HIV test during the 12 months before interview or who reported receiving an HIV-positive test result more than 12 months before interview. Percentages may not add to 100 because of missing data and “other” locations, which could not be classified as clinical or nonclinical settings.

<sup>a</sup> Clinical settings include private doctor’s office (including HMO), emergency department, hospital (inpatient), public health clinic or community health center, family planning or obstetrics clinic, correctional facility, or drug treatment program.

<sup>b</sup> Nonclinical settings include HIV counseling and testing site, HIV street outreach program or mobile unit, needle exchange program, or home.

<sup>c</sup> Hispanics/Latinos can be of any race.

Table 5. Sexual behavior with female and male sex partners in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	With female sex partners								With male sex partners				Total No.
	Vaginal sex		Condomless vaginal sex		Anal sex		Condomless anal sex		Anal sex		Condomless anal sex		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<b>HIV-negative<sup>a</sup></b>	885	12.4	596	8.4	353	5.0	231	3.2	6,422	90.1	5,112	71.7	7,125
<b>Age at interview (yr)</b>													
18–24	184	14.5	129	10.1	69	5.4	45	3.5	1,190	93.5	927	72.8	1,273
25–29	248	13.8	156	8.7	89	5.0	53	3.0	1,692	94.4	1,381	77.1	1,792
30–39	239	11.4	167	8.0	108	5.1	75	3.6	1,944	92.7	1,592	75.9	2,098
40–49	122	12.4	78	7.9	53	5.4	35	3.6	856	87.1	665	67.7	983
≥50	92	9.4	66	6.7	34	3.5	23	2.3	740	75.6	547	55.9	979
<b>Race/ethnicity</b>													
American Indian/Alaska Native	10	20.4	6	12.2	3	6.1	2	4.1	42	85.7	28	57.1	49
Asian	12	6.3	9	4.7	4	2.1	2	1.0	173	90.1	124	64.6	192
Black/African American	330	19.7	213	12.7	128	7.7	82	4.9	1,493	89.3	1,091	65.3	1,672
Hispanic/Latino <sup>b</sup>	239	11.9	153	7.6	96	4.8	61	3.0	1,853	92.6	1,472	73.5	2,002
Native Hawaiian/Other Pacific Islander	2	6.3	2	6.3	0	0.0	0	0.0	29	90.6	25	78.1	32
White	237	8.5	176	6.3	97	3.5	68	2.5	2,465	88.9	2,082	75.1	2,774
Multiple races	51	14.0	35	9.6	24	6.6	15	4.1	331	90.7	261	71.5	365
<b>HIV-positive<sup>c</sup></b>	226	10.4	119	5.5	84	3.9	43	2.0	2,026	93.2	1,561	71.8	2,174
<b>Age at interview (yr)</b>													
18–24	27	13.4	14	7.0	11	5.5	6	3.0	192	95.5	149	74.1	201
25–29	48	11.8	17	4.2	12	2.9	7	1.7	400	98.0	312	76.5	408
30–39	69	10.5	40	6.1	24	3.6	12	1.8	638	96.8	506	76.8	659
40–49	41	9.4	23	5.3	19	4.4	12	2.8	404	92.7	307	70.4	436
≥50	41	8.7	25	5.3	18	3.8	6	1.3	392	83.4	287	61.1	470
<b>Race/ethnicity</b>													
American Indian/Alaska Native	1	4.8	0	0.0	0	0.0	0	0.0	20	95.2	17	81.0	21
Asian	0	0.0	0	0.0	0	0.0	0	0.0	18	100	14	77.8	18
Black/African American	139	13.1	74	7.0	49	4.6	27	2.5	996	94.1	710	67.0	1,059
Hispanic/Latino <sup>b</sup>	44	9.2	21	4.4	19	4.0	7	1.5	453	94.6	368	76.8	479
Native Hawaiian/Other Pacific Islander	1	12.5	0	0.0	1	12.5	0	0.0	8	100	6	75.0	8
White	28	5.8	16	3.3	10	2.1	7	1.5	428	89.2	369	76.9	480
Multiple races	12	12.0	7	7.0	5	5.0	2	2.0	97	97.0	74	74.0	100
<b>No valid NHBS HIV test result<sup>d</sup></b>	75	9.3	33	4.1	27	3.4	12	1.5	695	86.3	496	61.6	805
<b>Total</b>	<b>1,186</b>	<b>11.7</b>	<b>748</b>	<b>7.4</b>	<b>464</b>	<b>4.6</b>	<b>286</b>	<b>2.8</b>	<b>9,143</b>	<b>90.5</b>	<b>7,169</b>	<b>71.0</b>	<b>10,104</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance.

<sup>a</sup> Participants with a valid negative NHBS HIV test result.<sup>b</sup> Hispanics/Latinos can be of any race.<sup>c</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.<sup>d</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

Table 6. Sexual behavior with male partners in the 12 months before interview among men who have sex with men, by partner type—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	Main male partner				Casual male partner				Main and casual male partners—sex of any type <sup>a</sup>		Total No.
	Anal sex		Condomless anal sex		Anal sex		Condomless anal sex		No.	%	
	No.	%	No.	%	No.	%	No.	%			
<b>HIV-negative<sup>b</sup></b>	4,035	56.6	3,336	46.8	4,966	69.7	3,325	46.7	2,579	36.2	7,125
<b>Age at interview (yr)</b>											
18–24	824	64.7	662	52.0	920	72.3	555	43.6	554	43.5	1,273
25–29	1,155	64.5	970	54.1	1,338	74.7	923	51.5	801	44.7	1,792
30–39	1,246	59.4	1,051	50.1	1,504	71.7	1,052	50.1	806	38.4	2,098
40–49	465	47.3	381	38.8	652	66.3	436	44.4	261	26.6	983
≥50	345	35.2	272	27.8	552	56.4	359	36.7	157	16.0	979
<b>Race/ethnicity</b>											
American Indian/Alaska Native	32	65.3	22	44.9	27	55.1	14	28.6	17	34.7	49
Asian	93	48.4	74	38.5	138	71.9	90	46.9	58	30.2	192
Black/African American	935	55.9	702	42.0	1,125	67.3	660	39.5	567	33.9	1,672
Hispanic/Latino <sup>c</sup>	1,185	59.2	976	48.8	1,416	70.7	907	45.3	748	37.4	2,002
Native Hawaiian/Other Pacific Islander	19	59.4	18	56.3	23	71.9	18	56.3	13	40.6	32
White	1,548	55.8	1,357	48.9	1,948	70.2	1,437	51.8	1,031	37.2	2,774
Multiple races	205	56.2	170	46.6	259	71.0	177	48.5	133	36.4	365
<b>HIV-positive<sup>d</sup></b>	1,285	59.1	965	44.4	1,570	72.2	1,068	49.1	829	38.1	2,174
<b>Age at interview (yr)</b>											
18–24	151	75.1	111	55.2	144	71.6	83	41.3	103	51.2	201
25–29	289	70.8	220	53.9	304	74.5	194	47.5	193	47.3	408
30–39	417	63.3	319	48.4	504	76.5	360	54.6	283	42.9	659
40–49	237	54.4	172	39.4	319	73.2	233	53.4	152	34.9	436
≥50	191	40.6	143	30.4	299	63.6	198	42.1	98	20.9	470
<b>Race/ethnicity</b>											
American Indian/Alaska Native	15	71.4	13	61.9	17	81.0	11	52.4	12	57.1	21
Asian	11	61.1	6	33.3	13	72.2	11	61.1	6	33.3	18
Black/African American	646	61.0	445	42.0	725	68.5	433	40.9	375	35.4	1,059
Hispanic/Latino <sup>c</sup>	283	59.1	224	46.8	370	77.2	270	56.4	200	41.8	479
Native Hawaiian/Other Pacific Islander	7	87.5	4	50.0	7	87.5	4	50.0	6	75.0	8
White	263	54.8	226	47.1	352	73.3	287	59.8	187	39.0	480
Multiple races	56	56.0	45	45.0	83	83.0	51	51.0	42	42.0	100
<b>No valid NHBS HIV test result<sup>e</sup></b>	438	54.4	325	40.4	502	62.4	296	36.8	245	30.4	805
<b>Total</b>	<b>5,758</b>	<b>57.0</b>	<b>4,626</b>	<b>45.8</b>	<b>7,038</b>	<b>69.7</b>	<b>4,689</b>	<b>46.4</b>	<b>3,653</b>	<b>36.2</b>	<b>10,104</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance.

<sup>a</sup> Participants who reported oral or anal sex with at least 1 male main partner and at least 1 male casual partner in the 12 months before interview.<sup>b</sup> Participants with a valid negative NHBS HIV test result.<sup>c</sup> Hispanics/Latinos can be of any race.<sup>d</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.<sup>e</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

**Table 7. Anal sex with the most recent sex partner during the 3 months before interview among men whose last sex partner was male—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	Insertive <sup>a</sup> anal sex only				Receptive <sup>b</sup> anal sex only				Both insertive <sup>a</sup> and receptive <sup>b</sup> anal sex				No anal sex in the past 3 months <sup>c,d</sup>		Total No.
	Total <sup>c</sup>		Condomless <sup>e</sup>		Total <sup>c</sup>		Condomless <sup>f</sup>		Total <sup>c</sup>		Condomless <sup>g</sup>		No.	%	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<b>HIV-negative<sup>h</sup></b>	1,913	28.1	1,257	18.5	1,177	17.3	725	10.6	1,863	27.4	1,430	21.0	1,853	27.2	6,811
<b>Age at interview (yr)</b>															
18–24	277	22.9	150	12.4	268	22.1	152	12.6	405	33.5	310	25.6	257	21.2	1,210
25–29	472	27.4	306	17.8	333	19.3	197	11.4	549	31.9	418	24.3	368	21.4	1,723
30–39	634	31.5	430	21.4	328	16.3	221	11.0	569	28.3	447	22.2	481	23.9	2,013
40–49	298	32.1	203	21.9	125	13.5	80	8.6	193	20.8	149	16.1	311	33.5	927
≥50	232	24.7	168	17.9	123	13.1	75	8.0	147	15.7	106	11.3	436	46.5	938
<b>Race/ethnicity</b>															
American Indian/Alaska Native	13	27.1	10	20.8	9	18.8	5	10.4	11	22.9	6	12.5	15	31.3	48
Asian	28	14.9	12	6.4	45	23.9	23	12.2	45	23.9	35	18.6	70	37.2	188
Black/African American	542	35.1	316	20.4	231	14.9	125	8.1	365	23.6	246	15.9	406	26.3	1,546
Hispanic/Latino <sup>i</sup>	523	27.0	345	17.8	331	17.1	189	9.8	626	32.4	474	24.5	453	23.4	1,934
Native Hawaiian/Other Pacific Islander	9	28.1	5	15.6	10	31.3	8	25.0	4	12.5	3	9.4	9	28.1	32
White	685	25.5	495	18.4	482	17.9	332	12.4	715	26.6	599	22.3	803	29.9	2,686
Multiple races	105	31.0	68	20.1	63	18.6	38	11.2	86	25.4	60	17.7	84	24.8	339
<b>HIV-positive<sup>j</sup></b>	476	22.4	318	15.0	500	23.6	314	14.8	676	31.9	502	23.7	467	22.0	2,122
<b>Age at interview (yr)</b>															
18–24	26	13.4	17	8.8	62	32.0	34	17.5	85	43.8	62	32.0	21	10.8	194
25–29	98	24.5	68	17.0	99	24.8	63	15.8	141	35.3	94	23.5	61	15.3	400
30–39	154	23.8	106	16.4	156	24.1	104	16.1	214	33.1	162	25.1	120	18.6	646
40–49	99	23.3	70	16.5	88	20.8	53	12.5	130	30.7	107	25.2	107	25.2	424
≥50	99	21.6	57	12.4	95	20.7	60	13.1	106	23.1	77	16.8	158	34.5	458
<b>Race/ethnicity</b>															
American Indian/Alaska Native	5	25.0	3	15.0	5	25.0	2	10.0	8	40.0	7	35.0	2	10.0	20
Asian	1	5.6	1	5.6	8	44.4	6	33.3	6	33.3	3	16.7	3	16.7	18
Black/African American	240	23.3	150	14.6	231	22.4	119	11.6	348	33.8	238	23.1	208	20.2	1,029
Hispanic/Latino <sup>i</sup>	97	20.5	65	13.7	133	28.1	88	18.6	151	31.9	120	25.4	92	19.5	473
Native Hawaiian/Other Pacific Islander	2	28.6	2	28.6	2	28.6	1	14.3	1	14.3	1	14.3	2	28.6	7
White	104	22.1	79	16.8	104	22.1	86	18.3	127	27.0	109	23.2	134	28.5	470
Multiple races	23	24.0	16	16.7	16	16.7	12	12.5	35	36.5	24	25.0	22	22.9	96
<b>No valid NHBS HIV test result<sup>k</sup></b>	188	24.1	100	12.8	117	15.0	71	9.1	230	29.5	158	20.3	243	31.2	779
<b>Total</b>	<b>2,577</b>	<b>26.5</b>	<b>1,675</b>	<b>17.2</b>	<b>1,794</b>	<b>18.5</b>	<b>1,110</b>	<b>11.4</b>	<b>2,769</b>	<b>28.5</b>	<b>2,090</b>	<b>21.5</b>	<b>2,563</b>	<b>26.4</b>	<b>9,712</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance.

Note. Outcomes are only reported for men whose most recent sex partner was male. Men whose most recent sex partner was female (n=353) or unknown gender (n=39) were excluded. Percentages may not add to 100 because of missing data.

<sup>a</sup> The participant's most recent sex partner was male and the participant placed his penis in the anus of his sex partner one or more times during the 3 months before interview.

<sup>b</sup> The participant's most recent sex partner was male and the sex partner placed his penis in the participant's anus one or more times during the 3 months before interview.

<sup>c</sup> The categories—insertive anal sex, receptive anal sex, both insertive and receptive anal sex, and no anal sex—are mutually exclusive.

<sup>d</sup> The participant's most recent sex partner was male and the participant reported neither insertive anal sex nor receptive anal sex with the sex partner during the 3 months before interview. Includes participants who had oral sex but not anal sex with the most recent sex partner during the 3 months before interview and those who last had sex more than 3 months before interview.

<sup>e</sup> The participant did not use a condom during one or more of the times he had insertive anal sex with the most recent sex partner during the 3 months before interview.

<sup>f</sup> The participant did not use a condom during one or more of the times he had receptive anal sex with the most recent sex partner during the 3 months before interview.

<sup>g</sup> The participant did not use a condom during one or more of the times he had insertive anal sex or did not use a condom during one or more of the times he had receptive anal sex with the most recent sex partner during the 3 months before interview.

<sup>h</sup> Participants with a valid negative NHBS HIV test result.

<sup>i</sup> Hispanics/Latinos can be of any race.

<sup>j</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>k</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

**Table 8a. Receipt of HIV prevention in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	Free condoms <sup>a</sup>		Individual- or group-level intervention <sup>b</sup>		PrEP awareness <sup>c</sup>		PrEP use <sup>d</sup>		Total No.
	No.	%	No.	%	No.	%	No.	%	
<b>HIV-negative<sup>e</sup></b>	4,952	69.5	2,000	28.1	6,044	84.8	1,782	25.0	7,125
<b>Age at interview (yr)</b>									
18–24	924	72.6	499	39.2	1,060	83.3	274	21.5	1,273
25–29	1,307	72.9	561	31.3	1,598	89.2	502	28.0	1,792
30–39	1,430	68.2	589	28.1	1,860	88.7	637	30.4	2,098
40–49	669	68.1	191	19.4	780	79.3	233	23.7	983
≥50	622	63.5	160	16.3	746	76.2	136	13.9	979
<b>Race/ethnicity</b>									
American Indian/Alaska Native	35	71.4	12	24.5	44	89.8	7	14.3	49
Asian	128	66.7	57	29.7	172	89.6	60	31.3	192
Black/African American	1,183	70.8	647	38.7	1,309	78.3	315	18.8	1,672
Hispanic/Latino <sup>f</sup>	1,426	71.2	588	29.4	1,616	80.7	425	21.2	2,002
Native Hawaiian/Other Pacific Islander	25	78.1	9	28.1	30	93.8	8	25.0	32
White	1,878	67.7	571	20.6	2,525	91.0	856	30.9	2,774
Multiple races	254	69.6	102	27.9	313	85.8	98	26.8	365
<b>HIV-positive<sup>g</sup></b>	1,603	73.7	858	39.5	—	—	—	—	2,174
<b>Age at interview (yr)</b>									
18–24	154	76.6	95	47.3	—	—	—	—	201
25–29	313	76.7	205	50.2	—	—	—	—	408
30–39	498	75.6	272	41.3	—	—	—	—	659
40–49	314	72.0	145	33.3	—	—	—	—	436
≥50	324	68.9	141	30.0	—	—	—	—	470
<b>Race/ethnicity</b>									
American Indian/Alaska Native	16	76.2	7	33.3	—	—	—	—	21
Asian	12	66.7	7	38.9	—	—	—	—	18
Black/African American	795	75.1	489	46.2	—	—	—	—	1,059
Hispanic/Latino <sup>f</sup>	367	76.6	171	35.7	—	—	—	—	479
Native Hawaiian/Other Pacific Islander	6	75.0	3	37.5	—	—	—	—	8
White	323	67.3	133	27.7	—	—	—	—	480
Multiple races	77	77.0	44	44.0	—	—	—	—	100
<b>No valid NHBS HIV test result<sup>h</sup></b>	518	64.3	247	30.7	—	—	—	—	805
<b>Total</b>	<b>7,073</b>	<b>70.0</b>	<b>3,105</b>	<b>30.7</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>10,104</b>

Abbreviations: PrEP; preexposure prophylaxis; NHBS, National HIV Behavioral Surveillance.

<sup>a</sup> Excludes condoms received from friends, relatives, or sex partners.

<sup>b</sup> Individual-level intervention defined as a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about ways to prevent HIV. Group-level intervention defined as a small-group discussion that is part of an organized session about ways to prevent HIV; excludes informal discussions with friends. Conversations that were part of obtaining an HIV test were excluded.

<sup>c</sup> Ever heard of PrEP, an antiretroviral medicine taken for months or years by a person who is HIV-negative to reduce the risk of getting HIV.

<sup>d</sup> Took PrEP at any point during the 12 months before interview to reduce the risk of getting HIV.

<sup>e</sup> Participants with a valid negative NHBS HIV test result.

<sup>f</sup> Hispanics/Latinos can be of any race.

<sup>g</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>h</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

Table 8b. Receipt of HIV prevention in the 12 months before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	Free condoms <sup>a</sup>		Individual- or group-level intervention <sup>b</sup>		PrEP awareness <sup>c</sup>		PrEP use <sup>d</sup>		Total No.
	No.	%	No.	%	No.	%	No.	%	
<b>HIV-negative<sup>e</sup></b>									
<b>City</b>									
Atlanta, GA	224	68.3	86	26.2	285	86.9	71	21.6	328
Baltimore, MD	133	56.4	62	26.3	168	71.2	29	12.3	236
Boston, MA	212	64.2	57	17.3	308	93.3	111	33.6	330
Chicago, IL	204	69.2	83	28.1	255	86.4	104	35.3	295
Dallas, TX	293	72.2	99	24.4	340	83.7	74	18.2	406
Denver, CO	271	62.0	91	20.8	392	89.7	103	23.6	437
Detroit, MI	224	71.8	89	28.5	179	57.4	37	11.9	312
Houston, TX	257	69.3	104	28.0	310	83.6	67	18.1	371
Los Angeles, CA	331	80.9	106	25.9	390	95.4	124	30.3	409
Memphis, TN	114	63.3	90	50.0	121	67.2	32	17.8	180
Miami, FL	188	62.5	54	17.9	209	69.4	34	11.3	301
Nassau-Suffolk, NY	93	66.9	40	28.8	108	77.7	18	12.9	139
New Orleans, LA	202	74.3	83	30.5	248	91.2	75	27.6	272
New York City, NY	269	73.1	115	31.3	331	89.9	118	32.1	368
Newark, NJ	97	80.2	78	64.5	95	78.5	20	16.5	121
Philadelphia, PA	213	64.5	120	36.4	250	75.8	68	20.6	330
Portland, OR	212	66.0	60	18.7	286	89.1	81	25.2	321
San Diego, CA	296	70.0	171	40.4	386	91.3	140	33.1	423
San Francisco, CA	244	67.4	108	29.8	352	97.2	176	48.6	362
San Juan, PR	195	78.9	55	22.3	149	60.3	9	3.6	247
Seattle, WA	290	77.5	66	17.6	355	94.9	129	34.5	374
Virginia Beach, VA	147	63.4	80	34.5	214	92.2	34	14.7	232
Washington, DC	243	73.4	103	31.1	313	94.6	128	38.7	331
<b>HIV-positive<sup>f</sup></b>									
<b>City</b>									
Atlanta, GA	122	74.4	63	38.4	—	—	—	—	164
Baltimore, MD	89	64.5	48	34.8	—	—	—	—	138
Boston, MA	14	56.0	10	40.0	—	—	—	—	25
Chicago, IL	78	79.6	37	37.8	—	—	—	—	98
Dallas, TX	70	72.2	35	36.1	—	—	—	—	97
Denver, CO	44	73.3	26	43.3	—	—	—	—	60
Detroit, MI	121	76.6	68	43.0	—	—	—	—	158
Houston, TX	80	70.8	45	39.8	—	—	—	—	113
Los Angeles, CA	94	86.2	45	41.3	—	—	—	—	109
Memphis, TN	66	71.0	58	62.4	—	—	—	—	93
Miami, FL	69	74.2	20	21.5	—	—	—	—	93
Nassau-Suffolk, NY	6	54.5	0	0.0	—	—	—	—	11
New Orleans, LA	54	76.1	25	35.2	—	—	—	—	71
New York City, NY	67	80.7	41	49.4	—	—	—	—	83
Newark, NJ	32	80.0	35	87.5	—	—	—	—	40
Philadelphia, PA	135	69.2	74	37.9	—	—	—	—	195
Portland, OR	41	66.1	23	37.1	—	—	—	—	62
San Diego, CA	94	70.1	55	41.0	—	—	—	—	134
San Francisco, CA	59	70.2	20	23.8	—	—	—	—	84
San Juan, PR	23	79.3	8	27.6	—	—	—	—	29
Seattle, WA	68	77.3	24	27.3	—	—	—	—	88
Virginia Beach, VA	80	74.1	54	50.0	—	—	—	—	108
Washington, DC	97	80.2	44	36.4	—	—	—	—	121

Abbreviations: PrEP; preexposure prophylaxis; NHBS, National HIV Behavioral Surveillance.

<sup>a</sup> Excludes condoms received from friends, relatives, or sex partners.

<sup>b</sup> Individual-level intervention defined as a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about ways to prevent HIV. Group-level intervention defined as a small-group discussion that is part of an organized session about ways to prevent HIV; excludes informal discussions with friends. Conversations that were part of obtaining an HIV test were excluded.

<sup>c</sup> Ever heard of PrEP, an antiretroviral medicine taken for months or years by a person who is HIV-negative to reduce the risk of getting HIV.

<sup>d</sup> Took PrEP at any point during the 12 months before interview to reduce the risk of getting HIV.

<sup>e</sup> Participants with a valid negative NHBS HIV test result.

<sup>f</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

Table 9. Diagnosis of sexually transmitted infections among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	Diagnosis during the 12 months before interview								Diagnosis, ever				Total No.
	Any bacterial STI <sup>a</sup>		Chlamydia		Gonorrhea		Syphilis		Genital warts		Genital herpes		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<b>HIV-negative<sup>b</sup></b>	1,254	17.6	633	8.9	770	10.8	347	4.9	431	6.0	405	5.7	7,125
<b>Age at interview (yr)</b>													
18–24	266	20.9	114	9.0	173	13.6	70	5.5	31	2.4	32	2.5	1,273
25–29	396	22.1	208	11.6	249	13.9	107	6.0	88	4.9	83	4.6	1,792
30–39	400	19.1	214	10.2	250	11.9	110	5.2	153	7.3	141	6.7	2,098
40–49	121	12.3	68	6.9	64	6.5	36	3.7	63	6.4	64	6.5	983
≥50	71	7.3	29	3.0	34	3.5	24	2.5	96	9.8	85	8.7	979
<b>Race/ethnicity</b>													
American Indian/Alaska Native	6	12.2	1	2.0	5	10.2	0	0.0	1	2.0	1	2.0	49
Asian	43	22.4	27	14.1	27	14.1	13	6.8	14	7.3	20	10.4	192
Black/African American	279	16.7	128	7.7	168	10.0	89	5.3	45	2.7	66	3.9	1,672
Hispanic/Latino <sup>c</sup>	332	16.6	159	7.9	193	9.6	109	5.4	90	4.5	92	4.6	2,002
Native Hawaiian/Other Pacific Islander	8	25.0	4	12.5	2	6.3	3	9.4	1	3.1	1	3.1	32
White	510	18.4	268	9.7	325	11.7	117	4.2	260	9.4	211	7.6	2,774
Multiple races	64	17.5	41	11.2	43	11.8	12	3.3	18	4.9	14	3.8	365
<b>HIV-positive<sup>d</sup></b>	565	26.0	235	10.8	293	13.5	284	13.1	254	11.7	206	9.5	2,174
<b>Age at interview (yr)</b>													
18–24	79	39.3	39	19.4	52	25.9	34	16.9	7	3.5	8	4.0	201
25–29	107	26.2	47	11.5	55	13.5	53	13.0	27	6.6	19	4.7	408
30–39	202	30.7	81	12.3	109	16.5	105	15.9	67	10.2	50	7.6	659
40–49	107	24.5	41	9.4	52	11.9	51	11.7	63	14.4	56	12.8	436
≥50	70	14.9	27	5.7	25	5.3	41	8.7	90	19.1	73	15.5	470
<b>Race/ethnicity</b>													
American Indian/Alaska Native	9	42.9	5	23.8	6	28.6	5	23.8	2	9.5	2	9.5	21
Asian	6	33.3	3	16.7	2	11.1	5	27.8	3	16.7	1	5.6	18
Black/African American	222	21.0	95	9.0	112	10.6	115	10.9	59	5.6	58	5.5	1,059
Hispanic/Latino <sup>c</sup>	150	31.3	62	12.9	75	15.7	78	16.3	62	12.9	54	11.3	479
Native Hawaiian/Other Pacific Islander	5	62.5	0	0.0	3	37.5	2	25.0	1	12.5	0	0.0	8
White	133	27.7	53	11.0	73	15.2	61	12.7	112	23.3	81	16.9	480
Multiple races	36	36.0	16	16.0	20	20.0	17	17.0	15	15.0	10	10.0	100
<b>No valid NHBS HIV test result<sup>e</sup></b>	112	13.9	55	6.8	73	9.1	37	4.6	61	7.6	42	5.2	805
<b>Total</b>	<b>1,931</b>	<b>19.1</b>	<b>923</b>	<b>9.1</b>	<b>1,136</b>	<b>11.2</b>	<b>668</b>	<b>6.6</b>	<b>746</b>	<b>7.4</b>	<b>653</b>	<b>6.5</b>	<b>10,104</b>

Abbreviations: STI, sexually transmitted infection; NHBS, National HIV Behavioral Surveillance.

<sup>a</sup> Any bacterial STI includes having received a diagnosis of gonorrhea, chlamydia, or syphilis in the 12 months before interview.

<sup>b</sup> Participants with a valid negative NHBS HIV test result.

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>e</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory test, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

**Table 10. Drug use in the 12 months before interview and binge drinking in the 30 days before interview among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017**

	Used drug	
	No.	%
<b>HIV-negative<sup>a</sup></b>		
Binge drinking (past 30 days) <sup>b</sup>	3,209	45.0
Any injection drugs	133	1.9
Any noninjection drugs (excludes binge drinking)	3,982	55.9
Cocaine	1,474	20.7
Crack	374	5.2
Downer <sup>c</sup>	486	6.8
Ecstasy	854	12.0
Heroin	77	1.1
Marijuana	3,485	48.9
Methamphetamine	421	5.9
Prescription opioids <sup>d</sup>	415	5.8
<b>HIV-positive<sup>e</sup></b>		
Binge drinking (past 30 days) <sup>b</sup>	694	31.9
Any injection drugs	114	5.2
Any noninjection drugs (excludes binge drinking)	1,225	56.3
Cocaine	388	17.8
Crack	121	5.6
Downer <sup>c</sup>	124	5.7
Ecstasy	192	8.8
Heroin	24	1.1
Marijuana	1,046	48.1
Methamphetamine	267	12.3
Prescription opioids <sup>d</sup>	129	5.9
<b>No valid NHBS HIV test result<sup>f</sup></b>		
Binge drinking (past 30 days) <sup>b</sup>	309	38.4
Any injection drugs	15	1.9
Any noninjection drugs (excludes binge drinking)	380	47.2
Cocaine	135	16.8
Crack	20	2.5
Downer <sup>c</sup>	43	5.3
Ecstasy	64	8.0
Heroin	2	0.2
Marijuana	344	42.7
Methamphetamine	44	5.5
Prescription opioids <sup>d</sup>	27	3.4

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviation: NHBS, National HIV Behavioral Surveillance.

Note. Denominator is the total number of participants in the category; HIV-negative participants: n = 7,125; HIV-positive participants: n = 2,174; participants without a valid NHBS HIV test result: n = 805. Responses are not mutually exclusive; percentages may not add to 100.

<sup>a</sup> Participants with a valid negative NHBS HIV test result.

<sup>b</sup> Defined as 5 or more drinks at one sitting during the 30 days before interview.

<sup>c</sup> Such as Klonopin, Valium, Ativan, or Xanax.

<sup>d</sup> Such as OxyContin, Vicodin, morphine, or Percocet.

<sup>e</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>f</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

Table 11. Additional outcomes among men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	Number of male sex partners Median (Q1–Q3)	Exchange sex <sup>a</sup>		Condomless sex with an HIV-discordant partner at last sex <sup>b</sup>		Total No.
		No.	%	No.	%	
<b>HIV-negative<sup>c</sup></b>	4 (2–10)	566	7.9	1,152	16.2	7,125
<b>Age at interview (yr)</b>						
18–24	4 (2–10)	122	9.6	212	16.7	1,273
25–29	5 (2–12)	131	7.3	297	16.6	1,792
30–39	5 (2–12)	149	7.1	334	15.9	2,098
40–49	4 (2–10)	79	8.0	173	17.6	983
≥50	3 (2–10)	85	8.7	136	13.9	979
<b>Race/ethnicity</b>						
American Indian/Alaska Native	3 (1–7)	3	6.1	11	22.4	49
Asian	4 (2–12)	9	4.7	21	10.9	192
Black/African American	3 (2–7)	194	11.6	279	16.7	1,672
Hispanic/Latino <sup>d</sup>	4 (2–10)	153	7.6	344	17.2	2,002
Native Hawaiian/Other Pacific Islander	5 (2.5–8.5)	3	9.4	6	18.8	32
White	5 (2–15)	159	5.7	418	15.1	2,774
Multiple races	4 (2–10)	42	11.5	69	18.9	365
<b>HIV-positive<sup>e</sup></b>	4 (2–10)	324	14.9	555	25.5	2,174
<b>Age at interview (yr)</b>						
18–24	4 (2–7)	44	21.9	54	26.9	201
25–29	4 (2–10)	56	13.7	106	26.0	408
30–39	5 (2–12)	91	13.8	189	28.7	659
40–49	4.5 (2–12)	63	14.4	113	25.9	436
≥50	4 (2–10)	70	14.9	93	19.8	470
<b>Race/ethnicity</b>						
American Indian/Alaska Native	6 (3–12)	4	19.0	7	33.3	21
Asian	6 (3–20)	3	16.7	7	38.9	18
Black/African American	3 (2–7)	191	18.0	234	22.1	1,059
Hispanic/Latino <sup>d</sup>	5 (2–15)	57	11.9	138	28.8	479
Native Hawaiian/Other Pacific Islander	3.5 (2.5–5)	3	37.5	2	25.0	8
White	6 (2–20)	47	9.8	137	28.5	480
Multiple races	5 (2–12)	19	19.0	29	29.0	100
<b>No valid NHBS HIV test result<sup>f</sup></b>	4 (2–10)	49	6.1	98	12.2	805
<b>Total</b>	<b>4 (2–10)</b>	<b>939</b>	<b>9.3</b>	<b>1,805</b>	<b>17.9</b>	<b>10,104</b>

Abbreviations: Q, quartile; NHBS, National HIV Behavioral Surveillance.

Note. Unless otherwise stated, outcomes are reported for the 12 months before interview.

<sup>a</sup> “Exchange sex” refers to giving or receiving money or drugs from a male casual partner in exchange for sex.

<sup>b</sup> “Condomless sex” refers to whether the participant reported engaging in vaginal or anal sex without a condom during his most recent sexual encounter. “HIV-discordant partner” refers to a sex partner of different or unknown HIV status.

<sup>c</sup> Participants with a valid negative NHBS HIV test result.

<sup>d</sup> Hispanics/Latinos can be of any race.

<sup>e</sup> Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.

<sup>f</sup> Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result, discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

Table 12. Receipt of HIV care and treatment among self-reported HIV-positive men who have sex with men—National HIV Behavioral Surveillance, 23 U.S. cities, 2017

	Visited health care provider about HIV								Total No.
	Ever		Within a month after diagnosis		During past 6 months		Currently taking antiretrovirals		
	No.	%	No.	%	No.	%	No.	%	
<b>Age at interview (yr)</b>									
18–24	146	94.2	118	76.1	135	87.1	137	88.4	155
25–29	349	98.0	261	73.3	321	90.2	331	93.0	356
30–39	568	96.4	423	71.8	518	87.9	527	89.5	589
40–49	406	97.4	309	74.1	383	91.8	390	93.5	417
≥50	443	97.6	301	66.3	422	93.0	434	95.6	454
<b>Race/ethnicity</b>									
American Indian/Alaska Native	21	100	15	71.4	18	85.7	20	95.2	21
Asian	19	95.0	12	60.0	19	95.0	18	90.0	20
Black/African American	851	96.0	608	68.6	792	89.4	802	90.5	886
Hispanic/Latino <sup>a</sup>	411	96.3	314	73.5	379	88.8	399	93.4	427
Native Hawaiian/ Other Pacific Islander	7	100	5	71.4	7	100	6	85.7	7
White	499	98.6	382	75.5	467	92.3	476	94.1	506
Multiple races	96	100	70	72.9	89	92.7	90	93.8	96
<b>City</b>									
Atlanta, GA	131	92.9	103	73.0	123	87.2	123	87.2	141
Baltimore, MD	113	99.1	79	69.3	106	93.0	104	91.2	114
Boston, MA	29	96.7	18	60.0	27	90.0	29	96.7	30
Chicago, IL	109	95.6	75	65.8	101	88.6	108	94.7	114
Dallas, TX	84	98.8	61	71.8	75	88.2	76	89.4	85
Denver, CO	60	96.8	43	69.4	56	90.3	60	96.8	62
Detroit, MI	100	94.3	72	67.9	95	89.6	97	91.5	106
Houston, TX	88	95.7	71	77.2	81	88.0	81	88.0	92
Los Angeles, CA	90	98.9	58	63.7	82	90.1	82	90.1	91
Memphis, TN	86	95.6	61	67.8	80	88.9	78	86.7	90
Miami, FL	75	97.4	62	80.5	70	90.9	71	92.2	77
Nassau-Suffolk, NY	12	100	10	83.3	11	91.7	11	91.7	12
New Orleans, LA	70	98.6	53	74.6	63	88.7	67	94.4	71
New York City, NY	82	98.8	68	81.9	81	97.6	79	95.2	83
Newark, NJ	35	89.7	27	69.2	34	87.2	33	84.6	39
Philadelphia, PA	154	97.5	108	68.4	146	92.4	145	91.8	158
Portland, OR	66	98.5	56	83.6	64	95.5	66	98.5	67
San Diego, CA	128	97.0	90	68.2	120	90.9	123	93.2	132
San Francisco, CA	87	100	67	77.0	74	85.1	83	95.4	87
San Juan, PR	18	90.0	12	60.0	17	85.0	17	85.0	20
Seattle, WA	91	98.9	65	70.7	84	91.3	89	96.7	92
Virginia Beach, VA	98	98.0	70	70.0	92	92.0	94	94.0	100
Washington, DC	106	98.1	83	76.9	97	89.8	103	95.4	108
<b>Total</b>	<b>1,912</b>	<b>97.0</b>	<b>1,412</b>	<b>71.6</b>	<b>1,779</b>	<b>90.3</b>	<b>1,819</b>	<b>92.3</b>	<b>1,971</b>

Abbreviation: NHBS, National HIV Behavioral Surveillance (footnotes only).

Note. Data include all participants who reported having ever received an HIV-positive test result (which may include those who did not have a valid test result, positive or negative, or who did not consent to the HIV test). "Past 6 months" refers to the 6 months before interview.

<sup>a</sup> Hispanics/Latinos can be of any race.

## Appendix: Measurement Notes

---

### SOCIODEMOGRAPHIC CHARACTERISTICS

- Age: Calculated from the reported date of birth; age categories were chosen for epidemiologic relevance and consistency of reporting across all 3 National HIV Behavioral Surveillance (NHBS) populations.
- Race/ethnicity: Participants reported 1 or more race categories (American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or other Pacific Islander, and white). Hispanic or Latino ethnicity was asked separately; participants reporting Hispanic or Latino ethnicity were considered Hispanic or Latino, regardless of reported race. Participants reporting multiple races (but not Hispanic or Latino ethnicity) were classified as multiple races.
- Education: Highest level of education completed.
- Household income: Participants were asked about their combined monthly or yearly household income (in US\$) from all sources for the calendar year before interview. Poverty was determined by using the U.S. Department of Health and Human Services poverty guidelines for 2017. These guidelines are issued yearly for the United States and are one of the indicators used for determining eligibility for many federal and state programs. The 2017 guidelines [1] were used for participants interviewed in 2017. Because the poverty guidelines are not defined for Puerto Rico, the guidelines for the 48 contiguous states and Washington, D.C., were used for this jurisdiction. Participants were asked to identify the range of their income by selecting from a list of income ranges and the number of dependents on that income. If the participant's income range and household size resulted in an ambiguous determination of poverty level, the participant's household income was assumed to be the low point of the income range.
- Health insurance: Currently having some form of health insurance.
- Homeless: Living on the street, in a shelter, in a single-room-occupancy hotel, or in a car at any time during the 12 months before interview.

- Incarcerated: Having been held in a detention center, jail, or prison for more than 24 hours during the 12 months before interview.
- City: Throughout this report, eligible metropolitan statistical areas (MSAs) and divisions are referred to by the name of the principal city. State and local health departments eligible to participate in NHBS are those in jurisdictions that included an MSA or a specified division within an MSA with high prevalence of HIV. This report presents 2017 data in 23 MSAs (see list at the end of the report), which represented approximately 59% of all persons living with HIV in urban areas with a population of at least 500,000 in 2016.

### HIV STATUS

HIV testing was performed for participants who consented to testing; blood specimens were collected for rapid testing in the field or laboratory-based testing.

- HIV-negative: Participants with a valid negative NHBS HIV test result.
- HIV-positive: Participants with a reactive rapid NHBS HIV test result supported by a second rapid test or supplemental laboratory-based testing.
- No valid NHBS HIV test result: Participants who did not have a valid positive or negative NHBS HIV test result, including those who did not consent to the HIV test, had an indeterminate laboratory result or discordant rapid test results, or reported a previous HIV-positive test result but had a negative NHBS HIV test result.

### HIV TESTING

- Ever tested: Having had an HIV test during one's lifetime.
- Tested in past 12 months: Having had an HIV test during the 12 months before interview.
- Clinical setting: Participants reported the location of their most recent HIV test—private doctor's office (including health maintenance organization), emergency department, hospital (inpa-

tient), public health clinic or community health center, family planning or obstetrics clinic, correctional facility (jail or prison), or drug treatment program.

- Nonclinical setting: Participants reported the location of their most recent HIV test—HIV counseling and testing site, HIV street outreach program or mobile unit, needle exchange program, or home.
- “Other” locations could not be classified and are excluded from the clinical/nonclinical setting classification.

### SEXUAL BEHAVIORS

- Any sex: Includes vaginal, oral, or anal sex.
- Vaginal sex: Penis inserted into a partner’s vagina.
- Oral sex: Penis inserted into a partner’s mouth, or mouth on a partner’s penis.
- Insertive anal sex: Participant’s penis inserted into a partner’s anus.
- Receptive anal sex: Partner’s penis inserted into the participant’s anus.
- Condomless sex: Vaginal or anal sex during which a condom either is not used or is not used throughout the sex act.
- Main partner: Person with whom the participant has sex and to whom he feels most committed (e.g., boyfriend, husband, significant other, or life partner).
- Casual partner: Person with whom the participant has sex, but to whom he does not feel committed or whom he does not know very well.
- Both insertive and receptive anal sex, condomless: participant reported both receptive and insertive anal sex with the most recent sex partner during the 3 months before interview (during the same or different sexual encounters) and reported not using a condom during one or more of those anal sex acts.

### RECEIPT OF HIV PREVENTION

- Free condoms: Having received free condoms during the 12 months before interview, not including those given by a friend, relative, or sex partner.

- Individual- or group-level intervention: A composite measure based on having received individual- or group-level HIV interventions. An individual-level intervention is a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about ways to prevent HIV, excluding conversations that were part of HIV testing. A group-level intervention is a small-group discussion (as part of an organized session) about ways to prevent HIV, excluding informal discussions with friends.
- PrEP awareness: Ever heard of PrEP, an antiretroviral medicine taken for months or years by a person who is HIV-negative to reduce the risk of getting HIV.
- PrEP use: Took PrEP at any point during the 12 months before interview to reduce the risk of getting HIV.

### SEXUALLY TRANSMITTED INFECTIONS

- Chlamydia: Having received a diagnosis of chlamydia during the 12 months before interview.
- Gonorrhea: Having received a diagnosis of gonorrhea during the 12 months before interview.
- Syphilis: Having received a diagnosis of syphilis during the 12 months before interview.
- Any bacterial STI: Having received a diagnosis of chlamydia, gonorrhea, or syphilis during the 12 months before interview.
- Genital warts: Having received a diagnosis of genital warts during one’s lifetime.
- Genital herpes: Having received a diagnosis of genital herpes during one’s lifetime.

### SUBSTANCE USE

Participants were asked about their use of drugs (excluding those prescribed for them) during the 12 months before interview and their use of alcohol during the 30 days before interview. Participants were not limited in the number of substances they could report. Participants were considered to have used a substance if they reported using that substance with any frequency other than “never.”

- Binge drinking: Consumed 5 or more drinks at one sitting during the 30 days before interview.

- Any injection drug: Used any injection drug (excluding those prescribed for him) during the 12 months before interview.
- Any noninjection drug: Used any noninjection drug, excluding alcohol, during the 12 months before interview.
- Cocaine: Used powder cocaine during the 12 months before interview.
- Crack: Used crack cocaine during the 12 months before interview.
- Downer: Used downers (benzodiazepines), such as Klonopin, Valium, Ativan, or Xanax, during the 12 months before interview.
- Ecstasy: Used X or ecstasy during the 12 months before interview.
- Heroin: Used heroin (smoked or snorted) during the 12 months before interview.
- Marijuana: Used marijuana during the 12 months before interview.
- Methamphetamine: Used methamphetamines, including meth, crystal meth, speed, or crank, during the 12 months before interview.
- Prescription opioids: Used pain killers, such as OxyContin, Vicodin, morphine, or Percocet, during the 12 months before interview.

### ADDITIONAL OUTCOMES

Table 11 includes outcomes that were of particular interest at the time of publication but that were not included in other tables.

- Number of male sex partners: Median number of male sex partners in the 12 months before interview; first and third quartiles (25th and 75th percentiles) are also reported.
- Exchange sex: Refers to giving or receiving money or drugs, during the 12 months before interview, in exchange for sex with a male casual partner.
- Condomless sex with an HIV-discordant partner at last sex: A composite measure based on self-reported HIV status of the participant (positive, negative, or unknown), the participant's knowledge of the HIV status of his most recent sex partner (positive, negative, or unknown), and whether the participant reported engaging in vaginal or anal sex without a condom during his most

recent sexual encounter. A partner was considered to be of discordant HIV status if the participant reported that one member of the partnership was known to be HIV-positive and the other was known to be HIV-negative, or if he did not know the HIV status of at least one member of the partnership (participant or partner). The result of the NHBS HIV test (completed after the interview) was not factored into this measure.

### RECEIPT OF HIV CARE

Participants who reported having received a positive HIV test result before interview were asked about their receipt of HIV care. Specifically, participants were asked the date of their first HIV-positive test result; if they had ever visited a doctor, nurse, or other health care provider for a medical evaluation or care related to their HIV infection; the date of their first visit to a health care provider for HIV care after learning they had HIV; the date of their most recent visit to a health care provider for HIV care; and whether they were currently taking any antiretroviral medicines.

- Visited health care provider about HIV, ever: Having ever visited a health care provider for HIV care.
- Visited health care provider about HIV, within 1 month after diagnosis: Having visited a health care provider for HIV care within 1 month after the date of their first HIV-positive test result.
- Visited health care provider about HIV, in the past 6 months: Having visited a health care provider for HIV care during the 6 months before date of interview.
- Currently taking antiretroviral HIV medicines: Taking antiretroviral medicines at the time of interview.

### REFERENCE

1. U.S. Department of Health and Human Services. 2017 poverty guidelines. <http://aspe.hhs.gov/2017-poverty-guidelines>. Published 2017. Accessed January 28, 2019.

**Participating Metropolitan Statistical Areas, 2017**

<b>Principal city</b>	<b>Metropolitan statistical area division</b>
Atlanta, Georgia	Atlanta–Sandy Springs–Roswell, Georgia
Baltimore, Maryland	Baltimore–Columbia–Towson, Maryland
Boston, Massachusetts	Boston–Cambridge–Newton, Massachusetts–New Hampshire (Boston Division)
Chicago, Illinois	Chicago–Naperville–Elgin, Illinois–Indiana–Wisconsin (Chicago Division)
Dallas, Texas	Dallas–Fort Worth–Arlington, Texas (Dallas Division)
Denver, Colorado	Denver–Aurora–Lakewood, Colorado
Detroit, Michigan	Detroit–Warren–Dearborn, Michigan (Detroit Division)
Houston, Texas	Houston–The Woodlands–Sugar Land, Texas
Los Angeles, California	Los Angeles–Long Beach–Anaheim, California (Los Angeles Division)
Memphis, Tennessee	Memphis, Tennessee–Mississippi–Arkansas
Miami, Florida	Miami–Fort Lauderdale–West Palm Beach, Florida (Miami Division)
Nassau–Suffolk, New York	New York–Newark–Jersey City, New York–New Jersey–Pennsylvania (Nassau Division)
New Orleans, Louisiana	New Orleans–Metairie, Louisiana
New York, New York	New York–Newark–Jersey City, New York–New Jersey–Pennsylvania (New York Division)
Newark, New Jersey	New York–Newark–Jersey City, New York–New Jersey–Pennsylvania (Newark Division)
Philadelphia, Pennsylvania	Philadelphia–Camden–Wilmington, Pennsylvania–New Jersey–Delaware–Maryland (Philadelphia Division)
Portland, Oregon	Portland–Vancouver–Hillsboro, Oregon–Washington
San Diego, California	San Diego–Carlsbad, California
San Francisco, California	San Francisco–Oakland–Hayward, California (San Francisco Division)
San Juan, Puerto Rico	San Juan–Carolina–Caguas, Puerto Rico
Seattle, Washington	Seattle–Tacoma–Bellevue, Washington (Seattle Division)
Virginia Beach, VA	Virginia Beach–Norfolk–Newport News, Virginia–North Carolina
Washington, DC	Washington, District of Columbia (DC)–Virginia–Maryland–West Virginia (Washington Division)

## Addendum: National HIV Prevention Progress Indicators

---

Table A1 presents data for indicators used to monitor progress toward HIV prevention goals outlined in the CDC Division of HIV/AIDS Prevention (DHAP) Strategic Plan [<https://www.cdc.gov/hiv/pdf/dhap/cdc-hiv-dhap-external-strategic-plan.pdf>]. Similar indicators were published previously in the National HIV Prevention Progress Report, 2015 [<https://www.cdc.gov/hiv/pdf/policies/progressreports/cdc-hiv-nationalprogressreport.pdf>]. For consistency with National HIV Prevention Progress Reports, data reported in Table A1 are reported for men who had oral or anal sex with another man during the 12 months before interview and did not report a previous HIV-positive test result, and are stratified by the following age categories: 18–24, 25–34, 35–44, 45–54, and  $\geq 55$ . Numbers and percentages may differ from those for similar outcomes included in this and other reports of NHBS data due to differences in indicator definition, analysis sample, or strata. Data for DHAP Strategic Plan indicators from NHBS will be included in future DHAP HIV Prevention Progress Reports. Published DHAP reports of NHBS data are available at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

**Table A1. High-risk sexual behavior among men who have sex with men at risk for HIV infection—National HIV Behavioral Surveillance, 2011, 2014, and 2017**

	2011 <sup>a</sup>			2014 <sup>b</sup>			2017 <sup>c</sup>		
	High-risk sexual behavior <sup>d</sup>		Total No.	High-risk sexual behavior <sup>d</sup>		Total No.	High-risk sexual behavior <sup>d</sup>		Total No.
	No.	%		No.	%		No.	%	
<b>Age at interview (yr)</b>									
18–24	308	13.9	2,209	259	14.5	1,787	184	13.0	1,417
25–34	332	12.3	2,710	380	12.2	3,103	374	10.8	3,463
35–44	211	13.6	1,557	209	14.4	1,448	148	9.6	1,535
45–54	144	13.5	1,069	170	14.4	1,179	143	13.2	1,084
≥55	46	9.9	464	49	9.2	533	67	10.7	628
<b>Race/ethnicity</b>									
American Indian/Alaska Native	11	17.5	63	3	6.1	49	9	17.0	53
Asian	14	7.0	200	16	9.5	169	11	5.3	209
Black/African American	297	14.4	2,068	310	15.2	2,034	299	14.0	2,137
Hispanic/Latino <sup>e</sup>	328	15.3	2,145	335	15.3	2,188	272	12.4	2,189
Native Hawaiian/Other Pacific Islander	8	15.1	53	2	4.8	42	4	11.1	36
White	344	10.8	3,177	339	10.8	3,147	266	8.7	3,041
Multiple races	35	12.3	284	57	15.2	375	52	12.5	417
<b>Total</b>	<b>1,041</b>	<b>13.0</b>	<b>8,009</b>	<b>1,067</b>	<b>13.3</b>	<b>8,050</b>	<b>916</b>	<b>11.3</b>	<b>8,127</b>

Abbreviations: NHBS, National HIV Behavioral Surveillance; PrEP; preexposure prophylaxis [footnotes only].

Note. Data include men who had oral or anal sex with another man during the 12 months before interview and did not report a previous HIV-positive test result.

<sup>a</sup> In 2011, NHBS was conducted in 20 MSAs using venue-based, time-space sampling. Details of the 2011 sample are reported in: Centers for Disease Control and Prevention. *HIV Risk, Prevention, and Testing Behaviors—National HIV Behavioral Surveillance System: Men Who Have Sex With Men, 20 U.S. Cities, 2011*. HIV Surveillance Special Report 8. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published September 2014. Accessed January 28, 2019.

<sup>b</sup> In 2014, NHBS was conducted in 20 MSAs using venue-based, time-space sampling. Details of the 2014 sample are reported in: Centers for Disease Control and Prevention. *HIV Infection Risk, Prevention, and Testing Behaviors among Men Who Have Sex With Men—National HIV Behavioral Surveillance, 20 U.S. Cities, 2014*. HIV Surveillance Special Report 15. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published January 2016. Accessed January 28, 2019.

<sup>c</sup> In 2017, NHBS was conducted in 23 MSAs using venue-based, time-spaced sampling. Details of the 2017 sample are reported in Technical Notes.

<sup>d</sup> During the 12 months before interview, did not take PrEP and at the most recent sexual encounter had vaginal or anal sex without a condom with a partner who was HIV-positive or of unknown status.

<sup>e</sup> Hispanics/Latinos can be of any race.

# **Exhibit B**

to Sangree Declaration



# Baltimore City Health Department

[News / Public Information](#)

Baltimore City Awarded \$5 Million SAMHSA Grant to Implement Community-based Trauma Informed Care in West Baltimore

The City of Baltimore is currently unable to send or receive email. If you need assistance, please call the department you wish to contact.

[Click here](#) for information on Baltimore city services / contact numbers.

[Click here](#) for Lien Affidavit For Payment of Outstanding Charges

[Click here](#) for ransomware frequently asked questions.

## Main Menu

[About](#)

[Our Programs](#)

[Statistics, Data, and  
Maps](#)

[Newsroom](#)

[Policies and Initiatives](#)

[Community Outreach &  
Events](#)

## Baltimore City Awarded \$5 Million SAMHSA Grant to Implement Community-based Trauma Informed Care in West Baltimore

Thursday Sep 15th, 2016

Share



**FOR IMMEDIATE RELEASE**

### Media Contacts:

[Mona Rock](#): Office: (443) 984-2623, Cell: (410) 375-7763

Department (BCHD) today announced that the agency has been awarded a five-year, \$5 million grant by the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Mental Health Services for the Resiliency in Communities After Stress and Trauma (ReCAST) program. The goal of ReCAST is to empower local community collaboration to assist high-risk youth and families in communities that have recently faced civil unrest through evidence-based violence prevention, community youth engagement, and trauma-informed behavioral health services.

ReCAST West Baltimore, which aims to reduce the impact of trauma and build resilience in Central West Baltimore so that young people can complete school and engage in the workforce, will serve three communities adversely impacted by the April 2015 unrest: Sandtown-Winchester, Penn North, and Upton/Druid Heights.

“Decades of poverty, neglect, racism, and widespread disparity have resulted in generations of Baltimoreans suffering from the effects trauma in communities across our city. We must recognize, treat, and prevent trauma,” said Baltimore City Health Commissioner Dr. Leana Wen. “Through this grant, we will be able to directly engage and support our most valuable resources: our communities and our residents. Together, we will provide thousands of Baltimore residents with the tools and supports necessary to break systemic cycles of trauma and create a healthy, resilient, and well city.”

Specifically, the program will implement high-quality, trauma-informed, community-based services—including youth and community organizing, mentoring programs, youth development, yoga/mindfulness activities, and healing circles—across multiple sectors in order to:

- Promote connectedness and resilience in youth;
- Increase community cohesion; and
- Link community-based organizations, youth leaders, and community residents with larger private and public institutions to create a support network and to increase access to resources.

The ReCAST West Baltimore project will be led by BCHD and a Community Board, consisting of peer-elected resident representatives, which will guide the ongoing development, implementation, and revision of a ReCAST West Baltimore Strategic Plan.

Initially, a coalition of partners, community members, and others formed through the proposal development process.

The ReCAST implementation partners include:

- Behavior Health Systems Baltimore
- Black Mental Health Alliance
- C&C Advocacy
- Communities United
- Elev8 Baltimore, a Division of Humanim
- Holistic Life Foundation
- Leaders of a Beautiful Struggle
- New Lens Youth Media
- No Boundaries Coalition
- Office of the State's Attorney
- Roberta's House
- Seeds of Promise
- University of Maryland, School of Social Work

Under the convening umbrella of BCHD, these funded partners have committed to building the capacity of smaller, community-led organizations through efforts such as, hiring from the community, sub-granting, and providing technical assistance.

Unlike the majority of awards, a portion of the grant funds remains unassigned at the time of submission. These funds will be directed by BCHD and the Community Board to meet the future needs identified in the forthcoming ReCAST West Baltimore Strategic Plan.

“We need to recognize and encourage how community-led change can become a critical tool in improving the health and lives of Baltimoreans,” said Jeanette Hill, a participant in the ReCAST West Baltimore Community Coalition. “This new grant program will be an important step forward in these efforts and reflects our communities’ commitment to breaking cycles of trauma in our city.”

This is the latest effort from the Baltimore City to prevent and ameliorate the impact of trauma in Baltimore City. Other efforts include:

- Convening the Violence Prevention B More for Youth Collaborative;
- Leading a city-wide effort to train frontline city workers on trauma-informed care;
- Addressing violence and trauma through the lens of public health;
- Recognizing that violence is a generational challenge impacted by the social determinants that shape people's lives.

These efforts are critical components of Healthy Baltimore 2020, Baltimore City's newly released strategic blueprint to promote health and well-being with one overarching vision to reduce health disparities in Baltimore by half over the decade.

###

---

## Related Stories

[Visit the Newsroom](#)

### [Baltimore City Health Department Announces Beginning of 2019 Code Red Extreme Heat Season](#)

**BALTIMORE, MD (May 15, 2019)** Today, the Baltimore City Health Department is announcing the start of Baltimore City's Code Red Extreme Heat season. Code Red Extreme Heat is a multi-agency effort to address the impact of extreme heat on residents of Baltimore City.

### [Measles Case Confirmed; Possible Exposures in Baltimore Area](#)

**Baltimore, MD** – On April 5, the Maryland Department of Health (MDH) confirmed a measles case in a Maryland resident.

### [Acting Health Commissioner, Dr. Dzirasa, Issues Statement on Maryland Senate Bill 759 to Establish Prescription Drug Affordability Board](#)

**BALTIMORE, MD (March 14, 2019)** – Acting Baltimore City Health Commissioner, Dr. Letitia Dzirasa, issued the following statement regarding [Maryland Senate Bill 759](#) that seeks to establish the Prescription Drug



BERNARD C. YOUNG  
MAYOR

## City of Baltimore

## Contact

*City Hall - Room 250*

*100 N. Holliday St, Baltimore, MD 21202*

*City Operator: (410) 396-3100*

[Privacy Policy](#)

[Terms of Use](#)

**Send**

# **Exhibit C**

to Sangree Declaration

# Resource Guide to Trauma-Informed Human Services

*The Administration for Children and Families, the Substance Abuse and Mental Health Services Administrations, the Administration for Community Living, the Offices of the Assistant Secretary for Health and the Assistant Secretary for Planning and Evaluation at HHS have worked together to develop this Guide to Trauma-Informed Human Services. The guide is intended to provide an introduction to the topic of trauma, a discussion of why understanding and addressing trauma is important for human services programs, and a “road map” to find relevant resources.*

Experiencing deeply disturbing events or situations (i.e., trauma) can affect the way a person learns, plans, and interacts with others. This can have profound implications for how human services agencies interact with their clients. Many individuals experience few problems after enduring a traumatic event. Some will have short term symptoms lasting a few days or weeks, but will recover quickly. A few will suffer longer term changes in mood, behavior, and how they interact with others and the world around them.

This guide provides human services leaders at the local, State, Tribal, and Territorial levels with information and resources on recent advances in our understanding of trauma, toxic stress, and executive functioning. It especially highlights what these advances mean for program design and service delivery. The guide helps professionals learn about trauma-informed care and helps those currently engaged in trauma-informed work to improve their practice.

These resources provide an overview of key concepts related to trauma and a guide to resources from a range of HHS federal agencies and respected sources outside government. These materials are both a “front door” to the topic of trauma and a “road map” to relevant resources.



Listen

[https://app.readspeaker.com/cgi-bin/rsent?](https://app.readspeaker.com/cgi-bin/rsent?customerid=7596&lang=en_us&readid=main&url=https%3A%2F%2Fwww.acf.hhs.gov%2Ftrauma-toolkit)[customerid=7596&lang=en\\_us&readid=main&url=https%3A%2F%2Fwww.acf.hhs.gov%2Ftrauma-toolkit\)](https://app.readspeaker.com/cgi-bin/rsent?customerid=7596&lang=en_us&readid=main&url=https%3A%2F%2Fwww.acf.hhs.gov%2Ftrauma-toolkit)**Concept Papers**

+

**Guiding Questions & Answers**

+

**Q&A: Trauma**

+

## What do we mean by trauma-informed services and why is such an approach important?

The practice of trauma informed service is less about “what” you’re doing, and more about “how” you’re doing it. It requires being mindful of ways in which your interactions with clients might inadvertently make them feel unsafe, either physically or emotionally. According to **SAMHSA’s concept of a trauma-informed approach** (<http://www.samhsa.gov/nctic/trauma-interventions>), a program, organization, or system that is trauma-informed:

- *Realizes* the widespread impact of trauma and understands potential paths for recovery;
- *Recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
- *Responds* by fully integrating knowledge about trauma into policies, procedures, and practices; and
- Seeks to actively prevent *re-traumatization*.

The SAMHSA-funded **National Technical Assistance Center for Children’s Mental Health**

(<http://gucchdtacenter.georgetown.edu/index.html>) has put together a **series of videos**

(<http://gucchdtacenter.georgetown.edu/TraumaInformedCare/>) by practitioners and state administrators that describe what trauma-informed means as an organizational approach, particularly in agencies that serve children and families. Being trauma-informed is described by the director of an agency as:

*Taking the principles about being sensitive to someone’s background and history and weaving those principles into everything you do organizationally. Not just a set-aside training program, but to really see it at the culture level, that it permeates everything you do [in an organization] from the policies and procedures to the practice and training; how you recruit, how you promote. Trauma-informed care sensitizes us.*

### Additional Resources:

- This **National Center on Domestic Violence, Trauma & Mental Health** guidance on **Action Steps to support emotional safety** (<http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2012/01/Action-Steps-to-Create-Emotional-Safety-attachment-for-Increasing-Emotional-Safety-CG.pdf>) may be useful to many programs interested in strengthening and deepening an existing trauma-informed practice.
- The **National Child Traumatic Stress Network** has developed **resources** (<http://www.nctsn.org/resources/topics/youth-and-family-partnerships>) on building partnerships between your organization and the families and youth served. They believe such partnerships are essential in order to maximize youths’ opportunities for choice and control, a key element of overcoming trauma.
- The **National Center for Families and Youth** features a **short slide show** (<http://ncfy.acf.hhs.gov/media-center/slideshows/5-collaborations-ensure-trauma-informed-care-youth-and-families>) on five collaborations to ensure trauma-informed services for youth and families.

# My agency has decided it wants to be more trauma-informed.

## Where do I start?

Case 1:19-cv-01672-GLR Document 14-12 Filed 06/12/19 Page 4 of 8

A trauma-informed approach involves being aware of how clients who are affected by traumatic experiences may perceive and respond to your organization's practices and services. Because implementing these approaches in some cases may involve considerable change in practice, for it to be successful leadership must commit to the change and actively engage in the process. Many organizations that have undertaken trauma-informed approaches have engaged in self-study that could involve **self-assessment**

(<http://www.nada.org.au/media/14607/ticoolkitforhomelesservicesusa.pdf>) and/or small workgroups or task forces.

Trauma-informed practices **articulated**

([http://gucchdtacenter.georgetown.edu/TraumaInformedCare/IssueBrief3\\_CreatingTraumaInformedOrgs.pdf](http://gucchdtacenter.georgetown.edu/TraumaInformedCare/IssueBrief3_CreatingTraumaInformedOrgs.pdf))

by the National Technical Assistance Center for Children's Mental Health include:

- Creating safe, supportive, welcoming, and respectful environments
- Educating all staff about the impact of trauma—particularly those that provide direct care or are support staff
- Training any clinical staff in trauma-specific interventions
- Awareness by all staff about their own cultural attitudes and beliefs and education about culturally relevant approaches
- Training for all staff in avoiding re-traumatization

## Additional Resources:

- **ACF** has produced **this presentation on five collaborations to ensure trauma-informed care for youth and families**. (<http://ncfy.acf.hhs.gov/media-center/slideshows/5-collaborations-ensure-trauma-informed-care-youth-and-families>) Some youth who have gone through traumatic experiences have a range of needs that may be best served by a group of service providers working in tandem. When each organization of the partnership comes into contact with youth, that's one more chance to assess the youth's experience with trauma and to help them heal and build resilience.
- **Trauma-Informed Care: Perspectives and Resources** (<http://gucchdtacenter.georgetown.edu/TraumaInformedCare/>). This is a free online tool created by the National Technical Assistance Center for Children's Mental Health and partners. It includes many resources, actions, and lessons learned from entities that have become trauma-informed, and is intended to support leaders and decision makers at all levels (national, state, tribal, territorial, and local) in taking steps on their journey.
- The **National Center on Family Homelessness** has produced a **Trauma-Informed Organizational Toolkit** (<http://www.air.org/resource/trauma-informed-organizational-toolkit>). The toolkit's *Agency Self-Assessment for Readiness for Trauma-Informed Approaches* which may provide a good starting place to gauge your agency's existing strengths for trauma-informed work, as well as identify additional training or plans you may need to get started. Although designed for agencies serving families experiencing homelessness, the agency self-assessment tool is applicable to other community organizations as well.
- The **National Clearinghouse on Families and Youth** offers a **free online course on trauma exposure in youth** (<https://ncfy-learn.jbsinternational.com/course/index.php?categoryid=14>), which staff can take to

- The **National Center on Domestic Violence, Trauma and Mental Health** has developed a **practice tip sheet on how to manage communication problems between clients and staff caused by clients' experiences of trauma** ([http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2012/01/ConversationGuide\\_-\\_Making-Connections\\_NCDVTMH\\_Dec2011.pdf](http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2012/01/ConversationGuide_-_Making-Connections_NCDVTMH_Dec2011.pdf)). This tip sheet may be useful to share with front-line staff. Although originally developed for domestic violence services providers, the tips are applicable to work with youth who have been traumatized as a result of experiences in the home or on the street.

## How do trauma-informed services differ from what I'm already doing?

**SAMHSA** (<http://www.samhsa.gov/nctic/trauma-interventions>) has developed **six principles** (<http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>) that are meant to be generalized across multiple types of settings, which your organization can use to determine whether your approach is trauma-informed:

1. **Safety** - throughout an organization, the staff and people they serve feel physically and psychologically safe; the physical setting must be safe and interactions should promote a sense of safety.
2. **Trustworthiness and Transparency** - Organizational operations and decisions are conducted with transparency and the goal of building and maintaining trust among clients, families and staff.
3. **Peer Support** - Other individuals who have experienced trauma can serve as key partners in recovery from trauma.
4. **Collaboration and Mutuality** - Partnering and leveling of power differences between staff and clients and among staff.
5. **Empowerment, Voice and Choice** - Individual strengths are recognized, built on, and validated and new skills are developed as needed.
6. **Cultural, Historical, and Gender Issues** - the organization incorporates policies, protocols, and processes that are responsive to the racial, ethnic and cultural needs of individuals served; there is a responsiveness to gender and consideration for historical trauma.

## What are the key issues in making sure my agency does not re-traumatize our clients?

Public human services agencies are charged with providing services and supports to individuals, children and families. However, for some clients who have experienced trauma, certain approaches, particularly aggressive or confrontational methods, may cause additional harm. A number of coercive practices that were once common but are no longer widely used have been of particular concern. These include **seclusion and restraints** (<http://www.samhsa.gov/trauma-violence/seclusion>) or other harsh disciplinary practices in the behavioral health or school system, or intimidating practices used in the criminal justice system. Where they continue to exist, these and similar policies, practices, and procedures can severely undermine efforts to achieve desired outcomes for clients in service systems.

In the past, human service agencies were not as focused on how to understand the impact of traumatic experiences on client functioning and mitigate the re-traumatizing effect of our service systems. In recent years, a range of human

Case 1:19-cv-01672-GLR Document 14-12 Filed 06/12/19 Page 6 of 8

service providing agencies in different sectors have focused on how to clients work through their reactions to traumatic events and reduce the chances of exacerbating existing problems through re-traumatization. The population-specific resource lists offer resources and suggestions that may be appropriate to the clients your organization or agency serves. A useful starting point is this **article providing tips for service providers on ways to avoid re-traumatizing clients** (<http://homelesshub.ca/resource/avoiding-retraumatization-and-fostering-recovery-among-people-experiencing-homelessness>), prepared by a Canadian organization focusing on homelessness. Also the Department of Justice's **Office on Victims of Crime has developed a module** (<https://www.ovcttac.gov/taskforceguide/eguide/4-supporting-victims/41-using-a-trauma-informed-approach/>) which, while focused on trafficking issues, includes good tips on how to avoid re-traumatization.

## What does my agency's physical space have to do with being trauma-informed?

The physical environment of your organization communicates your beliefs about the people you serve. It is important that your organization's physical setting be perceived as safe and welcoming and interpersonal interactions with staff and other clients promote a sense of safety. Your physical space sets the tone for your interactions with clients. For clients who have experienced trauma, reactions to perceived insecurity may be heightened and could inadvertently sabotage the ability of staff to engage families.

### Additional Resources:

- A good general resource ([http://nationalcenterdvtraumamh.org/wp-content/uploads/2012/01/Tipsheet\\_Welcoming-Environment\\_NCDVTMH\\_Aug2011.pdf](http://nationalcenterdvtraumamh.org/wp-content/uploads/2012/01/Tipsheet_Welcoming-Environment_NCDVTMH_Aug2011.pdf)) was created by the **National Center on Domestic Violence, Trauma, & Mental Health** (<http://www.nationalcenterdvtraumamh.org/>). This tip sheet provides guidance on how to arrange a physical environment to accommodate a wide range of feelings, interactions, and behaviors. Specific tips include:
  - Communicating that a broad range of people are wanted and welcome in your programs
  - Arranging for quiet spaces or places where people can move around more
  - Reducing noise and clutter that can be unsettling
  - Areas stocked with art supplies for people who want to express themselves in other ways
- While this **resource paper** ([http://www.chcs.org/media/ATC\\_whitepaper\\_040616.pdf](http://www.chcs.org/media/ATC_whitepaper_040616.pdf)) was designed for health care audiences, the section on creating a safe environment has straightforward suggestions for making sure both your physical space and the social and emotional environment of your agency feel non-threatening to clients with trauma histories.

## Where can I learn more about evidence-based and promising interventions to address the effects of trauma?

In the past several years, there has been substantial research on interventions that address trauma in different populations. Interventions are considered evidence-based if there is empirical evidence of impacts when delivered to specific populations in particular settings, such as the clinic, home, community or school. Treatments are considered promising if research has yielded limited evidence of effectiveness. For victims of trauma to be able to access evidence-based treatments, qualified clinical staff must be adequately trained and supervised.

The **California Evidence-Based Clearinghouse for Child Welfare (CEBC)** identifies a number of interventions for addressing the consequences of trauma in **children and adolescents** (<http://www.cebc4cw.org/search/topic->

Case 1:19-cv-01672-GLR Document 14-12 Filed 06/12/19 Page 7 of 8

**areas/trauma-treatment-child-adolescent/)** and in **adults (<http://www.cebc4cw.org/topic/trauma-treatment-adult/>)**. They define the topic area as, “interventions designed to help an individual process a trauma or multiple traumas they have experienced and learn how to cope with the feelings associated with the experience (e.g., fear, posttraumatic stress, anxiety, depression, etc.).”

With respect to interventions for children and adolescents, they find 4 models that either are well supported by research (their highest category) or supported by research (next highest category), as well as many additional promising approaches. Those backed by the most research include:

- **Trauma-Focused Cognitive-Behavioral Therapy (<http://www.cebc4cw.org/program/trauma-focused-cognitive-behavioral-therapy/>)**
- **Prolonged Exposure Therapy for Adolescents (<http://www.cebc4cw.org/program/prolonged-exposure-therapy-for-adolescents/>)**
- **Eye Movement Desensitization and Reprocessing (<http://www.cebc4cw.org/program/eye-movement-desensitization-and-reprocessing/>)**
- **Child-Parent Psychotherapy (<http://www.cebc4cw.org/program/child-parent-psychotherapy/>)**

For adults, the clearinghouse identifies six interventions considered either supported or well-supported by research and another five that are promising based on early research. The specific programs in the well-supported and supported categories are:

- **Cognitive Processing Therapy (<http://www.cebc4cw.org/program/cognitive-processing-therapy-cpt/>)**
- **Eye Movement Desensitization and Reprocessing (<http://www.cebc4cw.org/program/eye-movement-desensitization-and-reprocessing-for-adults/>)**
- **Narrative Exposure Therapy (<http://www.cebc4cw.org/program/narrative-exposure-therapy-net/>)**
- **Prolonged Exposure Therapy for PTSD for Adults (<http://www.cebc4cw.org/program/prolonged-exposure-therapy-for-adults-pe-for-ptsd/>)**
- **Cognitive Behavioral Therapy for Acute Stress Disorder (<http://www.cebc4cw.org/program/cognitive-behavioral-therapy-for-acute-stress-disorder/>)**
- **Seeking Safety (<http://www.cebc4cw.org/program/seeking-safety-for-adults/>)**

The **Georgetown National Technical Assistance Center for Children’s Mental Health** with partners has developed a helpful series of **video interviews (<http://gucchdtacenter.georgetown.edu/TraumaInformedCare/Module4.html>)** with state administrators and clinicians that highlight experiences implementing and adapting evidence-based treatment modalities for children and families who have experienced trauma.

Additionally, a **research-to-practice brief ([http://www.acf.hhs.gov/sites/default/files/opre/opre\\_nitr\\_brief\\_v07\\_508\\_2.pdf](http://www.acf.hhs.gov/sites/default/files/opre/opre_nitr_brief_v07_508_2.pdf))** recently published by **ACF’s Office of Planning, Research, and Evaluation (OPRE)** discusses what is known about the impact

of trauma on infants and toddlers, and the intervention strategies that could potentially protect them from the adverse consequences of traumatic experiences.

## **Additional Resources:**

- **The Georgetown National Technical Assistance Center for Children’s Mental Health** and partners published a resource entitled ***Evidence-Based Treatments Addressing Trauma***

## What elements of this process need funding? How have other agencies funded these efforts?

The National Child Traumatic Stress Network has developed a ***Guide to Private Funding to Support Child Traumatic Stress and Other Trauma-Focused Initiatives***.

([http://www.nctsnet.org/nctsn\\_assets/pdfs/Private\\_Funding\\_Guide\\_Final.pdf](http://www.nctsnet.org/nctsn_assets/pdfs/Private_Funding_Guide_Final.pdf)) This resource provides practical guidance on how leaders can address state budgetary shortfalls and tight fiscal markets by getting started in pursuing private funding.

Q&A: Staff Capacity Building



Trauma Resources for Specific Human Services Programs or Populations



Community Spotlights



# **Exhibit D**

to Sangree Declaration



www.igo.org

Contents lists available at ScienceDirect

## International Journal of Gynecology and Obstetrics

journal homepage: www.elsevier.com/locate/ijgo



## CONSCIENTIOUS OBJECTION

# Conscientious objection and refusal to provide reproductive healthcare: A White Paper examining prevalence, health consequences, and policy responses

Wendy Chavkin<sup>a,b,c,\*</sup>, Liddy Leitman<sup>a</sup>, Kate Polin<sup>a</sup>; for Global Doctors for Choice<sup>a</sup>Global Doctors for Choice, New York, USA<sup>b</sup>College of Physicians and Surgeons, Columbia University, New York, USA<sup>c</sup>Mailman School of Public Health, Columbia University, New York, USA

## ARTICLE INFO

## Keywords:

Abortion  
 Assisted reproductive technologies  
 Conscience-based refusal of care  
 Conscientious commitment  
 Conscientious objection  
 Contraception  
 Policy response  
 Reproductive health services

## ABSTRACT

**Background:** Global Doctors for Choice—a transnational network of physician advocates for reproductive health and rights—began exploring the phenomenon of conscience-based refusal of reproductive healthcare as a result of increasing reports of harms worldwide. The present White Paper examines the prevalence and impact of such refusal and reviews policy efforts to balance individual conscience, autonomy in reproductive decision making, safeguards for health, and professional medical integrity.

**Objectives and search strategy:** The White Paper draws on medical, public health, legal, ethical, and social science literature published between 1998 and 2013 in English, French, German, Italian, Portuguese, and Spanish. Estimates of prevalence are difficult to obtain, as there is no consensus about criteria for refuser status and no standardized definition of the practice, and the studies have sampling and other methodologic limitations. The White Paper reviews these data and offers logical frameworks to represent the possible health and health system consequences of conscience-based refusal to provide abortion; assisted reproductive technologies; contraception; treatment in cases of maternal health risk and inevitable pregnancy loss; and prenatal diagnosis. It concludes by categorizing legal, regulatory, and other policy responses to the practice.

**Conclusions:** Empirical evidence is essential for varied political actors as they respond with policies or regulations to the competing concerns at stake. Further research and training in diverse geopolitical settings are required. With dual commitments toward their own conscience and their obligations to patients' health and rights, providers and professional medical/public health societies must lead attempts to respond to conscience-based refusal and to safeguard reproductive health, medical integrity, and women's lives.

© 2013 International Federation of Gynecology and Obstetrics. Published by Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

How can societies find the proper balance between women's rights to receive the reproductive healthcare they need and healthcare providers' rights to exercise their conscience? Global Doctors for Choice (GDC)—a transnational network of physician advocates for reproductive health and rights ([www.globaldoctorsforchoice.org](http://www.globaldoctorsforchoice.org))—began exploring the phenomenon of conscience-based refusal of reproductive healthcare in response to increasing reports of harms worldwide. The present White Paper addresses the varied interests and needs at stake when clinicians claim conscientious objector status when providing certain elements of reproductive healthcare. (While GDC represents physicians, in the present White Paper we use the terms providers or clinicians to also address refusal of care by nurses, midwives, and pharmacists.) As the focus is on health, we examine data on the prevalence of refusal; lay

out the potential consequences for the health of patients and the impact on other health providers and health systems; and report on legal, regulatory, and professional responses. Human rights are intertwined with health, and we draw upon human rights frameworks and decisions throughout. We also refer to bedrock bioethical principles that undergird the practice of medicine in general, such as the obligations to provide patients with accurate information, to provide care conforming to the highest possible standards, and to provide care that is urgently needed. Others have underscored the consequences of negotiating conscientious objection in healthcare in terms of secular/religious tension. Our contribution, which complements all of this previous work, is to provide the medical and public health perspectives and the evidence. We focus on the rights of the provider who conscientiously objects, together with that provider's professional obligations; the rights of the women who need healthcare and the consequences of refusal for their health; and the impact on the health system as a whole.

Conscientious objection is the refusal to participate in an activity that an individual considers incompatible with his/her religious, moral, philosophical, or ethical beliefs [1]. This originated as opposition to mandatory military service but has increasingly been

\* Corresponding author: Wendy Chavkin, 60 Haven Avenue B-2, New York, NY 10032, USA. Tel.: +1 646 649 9903; fax: +1 646 366 1897.

E-mail address: [wendy@globaldoctorsforchoice.org](mailto:wendy@globaldoctorsforchoice.org); [wc9@columbia.edu](mailto:wc9@columbia.edu) (W. Chavkin).

raised in a wide variety of contested contexts such as education, capital punishment, driver's license requirements, marriage licenses for same-sex couples, and medicine and healthcare. While health providers have claimed conscientious objection to a variety of medical treatments (e.g. end-of-life palliative care and stem cell treatment), the present White Paper addresses conscientious objection to providing certain components of reproductive healthcare. (The terms conscientious objection and conscience-based refusal of care are used interchangeably throughout.) Refusal to provide this care has affected a wide swath of diagnostic procedures and treatments, including abortion and postabortion care; components of assisted reproductive technologies (ART) relating to embryo manipulation or selection; contraceptive services, including emergency contraception (EC); treatment in cases of unavoidable pregnancy loss or maternal illness during pregnancy; and prenatal diagnosis (PND).

Efforts have been made to balance the rights of objecting providers and other health personnel with those of patients. International and regional human rights conventions such as the Convention on the Elimination of All Forms of Discrimination against Women [2], the International Covenant on Civil and Political Rights (ICCPR) [1], the American Convention on Human Rights [3], and the European Convention for the Protection of Human Rights and Fundamental Freedoms [4], as well as UN treaty-monitoring bodies [5,6], have recognized both the right to have access to quality, affordable, and acceptable sexual and reproductive healthcare services and/or the right to freedom of religion, conscience, and thought. The Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa recognizes the right to be free from discrimination based on religion and acknowledges the right to health, especially reproductive health, as a key human right [7]. These instruments negotiate these apparently competing rights by stipulating that individuals have a right to belief but that the freedom to manifest one's religion or beliefs can be limited in order to protect the rights of others.

The ICCPR, a central pillar of human rights that gives legal force to the 1948 UN Universal Declaration of Human Rights, states in Article 18(1) that [1]:

Everyone shall have the right to freedom of thought, conscience and religion. This right shall include freedom to have or to adopt a religion or belief of his choice, and freedom, either individually or in community with others and in public or private, to manifest his religion or belief in worship, observance, practice and teaching.

Article 18(3), however, states that [1]:

Freedom to manifest one's religion or beliefs may be subject only to such limitations as are prescribed by law and are necessary to protect public safety, order, health or morals or the fundamental rights and freedoms of others.

International professional associations such as the World Medical Association (WMA) [8] and FIGO [9]—as well as national medical and nursing societies and groups such as the American Congress of Obstetricians and Gynecologists (ACOG) [10]; Grupo Médico por el Derecho a Decidir/GDC Colombia [11]; and the Royal College of Nursing, Australia [12]—have similarly agreed that the provider's right to conscientiously refuse to provide certain services must be secondary to his or her first duty, which is to the patient. They specify that this right to refuse must be bounded by obligations to ensure that the patient's rights to information and services are not infringed.

Conscience-based refusal of care appears to be widespread in many parts of the world. Although rigorous studies are few, estimates range from 10% of OB/GYNs refusing to provide abortions

reported in a UK study [13] to almost 70% of gynecologists who registered as conscientious objectors to abortion with the Italian Ministry of Health [14]. While the impact of the loss of providers may be immediate and most obvious in countries in which maternal death rates from pregnancy, delivery, and illegal abortion are high and represent major public health concerns, consequences at individual and systemic levels have also been reported in resource-rich settings. At the individual level, decreased access to health services brought about by conscientious objection has a disproportionate impact on those living in precarious circumstances, or at otherwise heightened risk, and aggravates inequities in health status. Indeed, too many women, men, and adolescents lack access to essential reproductive healthcare services because they live in countries with restrictive laws, scant health resources, too few providers and slots to train more, and limited infrastructure for healthcare and means to reach care (e.g. roads and transport). The inadequate number of providers is further depleted by the "brain drain" when trained personnel leave their home countries for more comfortable, technically fulfilling, and lucrative careers in wealthier lands [15]. Access to reproductive healthcare is additionally compromised when gynecologists, anesthesiologists, generalists, nurses, midwives, and pharmacists cite conscientious objection as grounds for refusing to provide specific elements of care.

The level of resources allocated by the health system greatly influences the impact caused by the loss of providers due to conscience-based refusal of care. In resource-constrained settings, where there are too few providers for population need, it is logical to assume the following chain of events: further reductions in available personnel lead to greater pressure on those remaining providers; more women present with complications due to decreased access to timely services; and complications require specialized services such as maternal/neonatal intensive care and more highly trained staff, in addition to incurring higher costs. The increased demand for specialized services and staffing burdens and diverts the human and infrastructural resources available for other priority health conditions. However, it is difficult to disentangle the impact of conscientious objection when it is one of many barriers to reproductive healthcare. It is conceptually and pragmatically complicated to sort the contribution to constrained access to reproductive care attributable to conscientious objectors from that due to limited resources, restrictive laws, or other barriers.

What are the criteria for establishing objector status and who is eligible to do so? In the military context, conscientious objector applicants must satisfy numerous procedural requirements and must provide evidence that their beliefs are sincere, deeply held, and consistent [16]. These requirements aim to parse genuine objectors from those who conflate conscientious objection with political or personal opinion. For example, the true conscientious objector to military involvement would refuse to fight in any war, whereas the latter describes someone who disagrees with a particular war but who would be willing to participate in a different, "just" war. Study findings and anecdotal reports from many countries suggest that some clinicians claim conscientious objection for reasons other than deeply held religious or ethical convictions. For example, some physicians in Brazil who described themselves as objectors were, nonetheless, willing to obtain or provide abortions for their immediate family members [17]. A Polish study described clinicians, such as those referred to as the White Coat Underground, who claim conscientious objection status in their public sector jobs but provide the same services in their fee-paying private practices [18]. Other investigations indicate that some claim objector status because they seek to avoid being associated with stigmatized services, rather than because they truly conscientiously object [19].

Moreover, some religiously affiliated healthcare *institutions* claim objector status and compel their employees to refuse to provide

legally permissible care [20,21]. The right to conscience is generally understood to belong to an individual, not to an institution, as claims of conscience are considered a way to maintain an individual's moral or religious integrity. Some disagree, however, and argue that a hospital's mission is analogous to a conscience-identity resembling that of an individual, and "warrant[s] substantial deference" [22]. Others dispute this on the grounds that healthcare institutions are licensed by states, often receive public financing, and may be the sole providers of healthcare services in communities. Wicclair and Charo both argue that, since a license bestows certain rights and privileges on an institution [22–24], "[W]hen licensees accept and enjoy these rights and privileges, they incur reciprocal obligations, including obligations to protect patients from harm, promote their health, and respect their autonomy" [22].

There are also disputes as to whether obligations and rights vary if a provider works in the public or private sector. Public sector providers are employees of the state and have obligations to serve the public for the greater good, providing the highest "standard of care," as codified in the laws and policies of the state [22]. The Institute of Medicine in the USA defines standard of care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" and identifies safety, effectiveness, patient centeredness, and timeliness as key components [25]. WHO adds the concepts of equitability, accessibility, and efficiency to the list of essential components of quality of care [26]. There are legal precedents limiting the scope of conscientious objection for professionals who operate as state actors [23]. Some argue that such limitations can be extended to those who provide health services in the private sector because, as state licensure grants these professions a monopoly on a public service, the professions have a collective obligation to patients to provide non-discriminatory access to all lawful services [23,27]. However, it is more difficult to identify conscience-based refusal of care in the private sector because clinicians typically have discretion over the services they choose to offer, although the same professional obligations of providing patients with accurate information and referral pertain.

An alternative framing is provided by the concept of *conscientious commitment* to acknowledge those providers whose conscience motivates them to deliver reproductive health services and who place priority on patient care over adherence to religious doctrines or religious self-interest [28,29]. Dickens and Cook articulate that conscientious commitment "inspires healthcare providers to overcome barriers to delivery of reproductive services to protect and advance women's health" [28]. They assert that, because provision of care can be conscience based, full respect for conscience requires accommodation of both objection to participation and commitment to performance of services such that the latter group of providers also have the right to not suffer discrimination on the basis of their convictions [28]. This principle is articulated by FIGO [9]; according to the FIGO "Resolution on Conscientious Objection," "Practitioners have a right to respect for their conscientious convictions in respect both not to undertake and to undertake the delivery of lawful procedures" [30].

We begin the present White Paper with a review of the limited data regarding the prevalence of conscience-based refusal of care and objectors' motivations. Descriptive prevalence data are needed in order to assess the distribution and scope of this phenomenon and it is necessary to understand the concerns of those who refuse in order to design respectful and effective responses. We review the data; point out the methodologic, geographic, and other limitations; and specify some questions requiring further investigation. Next, we explore the consequences of conscientious objection for patients and for health systems. Ideally, we would evaluate empirical evidence on the impact of conscience-based

refusal on delay in obtaining care for patients and their families, society, healthcare providers, and health systems. As such research has not been conducted, we schematically delineate the logical sequence of events if care is refused.

We then look at responses to conscience-based refusal of care by transnational bodies, governments, health sector and other employers, and professional associations. These responses include establishment of criteria for obtaining objector status, required disclosure to patients, registration of objector status, mandatory referral to willing providers, and provision of emergency care. We draw upon analyses performed by others to categorize the different models used: legislative, constitutional, case law, regulatory, employment requirements, and professional standards of care. Finally, we provide recommendations for further research and for ways in which medical and public health organizations could contribute to the development and implementation of policies to manage conscientious objection.

The present White Paper draws upon medical, public health, legal, ethical, and social science literature of the past 15 years in English, French, German, Italian, Portuguese, and Spanish available in 2013. It is intended to be a state-of-the-art compendium useful for health and other policymakers negotiating the balance of an individual provider's rights to "conscience" with the systemic obligation to provide care and it will need updating as further evidence and policy experiences accrue. It is intended to highlight the importance of the medical and public health perspectives, employ a human rights framework for provision of reproductive health services, and emphasize the use of scientific evidence in policy deliberations about competing rights and obligations.

## 2. Review of the evidence

### 2.1. Methods

We reviewed data regarding the prevalence of conscientious objection and the motivations of objectors in order to assess the distribution and scope of the phenomenon and to have an empirical basis for designing respectful and effective responses. However, estimates of prevalence are difficult to obtain; there is no consensus about criteria for objector status and, thus, no standardized definition of the practice. Moreover, it is difficult to assess whether findings in some studies reflect intention or actual behavior. The few countries that require registration provide the most solid evidence of prevalence.

A systematic review could not be performed because the data are limited in a variety of ways (which we describe), making most of them ineligible for inclusion in such a process. We searched systematically for data from quantitative, qualitative, and ethnographic studies and found that many have non-representative or small samples, low response rates, and other methodologic limitations that limit their generalizability. Indeed, the studies reviewed are not comparable methodologically or topically. The majority focus on conscience-based refusal of abortion-related care and only a few examine refusal of emergency or other contraception, PND, or other elements of care. Some examine provider attitudes and practices related to abortion in general, while others investigate these in terms of the specific circumstances for which people seek the service: for example, financial reasons, sex selection, failed contraception, rape/incest, fetal anomaly, and maternal life endangerment. Some rely on closed-ended electronic or mail surveys, while others employ in-depth interviews. Most focus on physicians; fewer study nurses, midwives, or pharmacists.

These investigations are also limited geographically because more were conducted in higher-income than lower-income countries. Because of both greater resources and more liberalized reproductive health laws and policies, many higher-income coun-

tries offer a greater range of legal services and, consequently, more opportunities for objection. Assessment of the impact of conscience-based refusal of care in resource-constrained settings presents additional challenges because high costs and lack of skilled providers may dwarf this and other factors that impede access. Acknowledging that conscientious objection to reproductive health-care has yet to be rigorously studied, we included all studies we were able to locate within the past 15 years, and present the cross-cutting themes as topics for future systematic investigation.

## 2.2. Prevalence and attitudes

The sturdiest estimates of prevalence come from a limited sample of those few places that require objectors to register as such or to provide written notification. 70% of OB/GYNs and 50% of anesthesiologists have registered with the Italian Ministry of Health as objectors to abortion [31]. While Norway and Slovenia require some form of registration, neither has reported prevalence data [32–34]. Other estimates of prevalence derive from surveys with varied sampling strategies and response rates. In a random sample of OB/GYN trainees in the UK, almost one-third objected to abortion [35]. 14% of physicians of varied specialties surveyed in Hong Kong reported themselves to be objectors [36]. 17% of licensed Nevada pharmacists surveyed objected to dispensing mifepristone and 8% objected to EC [37]. A report from Austria describes many regions without providers and a report from Portugal indicates that approximately 80% of gynecologists there refuse to perform legal abortions [38–40].

Other studies have investigated opinions about abortion and intention to provide services. A convenience sample of Spanish medical and nursing students indicated that most support access to abortion and intend to provide it [41]. A survey of medical, nursing, and physician assistant students at a US university indicated that more than two-thirds support abortion yet only one-third intend to provide, with the nursing and physician assistant students evincing the strongest interest in doing so [42]. The 8 traditional healers interviewed in South Africa were opposed to abortion [43], and an ethnographic study of Senegalese OB/GYNs, midwives, and nurses reported that one-third thought the highly restrictive law there should permit abortion for rape/incest, although very few were willing to provide services (unpublished data).

Some studies indicate that a subset of providers claim to be conscientious objectors when, in fact, their objection is not absolute. Rather, it reflects opinions about patient characteristics or reasons for seeking a particular service. For example, a stratified random sample of US physicians revealed that half refuse contraception and abortion to adolescents without parental consent, although the law stipulates otherwise [44]. A survey of members of the US professional society of pediatric emergency room physicians indicated that the majority supported prescription of EC to adolescents but only a minority had done so [45]. A study of the postabortion care program in Senegal, intended to reduce morbidity and mortality due to complications from unsafe abortion, found that some providers nonetheless delayed care for women they suspected of having had an induced abortion (unpublished data).

Willingness to provide abortions varies by clinical context and reason for abortion, as demonstrated by a stratified random sample of OB/GYN members of the American Medical Association (AMA) [46]. A survey of family medicine residents in the USA assessing prevalence of moral objection to 14 legally available medical procedures revealed that 52% supported performing abortion for failed contraception [47]. Despite opposition to voluntary abortion, more than three-quarters of OB/GYNs working in public hospitals in the Buenos Aires area from 1998 to 1999 supported abortion for maternal health threat, severe fetal anomaly, and rape/incest [48]. While 10% of a random sample of consultant OB/GYNs in the UK

described themselves as objectors, most of this group supported abortion for severe fetal anomaly [13].

Other inconsistencies regarding refusal of care derived from the provider's familiarity with a patient, experience of stigmatization, or opportunism. A Brazilian study reported that Brazilian gynecologists were more likely to support abortion for themselves or a family member than for patients [17]. Physicians in Poland and Brazil reported reluctance to perform legally permissible abortions because of a hostile political atmosphere rather than because of conscience-based objection. The authors also noted that conscientious objection in the public sphere allowed doctors to funnel patients to private practices for higher fees [19].

Not surprisingly, higher levels of self-described religiosity were associated with higher levels of disapproval and objection regarding the provision of certain procedures [49]. Additionally, a random sample of UK general practitioners (GPs) [50], a study of Idaho licensed nurses [51], a study of OB/GYNs in a New York hospital [52], and a cross-sectional survey of OB/GYNs and midwives in Sweden [53] found self-reported religiosity to be associated with reluctance to perform abortion. A study of Texas pharmacists found the same association regarding refusal to prescribe EC [54].

Higher acceptance of these contested service components and lower rates of objection were associated with higher levels of training and experience in a survey of medical students and physicians in Cameroon and in a qualitative study of OB/GYN clinicians in Senegal [55,56]. Similar patterns prevailed in a survey of Norwegian medical students [57] and among pharmacists and OB/GYNs in the USA [45].

Clinicians' refusal to provide elements of ART and PND also varied, at times motivated by concerns about their own lack of competence with these procedures. And, while the majority of Danish OB/GYNs and nurses (87%) in a non-random sample supported abortion and ART, 69% opposed selective reduction [49]. A random sample of OB/GYNs from the UK indicated that 18% would not agree to provide a patient with PND [13].

Several studies report institutional-level implications consequent to refusal of care. Physicians and nurse managers in hospitals in Massachusetts said that nurse objection limited the ability to schedule procedures and caused delays for patients [58]. Half of a stratified random sample of US OB/GYNs practicing primarily at religiously affiliated hospitals reported conflicts with the hospital regarding clinical practice; 5% reported these to center on treatment of ectopic pregnancy [59]. 52% of a non-random sample of regional consultant OB/GYNs in the UK said that insufficient numbers of junior doctors are being trained to provide abortions owing to opting out and conscientious objection [35]. A 2011 South African report states that more than half of facilities designated to provide abortion do not do so, partly because of conscientious objection, resulting in the persistence of widespread unsafe abortion, morbidity, and mortality [60]. A non-random sample of Polish physicians reported that institutional, rather than individual, objection was common [19]. Similar observations have been made about Slovakian hospitals [61].

A few investigations have explored clinician attitudes toward regulation of conscience-based refusal of reproductive healthcare. Two studies from the USA indicate that majorities of family medicine physicians in Wisconsin and a random sample of US physicians believe physicians should disclose objector status to patients [44,47]. A survey of UK consultants revealed that half want the authority to include abortion provision in job descriptions for OB/GYN posts, and more than one-third think objectors should be required to state their reasons [35]. Interviews with a purposive sample of Irish physicians revealed mixed opinions about the obligation of objectors to refer to other willing providers, as well as awareness that women traveled abroad for abortions and related services that were denied at home [62].

While the reviewed literature indicates widespread occurrence of conscientious objection to providing some elements of reproductive healthcare, it does not offer a rigorously obtained evidentiary basis from which to map the global landscape. Assessment of the prevalence of conscientious objection requires ascertainment of the number objecting (numerator) and the total count of the relevant population of providers comprising the denominator (e.g. the number of OB/GYNs claiming conscientious objection to providing EC and the total population of OB/GYNs). Registration of objectors, as required by the Italian Ministry of Health, provides such data. Professional societies could also systematically gather data by surveying members on their practices related to conscience-based refusal of care or by including such self-identification on standard mandatory forms. Academic institutions or other research organizations could conduct formal studies or add questions on conscience-based refusal of care to ongoing general surveys of clinicians.

Aside from prevalence, there are a host of key questions. Further research on motivations of objectors is required in order to better understand reasons other than conscience-based objection that may lead to refusal of care. As the studies reviewed indicate, these factors may include desire to avoid stigma, to avoid burdensome administrative processes, and to earn more money by providing services in private practice rather than in public facilities; knowledge gaps in professional training; and lack of access to necessary supplies or equipment. Qualitative studies would best probe these complicated motivations.

What is the impact of conscience-based refusal of care? In the next section, we outline systemic and biologically plausible sequences of events when specified care components are refused. Research is needed to see whether these hold true and have health consequences for women and practical consequences for other clinicians and the health system as a whole. Research could illuminate women's experiences when refused care—their understanding, access to safe and unsafe alternatives, emotional response, and course of action. Investigations on the clinician side could further explore the experiences of those who do provide services after others have refused to do so. Each of these questions is likely to have context-specific answers, so research should take place in varied geopolitical settings, and the contextual nature of the findings must be made clear.

Do clinicians consider conscientious objection to be problematic? What kinds of constraints on provider behavior do clinicians consider appropriate or realistic? When enacted, have such policies or regulations been implemented? Have those implemented effectively met their purported objectives? What mechanisms of regulation do women consider reasonable? Do they perceive conscience-based refusal of care as a significant barrier to reproductive health services? Could enhanced training and updated medical and nursing school curricula devoted to reproductive health address the lack of clinical skills that contributes to refusal of care? Could further education clarify which services are permitted by law, and under which circumstances, and thus reassure clinicians sufficiently such that they provide care? Empirical evidence is essential as varied political actors try to respond to these competing concerns with policies or regulations.

### **3. Consequences of refusal of reproductive healthcare for women and for health systems**

We lay out the potential implications of conscience-based refusal of care for patients and for health systems in 5 areas of reproductive healthcare—abortion and postabortion care, ART, contraception, treatment for maternal health risk and unavoidable pregnancy loss, and PND. Because we lack empirical data to explore the impact of conscience-based refusal of care on patients

and health systems, we build logical models delineating plausible consequences if a particular component of care is refused. We provide visual schemata to represent these pathways and we use data and examples of refusal from around the world to ground them.

We attempt to isolate the impact of conscientious objection for each of the 5 reproductive health components, although we recognize the difficulties of identifying the contributions attributable to other barriers to access. These include limited resources, inadequate infrastructure, failure to implement policies, sociocultural practices, and inadequate understanding of the relevant law by providers and patients alike.

We start from the premise that refusal of care leads to fewer clinicians providing specific services, thereby constraining access to these services. We posit that those who continue to provide these contested services may face stigma and/or become overburdened. We specify plausible health outcomes for patients, as well as the consequences of refusal for families, communities, health systems, and providers.

#### *3.1. Conscience-based refusal of abortion-related services*

The availability of safe and legal abortion services varies greatly by setting. Nearly all countries in the world allow legal abortion in certain cases (e.g. to save the life of the woman, in cases of rape, and in cases of severe fetal anomaly). Few countries prohibit abortion in all circumstances. While some among these allow the criminal law defense of necessity to permit life-saving abortions, Chile, El Salvador, Malta, and Nicaragua restrict even this recourse. Other countries with restrictive laws are not explicit or clear about those circumstances in which abortion is allowed [63].

In many countries, particularly in low-resource areas, access to legal services is compromised by lack of resources for health services, lack of health information, inadequate understanding of the law, and societal stigma associated with abortion [64].

There is substantial evidence that countries that provide greater access to safe, legal abortion services have negligible rates of unsafe abortion [65]. Conversely, nearly all of the world's unsafe abortions occur in restrictive legal settings. Where access to legal abortion services is restricted, women seek services under unsafe circumstances. Approximately 21.6 million of the world's annual 46 million induced abortions are unsafe, with nearly all of these (98%) occurring in resource-limited countries [65,66]. In low-income countries, more than half of abortions performed (56%) are unsafe, compared with 6% in high-income areas [66]. Nearly one-quarter (more than 5 million) of these result in serious medical complications that require hospital-based treatment [67, 68]; 47,000 women die each year because of unsafe abortion and an additional unknown number of women experience complications from unsafe abortions but do not seek care [68]. While the international health community has sought to mitigate the high rates of maternal morbidity and mortality caused by unsafe abortion through postabortion care programs [56], the implementation and effectiveness of these have been undermined by conscience-based refusal of care [24,56,69].

We posit that conscience-based refusal of care will have less of an impact at the population level in countries with available safe, legal abortion services than in those where access is restricted. Women living in settings in which legal abortion is widely available and who experience provider refusal will be more likely to find other willing providers offering safe, legal services than women in settings in which abortion is more highly restricted. We ground our model (Fig. 1) in the following examples: (1) in South Africa, widespread conscientious objection limits the numbers of willing providers and, thus, access to safe care, and the number of unsafe abortions has not decreased since the legalization of abortion in

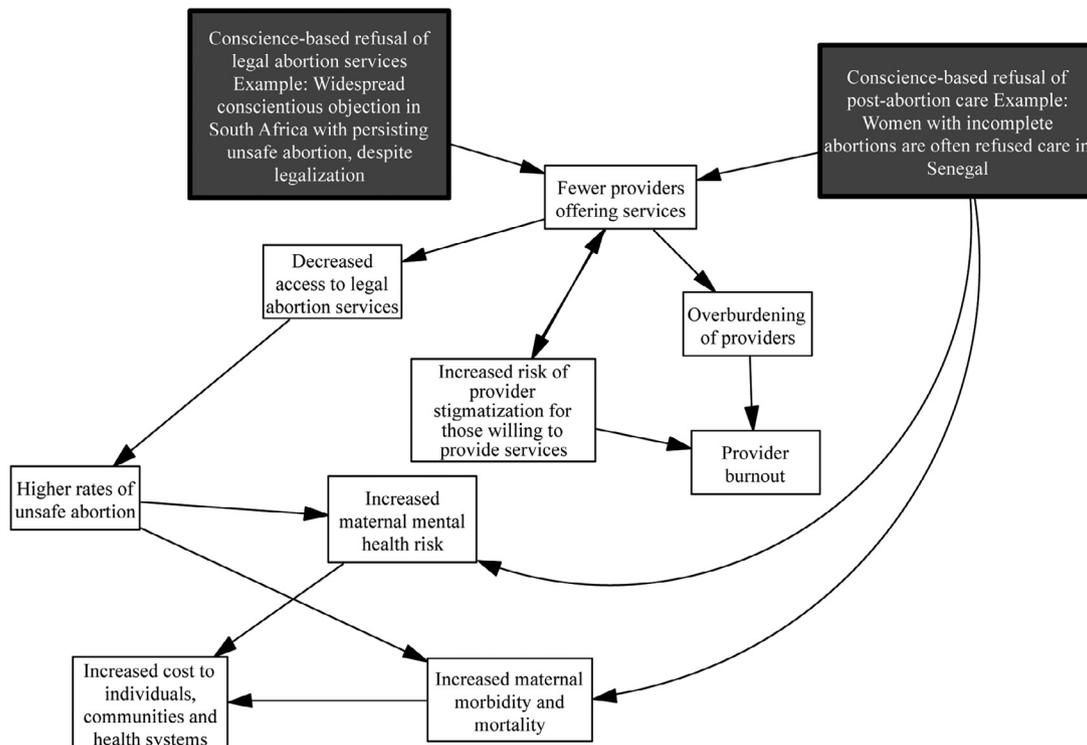


Fig. 1. Consequences of refusal of abortion-related services.

1996 [70,71]; (2) although Senegal's postabortion care program is meant to mitigate the grave consequences of unsafe abortion, conscientious objection is, nevertheless, often invoked when abortion is suspected of being induced rather than spontaneous [56] (unpublished data).

### 3.2. Conscience-based refusal of components of ART

Infertility is a global public health issue affecting approximately 8%–15% of couples [72,73], or 50–80 million people [74], worldwide. Although the majority of those affected reside in low-resource countries [72,73], the use of ART is much more likely in high-resource countries.

Access to specific ART varies by socioeconomic status and geographic location, between and within countries. In high-resource countries, the cost of treatment varies greatly depending on the healthcare system and the availability of government subsidy [75]. For example, in 2006, the price of a standard in vitro fertilization (IVF) cycle ranged from US\$3956 in Japan to \$12,513 in the USA [76]. After government subsidization in Australia, the cost of IVF averaged 6% of an individual's annual disposable income; it was 50% without subsidization in the USA [77]. In low-income countries, despite high rates of infertility, there are few resources available for ART, and costs are generally prohibitive for the majority of the population. Because these economic and infrastructural factors drive lack of access to ART in low-income countries, we posit that denial of services owing to conscience-based refusal of care is not a major contributing factor to limited access in these settings. Therefore, for the model (Fig. 2), we primarily examine the consequences of conscientious objection to components of ART in middle- to high-income countries. At times, regulations and policies regarding ART stem from empirically based concerns, grounded in medical evidence, about health outcomes for women and their offspring or health system priorities. Our focus, however, is on those instances in which some physicians practice according to moral or religious beliefs, even when these contradict best medical practices. In some Latin American countries, despite the medical evidence that mater-

nal and fetal outcomes are markedly superior when fewer embryos are implanted, the objection to embryo selection/reduction and cryopreservation promoted by the Catholic Church has reportedly led many physicians to avoid these [78]. Anecdotal reports from Argentina describe ART physicians' avoidance of cryopreservation and embryo selection/reduction following the self-appointment of a lawyer and member of Opus Dei as legal guardian for cryopreserved embryos [78,79]. The only example that illustrates the implications of denial of preimplantation genetic diagnosis (PGD) refers to a legal ban, rather than conscience-based refusal of care. Nonetheless, we use it to describe the potential consequences when such care is denied. In 2004, Italy passed a law banning PGD, cryopreservation, and gamete donation [80]. This ban compelled a couple who were both carriers of the gene for  $\beta$ -thalassemia to wait to undergo amniocentesis and then to have a second-trimester abortion rather than allow the abnormality to be detected prior to implantation [80] (Fig. 2).

### 3.3. Conscience-based refusal of contraceptive services

The availability of the range of contraceptive methods varies by setting, as does prevalence of use [81]. In general, contraceptive use is correlated with level of income. In 2011, 61.3% of women aged 15–49 years, married or in a union, in middle-upper-income countries were using modern methods, compared with 25% in the lowest-resource countries [81,82]. Within countries, access to and use of methods also vary. For example, according to the 2003 Demographic and Health Survey of Kenya (a cross-sectional study of a nationally representative sample), women in the richest quintile were reported to have significantly higher odds for using long-term contraceptive methods (intrauterine device, sterilization, implants) than women in the poorest quintile [82].

The legal status of particular contraceptive methods also varies by setting. In Honduras, Congress passed a bill banning EC, which has not yet been enacted into law [83]. Even when contraception is legal, lack of basic resources allocated by government programs may compromise availability of particular methods. High manufacturing

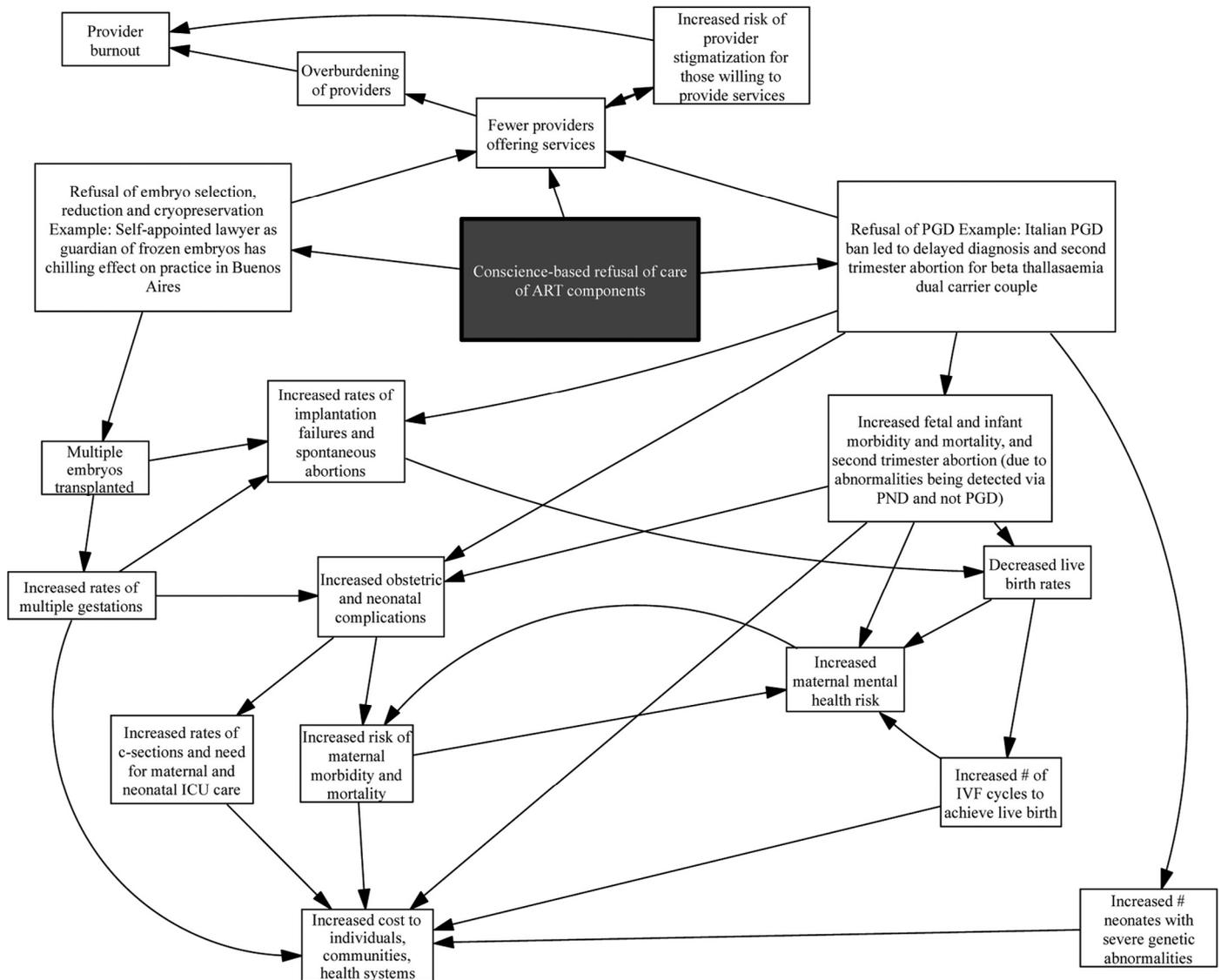


Fig. 2. Consequences of refusal of components of assisted reproductive technologies.

costs or steep prices can also undermine access [84]. In other cases, individual health providers opt not to provide contraception to all or to certain groups of women. Some providers refuse to provide specific methods such as EC or sterilization. In Poland, there is widespread refusal to provide contraceptive services (J. Mishtal, personal communication, April 2012). In Oklahoma, a rape victim was denied EC by a doctor [85], and in Germany a rape victim was denied EC by 2 Catholic hospitals in 2012 [86]. In Fig. 3, we delineate potential implications of conscience-based refusal of contraceptive services.

#### 3.4. Conscience-based refusal of care in cases of risk to maternal health and unavoidable pregnancy loss

In some circumstances, pregnancy can exacerbate a serious maternal illness or maternal illness may require treatment hazardous to a fetus. In these cases, women require access to life-saving treatment, which may include abortion. Yet women have been denied appropriate treatment. Women seeking completion of inevitable pregnancy loss due to ectopic pregnancy or spontaneous abortion have also been denied necessary care.

It is beyond the scope of the present White Paper to define the full range of conditions that may be exacerbated by pregnancy

and jeopardize the health of the pregnant woman. However, the incidence of ectopic pregnancy ranges from 1% to 16% [87–90], and 10%–20% of all clinically recognized pregnancies end in spontaneous abortion [90]. Often, refusal of care in circumstances of maternal health risk occurs in the context of highly restrictive abortion laws. We refer to 3 cases from around the world (Fig. 4) to highlight this phenomenon in our model. In Ireland in 2012, Savita Halappanavar, 31, presented at a Galway hospital with ruptured membranes early in the second trimester. She was refused completion of the inevitable spontaneous abortion, developed sepsis, and subsequently died [91]. Z's daughter, a young Polish woman, was diagnosed with ulcerative colitis while she was pregnant [92]. She was repeatedly denied medical treatment; physicians stated that they would not conduct procedures or tests that might result in fetal harm or termination of the pregnancy [92]. She developed sepsis, experienced fetal demise, and died. The only example that illustrates the implications of denial of treatment for ectopic pregnancy derives from legal bans, rather than from an example of conscience-based refusal of care. In El Salvador, a total prohibition on abortion has led to physician refusal to treat ectopic pregnancy [93]; in Nicaragua, the abortion ban results in delay of treatment for ectopic pregnancies, despite law and medical guidelines mandating the contrary [94] (Fig. 4).



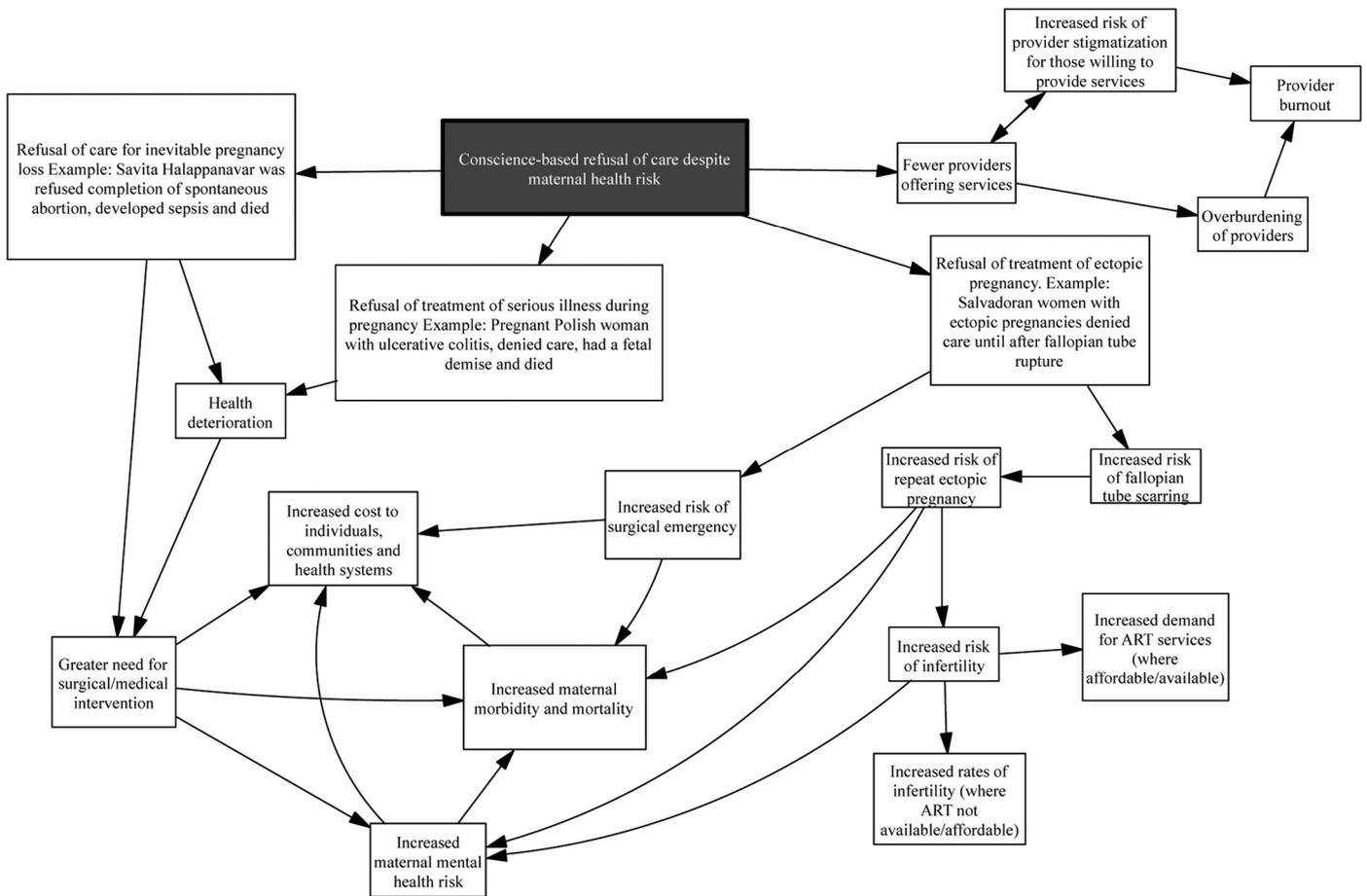


Fig. 4. Consequences of refusal of care in cases of risk to maternal health and unavoidable pregnancy loss.

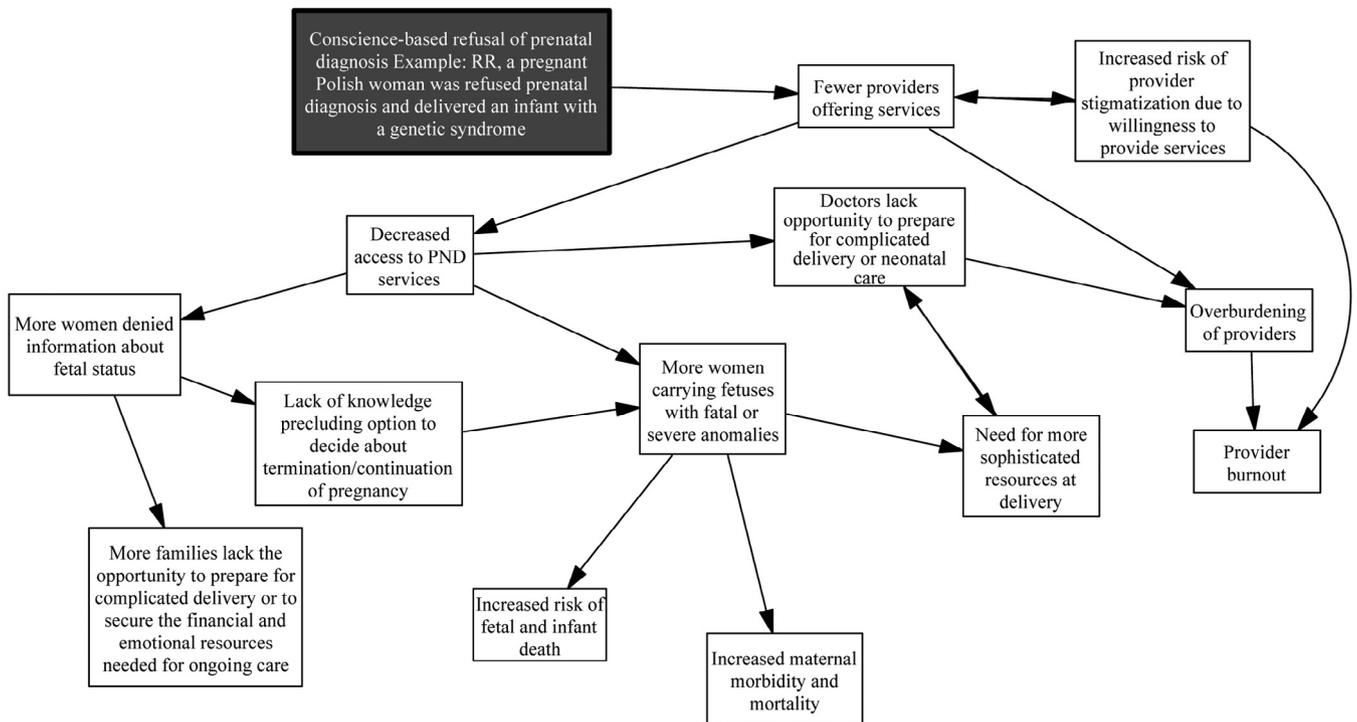


Fig. 5. Consequences of refusal of prenatal diagnosis.

conscientious objection to reproductive healthcare provision. While these are non-binding recommendations, they do assert professional standards of care. These include the following:

- Providers have a right to conscientious objection and not to suffer discrimination on the basis of their beliefs.
- The primary conscientious duty of healthcare providers is to

treat, or provide benefit and prevent harm to patients; conscientious objection is secondary to this primary duty.

Moreover, the following safeguards must be in place in order to ensure access to services without discrimination or undue delays:

- Providers have a professional duty to follow scientifically and professionally determined definitions of reproductive health services, and not to misrepresent them on the basis of personal beliefs.
- Patients have the right to be referred to practitioners who do not object for procedures medically indicated for their care.
- Healthcare providers must provide patients with timely access to medical services, including giving information about the medically indicated options of procedures for care, including those that providers object to on grounds of conscience.
- Providers must provide timely care to their patients when referral to other providers is not possible and delay would jeopardize patients' health.
- In emergency situations, providers must provide the medically indicated care, regardless of their own personal objections.

These statements support both sides of the tension: the right of patients to have access to appropriate medical care and the right of providers to object, for reasons of conscience, to providing particular forms of care. They underscore the professional obligation of healthcare providers to ensure timely access to care, through provision of accurate information, referral, and emergency care. At the transnational level, human rights consensus documents have asserted that institutions and individuals are similarly bound by their obligations to operate according to the bedrock principles that underpin the practice of medicine, such as the obligations to provide patients with accurate information, to provide care conforming to the highest possible standards, and to provide care in emergency situations.

At the country level, however, there is no agreement as to whether institutions can claim objector status. For example, Spain [106], Colombia [107], and South Africa [108] have laws stating that refusal to perform abortions is always an individual, not an institutional, decision. Conversely, Argentinian law [109,110] gives private institutions the ability to object and requires private health centers to register as conscientious objectors with local health authorities. In Uruguay, the Ethical Code does not require the institution employing a conscientious objector to provide referral services, although a newly proposed bill would require such referral [111,112]. In the USA, the question of institutional rights and obligations is hotly debated and the situation is complicated and unresolved. Currently, federal law forbids agencies receiving federal funding from discriminating against any healthcare entity that refuses to provide abortion services [113]. Yet other federal law requires institutions providing services for low-income people to maintain an adequate network of providers and to guarantee that individuals receive services without additional out-of-pocket cost [114].

International and regional human rights bodies, governments, courts, and health professional associations have developed various responses to address conscience-based refusal of care. These responses differ as to whose rights they protect: the rights of a woman to have access to legal services or the rights of a provider to object based on reasons of conscience. They might also have different emphases or targets. Some focus on ensuring an adequate number of providers for a certain service, some concentrate on ensuring that women receive timely referrals to non-objecting practitioners, and some seek to establish criteria for designation as an objector. For example, Norway established a comprehensive regulatory and oversight framework on conscientious objection to abortion, which includes ensuring the availability of providers

[33,115]. In Colombia, the Constitutional Court affirmed that conscientious objection must be grounded in true religious conviction, rather than in a personal judgment of "rightness" [116].

Some of these responses are legally binding through national constitutional provisions, legislation, or case law. The European Court of Human Rights (ECHR), whose rulings are legally binding for member nations, clarified the obligation of states to organize the practice of conscience-based refusal of care to ensure that patients have access to legal services, specifically to abortion [97]. Professional associations and employers have developed other interventions, including job requirements and non-binding recommendations. In Germany, for example, a Bavarian High Administrative Court decision [117], upheld by the Federal Administrative Court [118], ruled that it was permissible for a municipality to include ability and willingness to perform abortions as a job criterion. In Norway, employers can refuse to hire objectors and employment advertisements may require performance of abortion as a condition for employment [112]. In Sweden, Bulgaria, Czech Republic, Finland, and Iceland, healthcare providers are not legally permitted to conscientiously object to providing abortion services [38]. Some require referral to non-objecting providers. For example, in the recent *P. and S. v. Poland* case, the ECHR emphasized the need for referrals to be put in writing and included in patients' medical records [119]. In Argentina [110] and France [120], legislation requires doctors who conscientiously object to refer patients to non-objecting practitioners. Similar laws exist in Victoria, Australia [121], Colombia [116,122,123], Italy [124], and Norway [115]. Professional and medical associations around the world recommend that objectors refer patients to non-objecting colleagues. ACOG in the USA [125] and El Sindicato Médico in Uruguay [126] recommend that objectors refer patients to other practitioners. The British Medical Association (BMA) specifies that practitioners cannot claim exemption from giving advice or performing preparatory steps (including referral) where the request for an abortion meets legal requirements [127]. The WMA asserts that, if a physician must refuse a certain service on the basis of conscience, s/he may do so after ensuring the continuity of medical care by a qualified colleague [128]. FIGO maintains that patients are entitled to referral to practitioners who do not object [9].

Pharmacists' associations in the USA and UK have made similar recommendations. The American Society of Health-System Pharmacists asserts that pharmacists and other pharmacy employees have the right not to participate in therapies they consider to be morally objectionable but they must make referrals in an objective manner [129]; the AMA guidelines state that patients have the right to receive an immediate referral to another dispensing pharmacy if a pharmacist invokes conscientious objection [130]. In the UK, pharmacists must also have in place the means to make a referral to another relevant professional within an appropriate time frame [131].

Some jurisdictions mandate registration of objectors or require objectors to provide advance written notice to employers or government bodies. In Spain, for example, the law requires that conscientious objection must be expressed in advance and in written form to the health institution and the government [106]. Italian law also requires healthcare personnel to declare their conscientious objection to abortion to the medical director of the hospital or nursing home in which they are employed and to the provincial medical officer no later than 1 month after date of commencement of employment [124]. Victoria, Australia [118]; Colombia [123]; Norway [115]; Madagascar [132]; and Argentina [109] have similar laws. In Norway, the administrative head of a health institution must inform the county municipality of the number of different categories of health personnel who are exempted on grounds of conscience [115]. Argentinian law [109] gives private institutions the ability to object, requiring these

institutions to register as conscientious objectors with local health authorities and to guarantee care by referring women to other centers. Argentinian law also states that an individual objector cannot provide services in a private health center that s/he objects to the provision of in the public health system [110]. Regulation in Canada requires pharmacists to ensure that employers know about their conscientious objector status and to prearrange access to an alternative source for treatment, medication, or procedure [133]. The Code of Ethics for nurses in Australia also requires disclosure to employers [134]. In Northern Ireland, a guidance document by the Department of Health, Social Services and Public Safety asserts that an objecting provider “should have in place arrangements with practice colleagues, another GP practice, or a Health Social Care Trust to whom the woman can be referred” for advice or assessment for termination of pregnancy [135].

Other measures require disclosure to patients about providers’ status as objectors. For example, the law in the state of Victoria, Australia, requires objectors to inform the woman and refer her to a willing provider [121]. In Argentina, the Technical Guide for Comprehensive Legal Abortion Care 2010 [109] requires that all women be informed of the conscientious objections of medical, treating, and/or support staff at first visit. Portugal’s medical ethical guidelines encourage doctors to communicate their objection to patients [136].

The right to receive information in healthcare, including reproductive health information, is enshrined in international law. For example, the ECHR determined that denial of services essential to making an informed decision regarding abortion can constitute a violation of the right to be free from inhuman and degrading treatment [97]. At the national level, laws have mandated disclosure of health information to patients. For example, according to the South African abortion law, providers, including objectors, must ensure that pregnant women are aware of their legal rights to abortion [108]. In Spain, women are entitled to receive information about their pregnancies (including prenatal testing results) from all providers, including those registered as objectors [106]. In the UK, objectors are legally required to disclose their conscientious objector status to patients, to tell them they have the right to see another doctor, and to provide them with sufficient information to enable them to exercise that right [137–139].

Professional guidelines have also addressed disclosure of health information. In Argentina, any delaying tactics, provision of false information, or reluctance to carry out treatment by health professionals and authorities of hospitals is subject to administrative, civil, and/or criminal actions [109]. FIGO asserts that the ethical responsibility of OB/GYNs to prevent harm requires them to provide patients with timely access to medical services, including giving them information about the medically indicated options for their care [9].

Some require the provision of services in cases of emergency. For example, legislation in Victoria, Australia [121]; Mexico City [140]; Slovenia [141]; and the UK [138] stipulates that physicians may not refuse to provide services in cases of emergency and when urgent termination is required. US case law determined that a private hospital with a tradition of providing emergency care was still obliged to treat anyone relying on it even after its merger with a Catholic institution. This sets the standard for continuity of access after mergers of 2 hospitals with conflicting philosophies [142]. Also, ACOG urges clinicians to provide medically indicated care in emergency situations [125]. In Argentina, technical guidelines from the Ministry of Health stipulate that institutions must provide termination of pregnancy through another provider at the institution within 5 days or immediately if the situation is urgent [109]. In the UK, medical standards also prohibit conscience-based refusal of care in cases of emergency for nurses and midwives [143].

Other measures address the required provision of services when referral to an alternative provider is not possible. In Norway, for example, a doctor is not legally allowed to refuse care unless a patient has such reasonable access [115]. FIGO recommends that “practitioners must provide timely care to their patients when referral to other practitioners is not possible and delay would jeopardize patients’ health and well being, such as by patients experiencing unwanted pregnancy” [9].

Some interventions obligate the state to ensure services. In Colombia, for example, the health system is responsible for providing an adequate number of providers, and institutions must provide services even if individuals conscientiously object [107]. The law on voluntary sterilization and vasectomies in Argentina obligates health centers to ensure the immediate availability of alternative services when a provider has objected [144]. In Spain, the government will pay for transportation to an alternative willing public health facility [106]. Italian law requires healthcare institutions to ensure that women have access to abortion; regional healthcare entities are obliged to supervise and ensure such access, which may include transferring healthcare personnel [125]. In Mexico City, the public health code was amended to reinforce the duty of healthcare facilities to make abortion accessible, including their responsibility to limit the scope of conscientious objection [140].

Some measures specify which service providers are eligible to refuse and when they are allowed to do so. In the UK, for example, auxiliary staff are not entitled to conscientiously object [145,146]. According to the BMA guidelines, refusal to participate in paperwork or administration connected with abortion procedures lies outside the terms of the conscientious objection clause [127]. In Spain, only health professionals directly involved in termination of pregnancy have the right to object, and they must provide care to the woman before and after termination of pregnancy [106]. Similarly, doctors in Italy are legally required to assist before and after an abortion procedure even if they opt out of the procedure itself [124]. Also, medical guidelines in Argentina encourage practitioners to aid before and after legal abortion procedures even if they are invoking conscientious objection to participation in the procedure itself [109]. During the Bush administration, the US Department of Health and Human Services extended regulatory “conscience protections” to any individual peripherally participating in a health service [147]. This regulation was contested vigorously and retracted almost fully in February 2011 [148,149].

In Table 1, we lay out some benefits and limitations of policy responses to conscientious objection in order to provide varied actors with a menu of possibilities. As criteria are developed for invoking refusal, it is essential to address the questions of who is eligible to object, and to the provision of which services. We have added the categories of “data” and “standardization” as parameters in the table in recognition of the scant evidence available and the resulting inability to methodically assess the scope and efficacy of interventions. Selection of the various options delineated below will be influenced by the specific sociopolitical and economic context.

## 5. Conclusion

Refusal to provide certain components of reproductive healthcare because of moral or religious objection is widespread and seems to be increasing globally. Because lack of access to reproductive healthcare is a recognized route toward adverse health outcomes and inequalities, exacerbation of this through further depletion of clinicians constitutes a grave global health and rights concern. The limited evidence available indicates that objection occurs least when the law, public discourse, provider custom, and clinical experience all normalize the provision of the full range of reproductive healthcare services and promote women’s autonomy. While data on both the prevalence of conscience-based refusal of

**Table 1**  
Benefits and limitations of policy interventions

Option	Health system needs	Timely access to care	Balancing rights and obligations	Developing criteria for refusors	Standardization	Data needs
Referral to willing and accessible providers	Enables system planning for service delivery	Expedites patients' access to services	Upholds patients' rights to health-related information; providers' obligations to provide information and make refusal transparent; individual conscience	Establishes obligations of those claiming objector status while acknowledging legitimacy of objection	Policies and procedures for disclosure and referral standardized throughout health system	Provides indirect data on patients' encounters with refusal
Registration of objectors/written notice to employers	Informs on prevalence of objection, enabling system planning for service delivery	Leads to more timely access to care for women who can avoid seeking care from known objectors	Acknowledges provider right to object while informing patients. Requirement of formal documentation acknowledges health system stake in such knowledge	Delineates the specific instances in which objection is permitted, and by whom; formal notification of employers makes explicit the criteria for designation as an objector	Ensures that requirements for designation as objector are standardized throughout the health system	Registries provide data on prevalence by type of provider as well as component of care refused
Required disclosure of objector status to patients	Enables women to avoid unproductive visits to objectors and delayed care, promoting smoother functioning of system	Women go directly to willing provider	Acknowledges provider right to object while upholding patients' rights to autonomy and health-related information	Defines obligations of objectors	Standardizes information provided to patients	N/A
Required information to patients about available health options	Informed patients are better able to make decisions and to locate the services that they need	Facilitates patient access to appropriate care	Upholds patients' rights to obtain health-related information; underscores providers' obligations to provide accurate information and to inform about legally available options; asserts health system's commitment to science and to patients' rights	Limits scope of objection by specifying components of care individuals obligated to provide	Standardizes information to patients about health system's range of available services	N/A
Mandated provision of services in urgent situations or when no alternative exists	Facilitates planning for provision of emergency care and for associated policies, procedures, and oversight; ensures that medical sequelae of denial or delay of care are minimized	Provides critical care in a timely fashion	Obligations of the provider to operate in the best interests of patients and to provide appropriate care take precedence over the individual clinician's right to object	Sets limits on the scope of refusal to protect patients in emergency situations	Ensures that objectors adhere to contractual obligations to provide essential and/or life-saving care	Contributes to the ability to track urgent cases and to plan service provision needs
Willingness to provide and proficiency as criteria for employment	Underscores employers' needs to ensure sufficient number of providers to meet demand for specific services	Staff competency and willingness enable ready and timely access to appropriate care	Health systems' needs to employ proficient and willing providers to respond to the health needs of the community trump provider rights to object; providers free to adhere to conscience by choosing other employment	Limits objection because only those willing and trained are eligible for employment	Standardizes such requirements in job postings throughout health system	Tracks the number of proficient and willing candidates seeking employment
Medical certification contingent upon proficiency in specific services	Improves health system-level planning for service delivery by assuring that providers are proficient in needed services	Availability of trained providers facilitates timely access to care	Establishes that objectors have the right to choose other specialties, but not to refuse essential components of a specialty; ensures patient rights to receive appropriate services from providers designated as specialists; defines and safeguards professional standards	Clarifies that specialist objectors must be trained and ready to provide care in emergency situations or when other options not available	Specialty certification guarantees mastery of a set of skills and compliance with explicit obligations	Tracks number of providers certified and, therefore, proficient, thus facilitating planning
Medical society guidelines delineating expected standards of care	Recommends that priority go to patient receipt of care and to prevention of shortages of willing and qualified providers; guidelines may lack mechanisms for implementation	Recommends policies and procedures to ensure timely access to care but may lack force	Delineates the rights and obligations of providers and the rights of patients	Suggests criteria for designation as objector and associated obligations	Asserts standards of care	N/A

care and the consequences for women's health and health system function are inadequate, they indicate that refusal is unevenly distributed; that it may have the most severe impact in those parts of the world least able to sustain further personnel shortages; and that it also affects women in more privileged circumstances.

The present White Paper has laid out the available data and outlined research questions for further management of conscience-based refusal of care. It presents logical chains of consequences when refusal compromises access to specific components of reproductive healthcare and categorizes efforts to balance the claims of objectors with the claims of both those seeking healthcare and the systems obligated to provide these services. We highlight the claims of those whose conscience compels them to provide such care, despite hardship. As our emphasis is on medicine and science, we close by considering ways for medical professional and public health societies to develop and implement policies to manage conscientious objection.

One recommendation is to standardize a definition of the practice and to develop eligibility criteria for designation as an objector. Such designation would have accompanying obligations, such as disclosure to employers and patients, and duties to refer, to impart accurate information, and to provide urgently needed care. Importantly, professional organizational voices can uphold conformity with standards of care as the priority professional commitment of clinicians, thus eliminating refusal as an option for the care of ectopic pregnancy, inevitable spontaneous abortion, rape, and maternal illness. In sum, medical and public health professional organizations can establish a clinical standard of care for conscientious objection, to which clinicians could be held accountable by patients, medical societies, and health and legal systems.

There are additional avenues for professional organizations to explore in upholding standards. Clinical specialty boards might condition certification upon demonstration of proficiency in specific services. Clinical educators could ensure that trainees and members are educated about relevant laws and clinical protocols/procedures. Health systems may consider willingness to provide needed services and proficiency as criteria for employment. These last are noteworthy because they also move us from locating the issue at the individual level to consideration of obligations at the professional and health system levels.

These issues are neither simple nor one-sided. Conscience and integrity are critically important to individuals. Societies have the complicated task of honoring the rights of dissenters while also limiting their impact on other individuals and on communities. Although conscientious objection is only one of many barriers to reproductive healthcare, it is one that medical societies are well positioned to address because providers are at the nexus of health and rights concerns. They have the unique vantage point of caring simultaneously about their own conscience and about their obligations to patients' health and rights and to the highest standards of evidence-based care. The present White Paper has disentangled the range of implications for women's health and rights, health systems, and objecting and committed providers. Thus, it equips clinicians and their professional organizations to contribute a distinct medical voice, complementary to those of lawyers, ethicists, and others. We urge medical and public health societies to assert leadership in forging policies to balance these competing interests and to safeguard reproductive health, medical integrity, and women's lives.

#### Acknowledgments

Ford Foundation and an anonymous donor supported the publication of the supplement. We thank all GDC funders for making the project possible.

#### Conflict of interest

The authors have no conflicts of interest.

#### References

- [1] International Covenant on Civil and Political Rights, *adopted* Dec. 16, 1966, G.A. Res. 2200A (XXI), U.N. GAOR, 21st Sess., Supp. No. 16, at 52, U.N. Doc. A/6316 (1966), 999 U.N.T.S. 171 (*entered into force* March 23, 1976).
- [2] Convention on the Elimination of All Forms of Discrimination against Women, *adopted* December 18, 1979, G.A. Res. 34/180, U.N. GAOR, 34th Sess., Supp. No. 46, at 193, U.N. Doc. A/34/46 (*entered into force* September 3, 1981).
- [3] Organization of American States. American Convention on Human Rights, "Pact of San Jose", Costa Rica. November 22, 1969. <http://www.unhcr.org/refworld/docid/3ae6b36510.html>. Accessed February 10, 2013.
- [4] Council of Europe. European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14. November 4, 1950, ETS 5. <http://www.unhcr.org/refworld/docid/3ae6b3b04.html>. Accessed February 10, 2013.
- [5] UN Committee on Economic, Social and Cultural Rights (CESCR). General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant). August 11, 2000, E/C.12/2000/4. <http://www.refworld.org/docid/4538838d0.html>. Accessed May 7, 2013.
- [6] L.C. v. Peru, Communication No. 1153/2003, Human Rights Committee, para. 6.3, U.N. Doc. CCPR/C/85/D/1153/2003 (2005).
- [7] Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, *adopted* July 11, 2003, 2nd African Union Assembly, Maputo, Mozambique (*entered into force* 2005).
- [8] World Medical Association. Declaration of Helsinki—Ethical Principles for World Medical Research Involving Human Subjects. Adopted 1964. <http://www.wma.net/en/30publications/10policies/b3/>. Accessed June 15, 2013.
- [9] FIGO Committee for the Ethical Aspects of Human Reproduction and Women's Health. Ethical guidelines on conscientious objection. FIGO Committee for the Ethical Aspects of Human Reproduction and Women's Health. *Int J Gynecol Obstet* 2006;92(3):333–4.
- [10] American College of Obstetricians and Gynecologists (ACOG). ACOG Committee Opinion, Committee on Ethics. The Limits of Conscientious Refusal in Reproductive Health Care. Number 385, November 2007 (*reaffirmed* 2010). <http://www.acog.org/Resources%20And%20Publications/Committee%20Opinions/Committee%20on%20Ethics/The%20Limits%20of%20Conscientious%20Refusal%20in%20Reproductive%20Medicine.aspx>. Accessed March 22, 2013.
- [11] González Vélez AC. Refusal of Care due to Conscientious Objection. Grupo Médico por el Derecho a Decidir. Global Doctors for Choice/Columbia 2012. <http://globaldoctorsforchoice.org/wp-content/uploads/Negaci%C3%B3n-de-servicios-por-razones-de-conciencia.pdf>. Accessed October 23, 2013.
- [12] Royal College of Nursing, Australia. Position Statement. Conscientious Objection. [http://www.rcna.org.au/wcm/RCNA/Policy/Position\\_statements/rcna/policy/position\\_statements\\_guidelines\\_and\\_communique.aspx](http://www.rcna.org.au/wcm/RCNA/Policy/Position_statements/rcna/policy/position_statements_guidelines_and_communique.aspx). Accessed March 22, 2013.
- [13] Green JM. Obstetricians' views on prenatal diagnosis and termination of pregnancy: 1980 compared with 1993. *British J Obstet Gynaecol* 1995;102(3):228–32.
- [14] Zampas C, Andion-Ibaniez X. Conscientious objection to sexual and reproductive health services: international human rights standards and European law and practice. *Eur J Health Law* 2012;19:231–56.
- [15] Dodani S, LaPorte R. Brain drain from developing countries: how can brain drain be converted into wisdom gain? *J R Soc Med* 2005;98(11):487–91.
- [16] United States Department of Defense Regulations. DoD Directive 1300.6: Conscientious Objectors. <http://www.dtic.mil/whs/directives/corres/pdf/130006p.pdf>. Published May 31, 2007. Accessed October 23, 2013.
- [17] Faundes A, Duarte GA, Neto JA, de Sousa MH. The closer you are, the better you understand: the reaction of Brazilian obstetrician-gynaecologists to unwanted pregnancy. *RHM* 2004;12(24 Suppl):47–56.
- [18] Mishtal J. Contradictions of Democratization: The Politics of Reproductive Rights and Policies in Postsocialist Poland. Dissertation submitted to the Faculty of the Graduate School of the University of Colorado in partial fulfillment of the requirement for the degree of Doctor of Philosophy. Department of Anthropology. 2006. [http://federa.org.pl/dokumenty\\_pdf/prawareprodukcyjne/Mishtal%20dissertation.pdf](http://federa.org.pl/dokumenty_pdf/prawareprodukcyjne/Mishtal%20dissertation.pdf). Accessed June 17, 2013.
- [19] De Zordo S, Mishtal J. Physicians and abortion: Provision, political participation and conflicts on the ground—The cases of Brazil and Poland. *Women's Health Issues* 2011;21(Suppl 3):S32–6.
- [20] MergerWatch. Religious Restrictions: Refusals to Provide Care. <http://www.mergerwatch.org/refusals/>. Accessed August 17, 2012.
- [21] Shelton DL. Chicago Tribune News. Appeals court sides with pharmacists in emergency contraceptives care. [http://articles.chicagotribune.com/2012-09-22/news/ct-met-emergency-contraceptives-20120922\\_1\\_emergency-contraceptives-conscience-act-pharmacists](http://articles.chicagotribune.com/2012-09-22/news/ct-met-emergency-contraceptives-20120922_1_emergency-contraceptives-conscience-act-pharmacists). Published September 22, 2012. Accessed March 22, 2013.

- [22] Wicclair MR. Refusals by hospitals and emergency contraception. *Cambridge Quarterly of Healthcare Ethics* 2011;20(1):130–8.
- [23] Charo RA. American Constitution Society for Law and Policy, Health Care Provider Refusals to Treat, Prescribe, Refer or Inform: Professionalism and Conscience. *The Journal of the ACS Issue Groups* 2007: 119–35. [https://media.law.wisc.edu/m/yzdkn/charo\\_-\\_health\\_care\\_provider\\_refusals\\_-\\_feb\\_2007\\_-\\_advance\\_vol\\_1.pdf](https://media.law.wisc.edu/m/yzdkn/charo_-_health_care_provider_refusals_-_feb_2007_-_advance_vol_1.pdf).
- [24] Wicclair MR. *Conscientious Objection in Health Care*. Cambridge: Cambridge University Press; 2011.
- [25] Institute of Medicine. *Shaping the Future of Health. Crossing the Quality Chasm: A New Health System for the 21st Century*. <http://www.iom.edu/-/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf>. Published 2001. Accessed May 8, 2013.
- [26] WHO. *Quality of Care: A Process for Making Strategic Choices in Health Systems*. Geneva: WHO; 2006. [http://www.who.int/management/quality/assurance/QualityCare\\_B.Def.pdf](http://www.who.int/management/quality/assurance/QualityCare_B.Def.pdf).
- [27] Endres v. Indiana State Police, 349 F.3d 922 (7th Cir. 2003) (cert. denied, 541 U.S. 989 (2004)), cited in Charo RA. American Constitution Society for Law and Policy, Health Care Provider Refusals to Treat, Prescribe, Refer or Inform: Professionalism and Conscience. *The Journal of the ACS Issue Groups* 2007: 119–35. [https://media.law.wisc.edu/m/yzdkn/charo\\_-\\_health\\_care\\_provider\\_refusals\\_-\\_feb\\_2007\\_-\\_advance\\_vol\\_1.pdf](https://media.law.wisc.edu/m/yzdkn/charo_-_health_care_provider_refusals_-_feb_2007_-_advance_vol_1.pdf).
- [28] Dickens BM, Cook RJ. Conscientious commitment to women's health. *Int J Gynecol Obstet* 2011;113:163–6.
- [29] Harris L. Recognizing Conscience in Abortion Provision. *N Engl J Med* 2012;367(11):981–3.
- [30] FIGO. *Resolution on Conscientious Objection*. <http://www.figo.org/projects/conscientious>. Published 2005. Accessed June 1, 2013.
- [31] Republic of Italy. Ministry of Health. Report of the Ministry of Health on the Performance of the Law Containing Rules for the Social Care of Maternity and Voluntary Interruption of Pregnancy: 2006–2007 (2008).
- [32] The Act (13 June 1995 no. 50), concerning Termination of Pregnancy, with Amendments in the Act dated 16 June 1978 no. 5, at 14 (Norway).
- [33] Health Services Act, Art. 56, Official Gazette of the Republic of Slovenia (Slovenia).
- [34] The Abortion Act, Act No. 595/1974, as amended through Act No. 998/2007 (Sweden).
- [35] Roe J, Francome C, Bush M. Recruitment and training of British obstetrician-gynaecologists for abortion provision: conscientious objection versus opting out. *RHM* 1999;7(14):97–105.
- [36] Lo SS, Kok WM, Fan SY. Emergency contraception: knowledge, attitude and prescription practice among doctors in different specialties in Hong Kong. *J Obstet Gynaecol Research* 2009;35(4):767–74.
- [37] Davidson LA, Pettis CT, Cook DM, Klugman CM. Religion and conscientious objection: a survey of pharmacists' willingness to dispense medications. *Soc Sci Med* 2010;71(1):161–5.
- [38] Heino A, Gissler M, Apter D, Fiala C. Conscientious objection and induced abortion in Europe. *Euro J Contracept Reprod Health Care* 2013;18:231–3.
- [39] Austrian Ministry of Health. *Austrian Women's Health Report 2010/2011*. Vienna: Ministry of Health; 2011.
- [40] Oliveira da Silva M. Reflections on the legalisation of abortion in Portugal. *Eur J Contracept Reprod Health Care* 2009;14:245–8.
- [41] Rodríguez-Calvo MS, Martínez-Silva IM, Concheiro L, Muñoz-Barús JI. University students' attitudes towards Voluntary Interruption of Pregnancy. *Legal Medicine* 2012;14(4):209–13.
- [42] Guttmacher Institute. Attitudes and intentions of future health care providers toward abortion provision. *Perspectives Sexual Reprod Health* 2004;36(2):58–63.
- [43] Rakhudu MA, Mmesi AM, Myburgh CPH, Poggenpoel M. Exploration of the views of traditional healers regarding the termination of pregnancy (TOP) law. *Curatonia* 2006;29(3):56–60.
- [44] Curlin FA, Lawrence RE, Chin MH, Lantos JD. Religion, conscience, and controversial clinical practices. *N Engl J Med* 2007;356(6):593–600.
- [45] Goyal M, Zhao H, Mollen C. Exploring emergency contraception knowledge, prescription practices, and barriers to prescription for adolescents in the emergency department. *Pediatrics* 2009;123(3):765–70.
- [46] Harris LH, Cooper A, Rasinski KA, Curlin FA, Lysterly AD. Obstetrician-gynecologists' objections to and willingness to help patients obtain an abortion. *Obstet Gynecol* 2011;118(4):905–12.
- [47] Frank JE. Conscientious refusal in family medicine residency training. *Family Medicine* 2011;43(5):330–3.
- [48] Gogna M, Romero M, Ramos S, Petracci M, Szulik D. Abortion in a restrictive legal context: the views of obstetrician-gynaecologists in Buenos Aires, Argentina. *RHM* 2002;10(19):128–37.
- [49] de la Fuente Fonnest I, Sondergaard F, Fonnest G, Vedsted-Jacobsen A. Attitudes among health care professionals on the ethics of assisted reproductive technologies and legal abortion. *Acta Obstet Gynecol Scand* 2000;79(1):49–53.
- [50] Marie Stopes International. *General practitioners: attitudes to abortion* 2007. <http://www.mariestopes.org.uk/documents/GP%20attitudes%20to%20abortion%202007.pdf>. Published 2007. Accessed June 17, 2013.
- [51] Davis S, Schrader V, Belcheir MJ. Influencers of ethical beliefs and the impact on moral distress and conscientious objection. *Nurs Ethics* 2012;19(6):738–49.
- [52] Aiyer AN, Steinman A, Ho GY. Influence of physician attitudes on willingness to perform abortion. *Obstet Gynecol* 1999;93(4):576–80.
- [53] Hammarstedt M, Jacobsson L, Wulff M, Lalos A. Views of midwives and gynecologists on legal abortion—a population-based study. *Acta Obstet Gynecol Scand* 2005;84(1):58–64.
- [54] Griggs SK, Brown CM. Texas community pharmacists' willingness to participate in pharmacist-initiated emergency contraception. *JAPhA* 2007;47(1):48–57.
- [55] Wonkam A, Hurst SA. Acceptance of abortion by doctors and medical students in Cameroon. *Lancet* 2007;369(9578):1999.
- [56] Suh S. *Abortion Politics without Borders: The Implementation and Practice of Post-Abortion Care in Senegal*. SSRN 2013. <http://ssrn.com/abstract=2250193>. Published April 13, 2013.
- [57] Hagen GH, Hage CO, Magelssen M, Nortvedt P. Attitudes of medical students towards abortion. *Tidsskr Nor Laegeforen* 2011;131(18):1768–71.
- [58] Kade K, Kumar D, Polis C, Schaffer K. Effect of nurses' attitudes on hospital-based abortion procedures in Massachusetts. *Contraception* 2004;69(1):59–62.
- [59] Stulberg DB, Dude AM, Dahlquist I, Curlin FA. Obstetrician-gynecologists, religious institutions, and conflicts regarding patient-care policies. *Am J Obstet Gynecol* 2012;207(1):73 e1–5.
- [60] Guttmacher Institute. *Making Abortion Services Accessible in The Wake of Legal Reforms: A Framework And Six Case Studies*. <http://www.guttmacher.org/pubs/abortion-services-laws.pdf>. Published 2012. Accessed June 15, 2013.
- [61] International Planned Parenthood Federation. *Abortion, Legislation in Europe*. [http://www.ippfen.org/NR/rdonlyres/ED17CA78-43A8-4A49-ABE7-64A836C0413E/0/Abortionlegislation\\_May2012corr.pdf](http://www.ippfen.org/NR/rdonlyres/ED17CA78-43A8-4A49-ABE7-64A836C0413E/0/Abortionlegislation_May2012corr.pdf). Updated May 2012. Accessed May 8, 2013.
- [62] Mishtal J. *Quiet Contestations of Irish Abortion Law: Reproductive Health Politics in Flux*. In: Penny Light T, Stettner S, eds. *The History and Politics of Abortion*. Toronto: University of Toronto Press; 2014 (in press).
- [63] Center for Reproductive Rights. *The World's Abortion Laws Map 2013 and Update*. [http://reproductiverights.org/sites/crr.civicactions.net/files/documents/AbortionMap\\_Factsheet\\_2013.pdf](http://reproductiverights.org/sites/crr.civicactions.net/files/documents/AbortionMap_Factsheet_2013.pdf) and <http://worldabortionlaws.com/>. Published 2013. Accessed June 15, 2013.
- [64] Cohen SA. *Facts and Consequences: Legality, Incidence and Safety of Abortion Worldwide*. Guttmacher Policy Review 2009;12(4).
- [65] Grimes DA, Benson J, Singh S, Romero M, Ganatra B, Okonofua FE, et al. Unsafe abortion: the preventable pandemic. *Lancet* 2006;368(9550):1908–19.
- [66] Guttmacher Institute. *In Brief: Fact Sheet. Facts on Induced Abortion Worldwide*. [http://www.guttmacher.org/pubs/fb\\_IAW.html](http://www.guttmacher.org/pubs/fb_IAW.html). Published 2012. Accessed June 17, 2013.
- [67] Singh S. Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries. *Lancet* 2006;369(9550):1887–92.
- [68] Guttmacher Institute. *Media Kit. Worldwide Abortion: Legality, Incidence and Safety*. <http://www.guttmacher.org/media/presskits/abortion-WW/statsandfacts.html>. Accessed June 15, 2013.
- [69] Ipas. *Report on successes in achieving UN Global Strategy for Women's and Children's Health—September 2012*. [http://www.who.int/woman\\_child\\_accountability/ierg/reports/2012\\_105\\_Ipas\\_submission\\_forIERGreport\\_1May2012.pdf](http://www.who.int/woman_child_accountability/ierg/reports/2012_105_Ipas_submission_forIERGreport_1May2012.pdf). Published 2012. Accessed June 15, 2013.
- [70] Sangonet. *Unsafe Abortion in South Africa: A Preventable Pandemic*. <http://www.ngopulse.org/blogs/unsafe-abortion-south-africa-preventable-pandemic>. Published July 2012. Accessed May 8, 2013.
- [71] Republic of South Africa. *Saving Mothers: Short*. <http://www.doh.gov.za/docs/reports/2012/savingmothersshort.pdf>. Published 2012.
- [72] Poongothai J. Genetics of human male infertility. *Singapore Med J* 2009;50(4):337.
- [73] WHO. *Mother or nothing: The agony of fertility*. *Bull World Health Organ* 2010;88(12):877–953.
- [74] WHO. *Genomic Resource Centre. Gender and Genetics. Assisted Reproductive Technologies (ARTs)*. <http://www.who.int/genomics/gender/en/index6.html>. Accessed October 23, 2013.
- [75] Inhorn M. Global infertility and the globalization of new reproductive technologies: illustrations from Egypt. *Soc Sci Med* 2003;56(9):1837–51.
- [76] Chambers GM, Sullivan EA, Ishihara O, Chapman MG, Adamson GD. The economic impact of assisted reproductive technology: a review of selected developed countries. *Fertil Steril* 2009;91(6):2281–94.
- [77] Chambers GM. The costs and consequences of assisted reproductive technology: an economic perspective. *Hum Reprod Update* 2010;6(6):603–13.
- [78] Chavkin W. *The Old Meets the New: Religion and assisted reproductive technologies*. *Development* 2006;49(4):78–83.
- [79] Giubellino G. *I Would Not Freeze My Children*. *Clarín*. <http://edant.clarin.com/diario/2005/07/26/sociedad/s-03101.htm>. Published July 26, 2005.
- [80] Turone, F. Italian court upholds couple's demands for preimplantation genetic diagnosis. *BMJ* 2007;335(7622):687.

- [81] United Nations. Department of Economic and Social Affairs. Population Division. World Contraceptive Use 2011, Wall Chart, Front Side. <http://www.un.org/esa/population/publications/contraceptive2011/contraceptive2011.htm>. Accessed May 8, 2013.
- [82] Creanga AA, Gillespie D, Karklins S, Tsui AO. Low use of contraception among poor women in Africa: an equity issue. *Bull World Health Organ* 2011;89(4):258–66.
- [83] Center for Reproductive Rights. Over 700,000 Petitioners Demand Honduran Congress Reject Law Criminalizing Emergency Contraception. <http://reproductiverights.org/en/press-room/over-700000-petitioners-demand-honduran-congress-reject-law-criminalizing-emergency-contr>. Published May 16, 2012.
- [84] WHO. Emergency Contraception Pills. . . Too Expensive? [http://www.who.int/reproductivehealth/topics/family\\_planning/ec/en/index.html](http://www.who.int/reproductivehealth/topics/family_planning/ec/en/index.html). Accessed October 23, 2013.
- [85] Pieklo J. Care2. Oklahoma Rape Victim Turned Away from Hospital. <http://www.care2.com/causes/oklahoma-rape-victim-turned-away-from-hospital.html>. Published 2012. Accessed June 15, 2013.
- [86] Spiegel Online. Cologne Archbishop Meisner approves “morning after” pill for rape victims. <http://www.spiegel.de/panorama/gesellschaft/koelner-erzbischof-meisner-billigt-pille-danach-fuer-vergewaltigungsopfer-a-880814.html>. Published January 31, 2013. Accessed June 15, 2013.
- [87] Murray H, Baakdah H, Bardell T, Tulandi T. Diagnosis and treatment of ectopic pregnancy. *CMAJ* 2005;173(8):905.
- [88] Togas T. Incidence, risk factors, and pathology of ectopic pregnancy. <http://www.uptodate.com/contents/incidence-risk-factors-and-pathology-of-ectopic-pregnancy>. Accessed February 23, 2012.
- [89] Sivalingam VN, Duncan WC, Kirk E, Shephard LA, Home AW. Diagnosis and management of ectopic pregnancy. *J Fam Plann Reprod Health Care* 2011;37(4):231–40.
- [90] American Pregnancy Association. Promoting Pregnancy Wellness. Miscarriage. <http://americanpregnancy.org/pregnancycomplications/miscarriage.html>. Accessed February 23, 2012.
- [91] Berer M. Termination of pregnancy as emergency obstetric care: the interpretation of Catholic health policy and the consequences for pregnant women: An analysis of the death of Savita Halappanavar in Ireland and similar cases. *RHM* 2013;21(41):9–17.
- [92] Case of Z v. Poland. Application no. 46132/08. Judgment (Merits and Just Satisfaction). [http://hudoc.echr.coe.int/sites/eng-press/pages/search.aspx?i=001-114521#{"itemid":\["001-114521"\]](http://hudoc.echr.coe.int/sites/eng-press/pages/search.aspx?i=001-114521#{). Published 2012. Accessed June 15, 2013.
- [93] Harvard University. David Rockefeller Center for Latin American Studies. Remobilization, Demobilization, and Incarceration: Women and Abortion in Post-war El Salvador. <http://www.drclas.harvard.edu/node/853>. Accessed October 23, 2013.
- [94] Mollmann M. Over Their Dead Bodies—Denial of Access to Emergency Obstetric Care and Therapeutic Abortion in Nicaragua. *Human Rights Watch* 2007;19(2)(B). <http://womenshealthnews.blogspot.com/2006/04/women-of-el-salvador.html>. Published 2009. Accessed June 8, 2013.
- [95] Skotko B. Mothers of children with Down syndrome reflect on their postnatal support. *Pediatrics* 2005;115(1):64–77.
- [96] Hoehn KS, Wernovsky G, Rychik J, Tian ZY, Donaghue D, Gaynor JW, et al. Parental decision-making in congenital heart disease. *Cardiol Young* 2004;14(2004):309–14.
- [97] R.R. v. Poland, No. 27617/04 ECHR. (2011).
- [98] UN Human Rights Committee. General Comment 22, Article 18: The Right to Freedom of Thought, Conscience and Religion. A/48/40 vol. I (1993), para. 11.2.
- [99] UN Committee on the Elimination of Discrimination against Women. General Recommendation 24: Article 12 of the Convention (women and health) (20th Sess., 1999), para.11. <http://www.un.org/womenwatch/daw/cedaw/recommendations/recomm.htm#recom24>. Accessed February 23, 2012.
- [100] UN Committee on the Elimination of Discrimination against Women. Concluding Observations, Croatia, UN Doc. A/53/38 (1998), paras. 109, 117.
- [101] UN Committee on the Elimination of Discrimination against Women. Concluding Observations. Italy. UN Doc. A/52/38 Rev.1, Part II (1997), paras. 353, 360.
- [102] UN Committee on the Elimination of Discrimination against Women. Concluding Observations. South Africa. UN Doc. A/53/38/Rev.1 (1998), para. 113.
- [103] UN. Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Anand Grover—Mission to Poland, 20 May 2010, UN Doc. A/HRC/14/20/Add.3.
- [104] CESCR Committee. Concluding Observations. Poland. UN Doc. E/C.12/POL/CO/5 (2009), para. 28.
- [105] WHO. Safe abortion: technical and policy guidance for health systems. Second edition. [http://apps.who.int/iris/bitstream/10665/70914/1/9789241548434\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/70914/1/9789241548434_eng.pdf). Published 2012. Accessed June 8, 2013.
- [106] Ley Orgánica 2/2010, de 3 de marzo, de Salud Sexual y Reproductiva y de la Interrupción Voluntaria del Embarazo. [Law of Sexual and Reproductive Health and Abortion] (2010), Arts.17(4) and 14(a) (Spain).
- [107] Law C-355 of 2006 (Colombia).
- [108] Choice of Termination of Pregnancy Act 1996 (South Africa).
- [109] Regulation to National Law No. 25.673, Art.10 (Argentina). Ministerio de Salud de la Nación [National Health Ministry]. Guía Técnica para la Atención Integral de los Abortos No Punibles [Technical Guide for Comprehensive Care for Legal Abortions] (2010) (Argentina).
- [110] National Law No. 26.130, Art.6 (Argentina).
- [111] Código de Ética Médica [Ethical Medical Code], Chapter 5. (Uruguay). <http://www.smu.org.uy/elsmu/institucion/documentos/doc/cem.html#cap5>. Accessed February 23, 2013.
- [112] Vique AB, Cabrera OA, Lugo FG, Hevia M. Women and Health in Uruguay. The Uruguayan Executive Veto for the Decriminalization of Abortion: Deconstructing the fundamentals. Notebooks: Contributions to the debate on health, citizenship and right. 2010; Epoca 1 (1). <http://www.archivos.hacelosvaler.org/Cuaderno%201%20Final.pdf>. Published 2010. Accessed February 23, 2012.
- [113] Public Health Service Act (1973) (United States).
- [114] Sonfeld A. Guttmacher Institute. Delineating the Obligations That Come with Conscientious Refusal: A Question of Balance. *Guttmacher Policy Review* 2009;12(30). <http://www.guttmacher.org/pubs/gpr/12/3/gpr120306.html>.
- [115] Regulations for the Implementation of the Act dated 13 June 1995 no. 50 concerning Termination of 31 Pregnancy, with Amendments in the Act dated 16 June 1978, no. 66, §20 (Norway).
- [116] Constitutional Court Decision, T-209 of 2008 (Colombia). <http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=30206>. Published February 28, 2008.
- [117] Judgment of the Bavarian Higher Administrative Court of 03/07/1990, BayVGH DVBl. 1990, 880–82 41 (Federal Republic of Germany).
- [118] Judgment of the Federal Administrative Court of 12/13/1991, BVerwGE 89, 260–70 (Federal Republic of Germany).
- [119] P. and S. v. Poland, Application no. 57375/08, Decision, October 30, 2012. [http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-114098#{"itemid%22%2001-114098%22"}](http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-114098#{). Accessed February 23, 2012.
- [120] Code de la Santé Publique, arts. L2212-8, R4127-18 32 (France).
- [121] Abortion Law Reform Act, Sec. 8 (Australia, Victoria).
- [122] Constitutional Court Decision, T-388 of 2009 (Colombia).
- [123] Colombia. Ministry of Social Protection. Governmental Decree 4444 of 2006, article 6. [http://www.womenslinkworldwide.org/pdf\\_programs/es\\_prog\\_rr\\_col\\_legaldocs\\_decreto4444.pdf](http://www.womenslinkworldwide.org/pdf_programs/es_prog_rr_col_legaldocs_decreto4444.pdf). Accessed July 19, 2012.
- [124] Law No. 194 of 22 May 1978 on the social protection of motherhood and the voluntary termination of pregnancy, Gazz. Uff., Part I, 22 May 1978, No. 140, 3642–46 (Italy). [http://www.columbia.edu/itc/history/degrazia/courseworks/legge\\_194.pdf](http://www.columbia.edu/itc/history/degrazia/courseworks/legge_194.pdf). Accessed February 23, 2012.
- [125] American Congress of Obstetricians and Gynecologists. ACOG Committee Opinion. The Limits of Conscientious Refusal in Reproductive Medicine 2007; Opinion Number 385. [http://www.acog.org/Resources\\_And\\_Publications/Committee\\_Opinions/Committee\\_on\\_Ethics/The\\_Limits\\_of\\_Conscientious\\_Refusal\\_in\\_Reproductive\\_Medicine](http://www.acog.org/Resources_And_Publications/Committee_Opinions/Committee_on_Ethics/The_Limits_of_Conscientious_Refusal_in_Reproductive_Medicine). Accessed August 27, 2013.
- [126] El Sindicato Médico del Uruguay [Medical Association of Uruguay]. Chap 5, Art. 37 (Uruguay). <http://www.smu.org.uy/publicaciones/libros/laetica/cem.htm#cap5>. Accessed August 20, 2013.
- [127] British Medical Association. Ethics Department. The Law and Ethics of Abortion: BMA Views. November 2007.
- [128] World Medical Association. World Medical Association Declaration on Therapeutic Abortion. <http://www.wma.net/e/policy/a1.htm>. Published 2006.
- [129] American Society of Health-System Pharmacists, Council on Legal and Public Affairs. ASHP Statement: Pharmacist’s Right of Conscience and Patient’s Right of Access to Therapy (0610). 2010.
- [130] Anderson RM, Bishop LJ, Darragh M, Gray H, Nolen A, Poland SC, et al. National Reference Center for Bioethics Literature. The Joseph and Rose Kennedy Institute of Ethics. Pharmacists and Conscientious Objection. <http://bioethics.georgetown.edu/publications/scopenotes/sn46.pdf>. Accessed August 27, 2013.
- [131] General Pharmaceutical Council. Standards of conduct, ethics and performance. July 2012.
- [132] Decree No. 98-945 of 4 December 1998, setting forth the Code of Medical Ethics (Madagascar).
- [133] National Association of Pharmacy Regulatory Authorities. Model Statement Regarding Pharmacists’ Refusal to Provide Products or Services for Moral or Religious Reasons. <http://www.nbpharmacists.ca/LinkClick.aspx?fileticket=wxc0ugUqRRE%3D&tabid=261&mid=695>. Published 1999.
- [134] Code of Ethics for Nurses in Australia, developed under the auspices of Australian Nursing and Midwifery Council, Royal College of Nursing, Australia, Australian Nursing Federation. 2008.
- [135] Guidance on the Termination of Pregnancy: The Law and Clinical Practice in Northern Ireland, 16 July 2008, the Department of Health, Social Services and Public Safety.
- [136] Código Deontológico da Ordem dos Médicos [Code of Ethics of the Association of Doctors] (2008), Art. 37 (Portugal); 39 Lei No. [Law No.] 16/2007 de 17 de abril, Exclusão da ilicitudenos casos de interrupção voluntária da gravidez [Exclusion of cases of voluntary interruption of pregnancy] 40 (Portugal).

- [137] Health Service Guidance HSG (94)39 (US).
- [138] Abortion Act 1967 (England) (Section 4(1) of the 1967 Act permits that "no person shall be under any duty, whether by contractor by any statutory or other legal requirement, to participate in any treatment ... to which he has a conscientious objection." This does not apply to emergency procedures.).
- [139] Enright and another v. Kwun and Another, [2003] E.W.H.C. 1000 (Q.B.).
- [140] Decree reforming Articles 145 and 148 of the new Penal Code of Mexico City and adding Articles 16 bis 6 and 16 bis 7 to the Health Law of Mexico City, reported in Official Gazette of Mexico City, 14, no. 7, 24 January 2004, pp. 6-7 (Mexico).
- [141] Health Services Act, Art. 56, Official Gazette of the Rep. of Slovenia 36, No. 9, enacted 1992 (Slovenia).
- [142] *Wilmington General Hospital v. Manlove*, 174 A2d 135 (Del SC 1961) (US).
- [143] Nursing and Midwifery Council, The Code of Conduct, Professional standards for nurses and midwives (UK).
- [144] National Law on Medical Practice, Dentistry, and Auxiliary Practices, Law 17.132 (Argentina).
- [145] *Janaway v. Salford Health Authority*, 1988 (UK).
- [146] Brahams D. Conscientious Objection and Referral Letter for Abortion. *Lancet* 1988;331(8590):893.
- [147] 73 Fed. Reg. 78071 (December 19, 2008). 45 CFR Part 88 (2008).
- [148] Galston WA, Rogers M. Brookings Institute. Governance Studies at Brookings. Health Care Providers' Consciences and Patients' Needs: The Quest for Balance. [http://www.brookings.edu/~media/research/files/papers/2012/2/23%20health%20care%20galston%20rogers/0223\\_health\\_care\\_galston\\_rogers.pdf](http://www.brookings.edu/~media/research/files/papers/2012/2/23%20health%20care%20galston%20rogers/0223_health_care_galston_rogers.pdf). Published February 23, 2012.
- [149] Office of the Secretary of Health and Human Services. Final Rule, Regulation for the Enforcement of Federal Health Care Provider Conscience Protection Laws. <http://www.gpo.gov/fdsys/pkg/FR-2011-02-23/pdf/2011-3993.pdf>. Published February 23, 2011.

# **Exhibit E**

to Sangree Declaration

*Original Investigation*

Return on Investment: A Fuller Assessment  
of the Benefits and Cost Savings of the US  
Publicly Funded Family Planning Program

JENNIFER J. FROST, ADAM SONFIELD,  
MIA R. ZOLNA, and LAWRENCE B. FINER

*Guttmacher Institute*

**Policy Points:**

- The US publicly supported family planning effort serves millions of women and men each year, and this analysis provides new estimates of its positive impact on a wide range of health outcomes and its net savings to the government.
- The public investment in family planning programs and providers not only helps women and couples avoid unintended pregnancy and abortion, but also helps many thousands avoid cervical cancer, HIV and other sexually transmitted infections, infertility, and preterm and low birth weight births.
- This investment resulted in net government savings of \$13.6 billion in 2010, or \$7.09 for every public dollar spent.

**Context:** Each year the United States' publicly supported family planning program serves millions of low-income women. Although the health impact and public-sector savings associated with this program's services extend well beyond preventing unintended pregnancy, they never have been fully quantified.

**Methods:** Drawing on an array of survey data and published parameters, we estimated the direct national-level and state-level health benefits that accrued from providing contraceptives, tests for the human immunodeficiency virus (HIV) and other sexually transmitted infections (STIs), Pap tests and tests for

The Milbank Quarterly, Vol. 92, No. 4, 2014 (pp. 667-720)

© 2014 The Authors The Milbank Quarterly published by Wiley Periodicals, Inc. on behalf of The Milbank Memorial Fund

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

human papillomavirus (HPV), and HPV vaccinations at publicly supported family planning settings in 2010. We estimated the public cost savings attributable to these services and compared those with the cost of publicly funded family planning services in 2010 to find the net public-sector savings. We adjusted our estimates of the cost savings for unplanned births to exclude some mistimed births that would remain publicly funded if they had occurred later and to include the medical costs for births through age 5 of the child.

**Findings:** In 2010, care provided during publicly supported family planning visits averted an estimated 2.2 million unintended pregnancies, including 287,500 closely spaced and 164,190 preterm or low birth weight (LBW) births, 99,100 cases of chlamydia, 16,240 cases of gonorrhea, 410 cases of HIV, and 13,170 cases of pelvic inflammatory disease that would have led to 1,130 ectopic pregnancies and 2,210 cases of infertility. Pap and HPV tests and HPV vaccinations prevented an estimated 3,680 cases of cervical cancer and 2,110 cervical cancer deaths; HPV vaccination also prevented 9,000 cases of abnormal sequelae and precancerous lesions. Services provided at health centers supported by the Title X national family planning program accounted for more than half of these benefits. The gross public savings attributed to these services totaled approximately \$15.8 billion—\$15.7 billion from preventing unplanned births, \$123 million from STI/HIV testing, and \$23 million from Pap and HPV testing and vaccines. Subtracting \$2.2 billion in program costs from gross savings resulted in net public-sector savings of \$13.6 billion.

**Conclusions:** Public expenditures for the US family planning program not only prevented unintended pregnancies but also reduced the incidence and impact of preterm and LBW births, STIs, infertility, and cervical cancer. This investment saved the government billions of public dollars, equivalent to an estimated taxpayer savings of \$7.09 for every public dollar spent.

**Keywords:** family planning services, cost-benefit analysis, contraception, financing.

**I**N THE UNITED STATES, HALF OF ALL PREGNANCIES ARE unintended, and unintended pregnancy is highly concentrated among low-income women.<sup>1</sup> In response to this disparity, the federal and state governments have worked for decades to expand access to family planning services for young and low-income women and men, channeling public funds for family planning services primarily through 2 programs. Title X of the Public Health Service Act, enacted by Congress in 1970, is the sole federal program devoted entirely to family planning. Medicaid is a joint federal-state public health insurance program, which provides the vast majority of public family planning dollars and covers

millions of women and men of reproductive age. Since the mid-1990s, to further increase access to family planning services for low-income women not eligible for full-benefit Medicaid, 30 states have expanded eligibility under Medicaid specifically for family planning services.<sup>2</sup>

Decades of research have documented the reach and impact of publicly supported family planning services in the United States. Recently, Frost and colleagues found that 8.9 million poor and low-income women received publicly supported contraceptive services in 2010.<sup>3</sup> Such services helped women prevent an estimated 2.2 million unintended pregnancies that year, of which 1.1 million would have resulted in an unplanned birth, 760,000 in an abortion, and 360,000 in a miscarriage. Moreover, publicly funded family planning services resulted in an estimated net public savings of \$10.5 billion in 2010.

Although compelling, these findings capture only a portion of the total health impact of and savings generated by public efforts. The analysis by Frost and colleagues and similar previous analyses by Guttmacher Institute researchers<sup>4-8</sup> were limited to the numbers of unintended pregnancies, abortions, and unplanned births averted by clients' increased contraceptive use. They also were limited to a portion of the public savings from averting unplanned births that would have been funded by Medicaid, including only prenatal care, labor and delivery, postpartum care, and 12 months of infant care. Other studies of the benefits and cost savings from publicly funded family planning services went beyond those by Guttmacher in several ways, such as accounting for the medical costs of care for up to 5 years of a child's life, estimating public savings from averted miscarriages and abortions, and including costs for social services for infants and young children.<sup>9-12</sup>

A sizable body of literature indicates that the health impact and public-sector savings of publicly supported family planning services in the United States extend well beyond the impact of preventing unintended pregnancies.<sup>13</sup> Research indicates that by enabling women and couples to plan, delay, and space pregnancies, contraception is linked to improved maternal and child health outcomes.<sup>13-15</sup> Appropriate pregnancy spacing is linked to better birth outcomes, including the reduced likelihood of babies born prematurely, at a low birth weight (LBW), or small for their gestational age.<sup>16,17</sup>

Moreover, the package of care delivered as part of a publicly supported family planning visit extends well beyond contraception. Clients routinely receive screenings for sexually transmitted infections (STIs), such

as chlamydia, gonorrhea, syphilis, and HIV; cervical cancer prevention services, including Pap tests, and testing and vaccination for human papillomavirus (HPV); breast exams for early detection of breast cancer; and screenings for a variety of other health conditions and risks, such as diabetes, high blood pressure, and intimate partner violence. Screening services can lead to early detection, preventive behavior change, and prompt treatment. Some forms of treatment, such as for chlamydia and gonorrhea, are routinely provided on-site; others are facilitated through referrals to specialists. This broader package of preventive services has taken on heightened importance in recent years as policymakers, health care experts, providers, and insurers all have emphasized the importance of prevention, and indeed, the Affordable Care Act, which was enacted in March 2010, requires most private health plans to cover most of these preventive services without any out-of-pocket costs to enrollees. The impact on health and the cost savings of many of the individual preventive services delivered as part of a publicly supported family planning visit have been studied independently; for example, numerous studies have explored the benefits and costs of various HIV prevention strategies, including routine HIV screening.<sup>18-22</sup> But no study has looked at these services together in the context of what care is delivered to publicly supported family planning clients in the United States.

The analysis presented in this article expands on both Frost and colleagues' research<sup>3</sup> and earlier research at Guttmacher<sup>4-8</sup> on the benefits and cost savings of publicly funded family planning services. First, we estimated the direct health benefits and cost savings from several services delivered during a publicly funded family planning visit: testing and treatment for chlamydia and gonorrhea, HIV testing, Pap and HPV testing, and HPV vaccination. Second, we estimated the numbers of averted unplanned births that would have been preterm or LBW and that would have been closely spaced (<18 months interpregnancy interval). Third, in line with other recent cost-benefit studies,<sup>9,10,12</sup> we estimated the public savings from averted unplanned births to include the costs of medical care for children aged 13 to 60 months, factored in the medical costs from averted miscarriages and abortions, and re-adjusted to account for some averted births that were simply delayed and would not have contributed to public savings over the 5-year period. We concluded with a unified estimate of cost savings from publicly supported family planning care by combining the findings by Frost and colleagues<sup>3</sup> with those from this analysis.

## Methods

### *Overall Approach*

In this article, publicly supported providers refer to all health centers that offer publicly funded family planning services, such as health departments, federally qualified health centers, Planned Parenthood affiliates, and hospital outpatient clinics, as well as private doctors who provide family planning services to Medicaid recipients. We followed a similar pattern for each of the specific services covered by this analysis. First, we estimated the number of individuals who received that particular service from publicly supported providers in 2010; for some services (specifically, chlamydia, gonorrhea and HIV testing), we included male clients as well as female clients. Next we calculated how many individuals obtained a direct health benefit from that service that they would not have obtained in the absence of publicly funded care. This usually required comparing the health outcomes for individuals who received services with the anticipated health outcomes for individuals in a counterfactual situation for whom publicly funded services were not available. We assumed that the latter clients would shift to a less effective mix of methods or that some would delay obtaining noncontraceptive preventive services (the specific assumptions for each service are described later). We then calculated the cost of providing care for the medical conditions that would have ensued had family planning services not been available. We refined that calculation further by estimating how much of those savings would have been public savings.

We summed the public savings resulting from each specific service provided to obtain the total amount of public cost savings. We then compared this total with the total public cost of providing publicly funded family planning and related sexual and reproductive health services in 2010, previously estimated at \$2.2 billion.<sup>3</sup> (Note that the cost estimates used here for the family planning program differ slightly from those in an earlier report based on different data.<sup>23</sup> For this report, we derived family planning program cost estimates from Title X revenue data in order to apportion the expenditures by provider categories at the state level.) These total public costs already included the costs of providing all the various services studied in this article (ie, contraceptive method provision; STI, Pap, and HPV testing; and HPV vaccination); therefore, no additional costs for noncontraceptive services were factored

into the analysis. Table 1 summarizes the specific services examined, health benefits measured, and public costs averted.

*State and National Estimates.* When possible, the analyses were carried out at the state level and then summed to produce national totals. We examined data at the state and national levels for all health centers that provide family planning services and for Title X–supported health centers specifically. But as in previous analyses,<sup>3</sup> we could look at data for Medicaid-reimbursed private doctors only at the national level.

*Time Frames.* The data on services provided and actual costs were for 2010. Because many benefits of the services provided extended beyond a single year, the analysis for each specific service depended on assumptions about how many years of benefits would accrue from services provided in 2010. HIV and cancer prevention services, for example, have lifetime benefits. Because those services avert diseases that would have been identified and treated years or decades later, any analysis of their benefits must use an extended time frame. By contrast, services that prevent curable STIs have more limited, episodic benefits. They avert health consequences and treatment costs that would have occurred only a few months or years later, and they do not prevent future infections. The benefits of contraceptive care in helping women and couples avert unintended pregnancies are fundamentally different from the benefits of other services in that the averted medical costs theoretically could be extended to a child's entire life. For contraceptive services, however, we used a 5-year time frame, which has become widely accepted in the literature focusing on medical costs related to unplanned births.

*Expected Receipt of Services in the Absence of Publicly Funded Care.* We assumed that in the absence of publicly funded family planning services, many women and men who would have made a family planning visit and obtained contraceptive and related services would have been less likely to make such visits. Some women who would have used more effective contraceptive methods would instead have used less expensive over-the-counter methods or no method; this alternative method-mix scenario was based on the behavior of similar women who did not use publicly funded services but were eligible do so. Both scenarios were calculated using the 2006-2010 National Survey of Family Growth (NSFG) and form the basis for our estimates of the numbers of unintended pregnancies prevented by publicly funded contraceptive services.<sup>24</sup>

Without public funding, many women would forgo family planning visits and thus also forgo the receipt of related services, such as screening

**Table 1. Health Benefits Obtained and Public Costs Averted From Specific Services Received During Publicly Funded Family Planning Visits**

Service	Health Benefits Obtained	Public Costs Averted
Contraceptive services	<p>Unintended pregnancies are prevented, leading to:                      Fewer unplanned births and abortions;                      Fewer births with short interpregnancy intervals (IPIs); and                      Fewer preterm or LBW births.</p>	<p>Maternity and birth-related care to 60 months for all unwanted births and some mistimed births (mostly Medicaid).</p>
Chlamydia and gonorrhea testing	<p>Infections are identified and treated, leading to:                      Fewer cases of pelvic inflammatory disease (PID), epididymitis, and other sequelae (pelvic pain, ectopic pregnancy, infertility);                      Fewer infections and their sequelae transmitted to partners; and                      Fewer cases of STI-attributable HIV.</p>	<p>Care for miscarriages (including ectopic pregnancies) and abortions (mostly Medicaid).                      Treatment for PID and other sequelae (mostly Medicaid).</p>
HIV testing	<p>Clients are informed of their HIV status, thereby reducing HIV infections and sequelae in partners.</p>	<p>Treatment for HIV and AIDS (Medicaid, Ryan White, and others).</p>
Pap and HPV testing	<p>Cases of HPV and sequelae are identified, including abnormal cervical cells, precancerous lesions, and cervical cancer, thereby reducing cases that progress to cervical cancer and death.</p>	<p>Treatment for cervical cancer (mostly Medicaid and Medicare).</p>
HPV vaccination	<p>Fewer clients become infected with HPV, so fewer individuals experience its sequelae: abnormal cervical cells, precancerous lesions, cervical cancer and death, and other HPV-attributable cancers (vulvar, vaginal, anal/rectal, and oropharyngeal cancers).</p>	<p>Treatment for more severe sequelae of HPV infection, including cancers (mostly Medicaid and Medicare).</p>

for STIs and cervical cancer and HPV vaccination. We assumed that all women in our comparison group who were expected to continue to use prescription methods (13%), such as oral contraceptives or long-acting reversible methods, would also obtain these related screening and vaccination services in a timely manner. We assumed, too, that 16% of the remaining 87% of women in our comparison group who, in the absence of publicly funded services, were expected to use nonprescription methods or no method, would make a visit to obtain preventive services, including these screening and vaccination services. We based this proportion on the observed behavior of similar women in the NSFG. Accordingly, we calculated the benefits and cost savings for STI and cervical cancer screening and for HPV vaccination for only the 73% of female clients who, in the absence of publicly funded services, would likely forgo both the use of prescription methods and preventive gynecological visits for these screening and vaccination services. For male clients in the absence of publicly funded services, we assumed that 100% would forgo care.

*Data Sources.* We used various sources of data for this analysis. Our calculations of numbers of women served were based primarily on the Guttmacher Institute's 2010 Census of Publicly Funded Clinics Providing Contraceptive Services,<sup>3</sup> which counted the number of women served at all US health centers that provide publicly supported family planning services, and we estimated the number of women receiving Medicaid-funded contraceptive services from private physicians. In addition, we used data from the Family Planning Annual Report (FPAR)<sup>25</sup> produced by the federal Office of Population Affairs, which gives additional details about specific services provided to women and men served at Title X-supported facilities. Our analyses sometimes generalized the data for these facilities to all publicly supported facilities. In some cases, we used data from the Planned Parenthood Federation of America as a proxy for the larger universe of these clients,<sup>26</sup> which is reasonable given that Planned Parenthood's network of 800 centers provides services to 36% of all publicly supported family planning center clients.<sup>3</sup> Estimates of the incidence of medical conditions were drawn from either actual data for the client universe (such as the 2010 FPAR report)<sup>25</sup> or the medical and epidemiological literature. Additional estimates of clients' characteristics were based on the NSFG and the American Community Survey (ACS). Appendix Table A1 summarizes the key parameters related to this analysis.

*Discounting and Inflation.* Data on the cost of treatment for specific diseases and conditions were adjusted for inflation to 2010 dollars, using the Consumer Price Index (All Urban Consumers) for Medical Care.<sup>27</sup> Separately, for the cost of treatment that would occur years in the future, we applied a 3% annual discount, in accordance with the recommendations of the US Public Health Service Panel on Cost-Effectiveness in Health and Medicine.

*Rounding.* The incidence of most events usually was rounded to the nearest 10 or 100, although numbers less than 100 were left unrounded. The numbers of dollars saved were usually rounded to the nearest 1,000.

### *Pregnancy Spacing and Preterm/LBW Births*

A substantial body of research indicates that short interpregnancy intervals (IPIs)—often defined as less than 18 months between a birth and a subsequent pregnancy—are positively associated with babies being born prematurely, at LBW, or small for their gestational age.<sup>16,17,28,29</sup> Unintended pregnancy is strongly predictive of short IPIs, whereas contraceptive use is protective against them.<sup>30-32</sup>

To estimate the impact of the US family planning effort on women's ability to avoid short IPIs and poor infant health outcomes, we started with state-level numbers of the unplanned births averted by women's use of publicly supported family planning.<sup>3</sup> Next we analyzed data from the 2006-2010 NSFG and found that of all unplanned births to US women with incomes below 250% of the federal poverty level, 26% were conceived less than 18 months after an earlier birth.<sup>33</sup> We applied this 26% rate to the number of unplanned births averted in 2010 to arrive at state-level estimates of the number of short IPI births averted through publicly supported family planning services.

Using vital statistics data from the Centers for Disease Control and Prevention (CDC) for 2008, we tabulated the proportion of total births in each state that were preterm, LBW, or both.<sup>34</sup> We then applied these rates to the numbers of unplanned births averted in 2010 to arrive at state-level estimates of the number of preterm or LBW births averted through publicly supported family planning services.

Frost and colleagues' 2010 estimates of the costs and cost savings from publicly supported family planning services already included the costs of contraceptive services.<sup>3</sup> Moreover, the public-sector cost savings from

averted unplanned births that they had calculated were based on the average cost of Medicaid-funded maternity and infant care, including care for preterm and LBW births. Therefore, we factored no additional costs or savings into this analysis.

### *Chlamydia and Gonorrhea Testing*

Screening for STIs, including chlamydia and gonorrhea, is an integral component of reproductive health services that is offered at 97% of publicly funded sites that provide family planning.<sup>35</sup> The costs of STIs in the United States—for both health consequences and economic burden—have been well documented,<sup>13,36</sup> although the impact that STI testing and treatment during publicly funded family planning visits have had on reducing those consequences has not been calculated. Chlamydia and gonorrhea are two of the most common STIs in the United States, with an estimated 2.9 million new chlamydia infections and 820,000 new gonorrhea infections each year.<sup>37</sup> Untreated, such infections can lead to a host of adverse health outcomes, including PID, infertility, ectopic pregnancy, and chronic pelvic pain in women and epididymitis in men.<sup>38,39</sup>

We estimated the direct medical benefits from testing for chlamydia and gonorrhea during family planning visits by first figuring the proportion of public clients who received positive test results for each STI during family planning visits. We applied these proportions to the numbers of women and men who would be expected to forgo family planning visits and related STI testing in the absence of publicly funded services (73% of current female clients and 100% of current male clients).

To estimate the proportion of female clients positive for each STI, we began with the reported number of female clients tested for chlamydia at a Title X-funded health center in 2010, by age (<20, 20-24, ≥25) and state, and the total number of gonorrhea tests performed on female clients that year by state (counting tests, even if the same woman received more than 1 test during the year).<sup>25</sup> We calculated the number of female clients tested for gonorrhea in each state as 96% of the number of tests conducted on the basis of the national ratio of female clients receiving chlamydia tests to total gonorrhea tests performed on female clients. We multiplied the number of women who received each test by age- and state-specific chlamydia positivity rates and state-specific gonorrhea

positivity rates reported for women attending family planning clinics<sup>40</sup> through the CDC's infertility prevention project to estimate the number and percentage of female Title X clients with a positive chlamydia or gonorrhea result in 2010.

These percentages were then applied to state-level data on the number of all female contraceptive clients served at publicly funded health centers in 2010 (both Title X and non–Title X) and to national-level data on the number of female Medicaid recipients who received contraceptive services from private physicians that year.<sup>3</sup>

For men, we followed similar steps, beginning with the reported state-level numbers of male clients tested for chlamydia during a family planning visit at a Title X–funded health center in 2010 and the numbers of gonorrhea tests performed on male clients. We multiplied the number of men receiving each test by state-specific positivity rates for chlamydia and gonorrhea reported for men aged 16 to 24 entering the national job-training program<sup>41</sup> to estimate the number of male Title X clients with a positive chlamydia or gonorrhea result in 2010. We determined the numbers of male clients tested in non–Title X health centers by assuming that the same ratio of males tested to female clients found at Title X centers would apply in non–Title X centers and that the same proportion of positive test results would apply in both types of centers. We did not estimate any male clients served or tested for STIs by private doctors, because we had no data on the numbers of male Medicaid recipients making family planning visits to private doctors.

We assumed that 96.5% of both female and male clients testing positive for chlamydia or gonorrhea would receive treatment.<sup>42</sup> Following published formulas for estimating costs averted by STI prevention programs developed by Chesson, Owusu-Edusei, and others,<sup>43-46</sup> we assumed that the likelihood that treated women would develop PID would be reduced from 15% to 0% of symptomatic positive cases and from 15% to 7.5% of asymptomatic positive cases. We also assumed that the likelihood that men would develop epididymitis would be reduced from 2% to 0% in all cases. Recent evidence indicates that treatment is less effective for women with asymptomatic chlamydia or gonorrhea, as their infections may already have progressed to PID before treatment.<sup>47</sup> We assumed that 31% of women testing positive for chlamydia or gonorrhea would be symptomatic.<sup>39</sup> Following Chesson and colleagues, we adjusted our estimates of the impact of chlamydia treatment to account

for possible coinfection with gonorrhea (multiplying by 0.925 for both men and women). We also adjusted our estimates of the impact of gonorrhea treatment to account for possible coinfection with chlamydia (multiplying by 0.79 for women and 0.90 for men) and for possible reinfection within 1 year (multiplying by 0.70). We used updated estimates of the lifetime direct medical cost per case of untreated PID (\$3,202) and epididymitis (\$313).<sup>46,48</sup>

In addition to the direct medical benefits of testing, we also estimated the benefits from the reduced transmission of chlamydia and gonorrhea in the population, using published formulas that assume that each infection treated (in both women and men) will result in 0.5 fewer cases in the population.<sup>44</sup> For this, we relied on published estimates of the average cost per STI case. The cost per case of chlamydia (\$197) was calculated by averaging the cost per case for women (\$364) and for men (\$30)<sup>46</sup> and was applied to the estimated number of prevented infections. The average lifetime cost per case of gonorrhea was calculated at \$217, again by averaging the cost per case for women (\$354) and for men (\$79).<sup>46</sup>

Finally, we estimated the number of HIV infections prevented by treating individuals infected with chlamydia or gonorrhea before they contracted an STI-attributable HIV infection. We used published formulas assuming that the average numbers of new HIV cases attributable to a new case of chlamydia and gonorrhea are 0.0011 and 0.0007, respectively, and that the treatment of these infections would reduce by one-fourth (multiplying by 0.25) the time frame in which an STI-attributable HIV transmission is possible; and we adjusted for any overlap in the sex-partners of those clients being treated (multiplying by 0.75).<sup>44</sup>

To calculate the percentage of averted costs that would have been paid from public sources (primarily Medicaid) for both chlamydia and gonorrhea treatment, we first distributed the averted costs according to the percentage of Title X clients in 2 income groups (<100% or 100% to 249% of the federal poverty level). We then used data from the 2008-2010 ACS to determine the percentage of women aged 15 to 44 enrolled in Medicaid or other public programs (eg, Medicare or Indian Health Service) for each of those 2 income groups<sup>49</sup> and applied those percentages to the averted costs. Nationally, an estimated one-third of the averted costs for chlamydia and gonorrhea sequelae were public.

### *HIV Testing*

HIV testing is often provided during family planning visits and is offered at 92% of health centers that provide publicly supported family planning services.<sup>35</sup> It is a preventive care service for partners of individuals who learn they are HIV positive, because it leads to less risky behavior after a positive test result and reduced infectivity (via earlier entry into treatment for people living with HIV),<sup>13</sup> both of which significantly decrease transmission.

We started with state-level data specific to Title X–supported family planning centers<sup>25</sup> on the numbers of HIV tests performed on each female and male contraceptive client, and on the numbers of positive HIV tests for all those tested. Because the number of positive HIV tests each year was small, we combined data from 2010, 2011, and 2012<sup>50,51</sup> to calculate positivity ratios. Then we adjusted these state-level rates by sex, using data on HIV testing in health care settings from the CDC. The positivity rate for males between 2008 and 2010 (the most recent 3 years available) was 3.33 times that for females.<sup>52,53</sup>

Next, we applied the HIV testing rates and positivity rates to state-level estimates of female clients at publicly funded health centers in 2010 (both Title X and non–Title X) and to national-level estimates of female Medicaid recipients who received contraceptive services from private physicians that year.<sup>3</sup> We also applied them to state-level estimates of male health center clients, assuming that the same ratio of male to female clients found at Title X centers would apply in non–Title X centers; we did not estimate any male clients served by private doctors. We then adjusted these numbers to apply only to those women and men who would be expected to forgo contraceptive and related STI services in the absence of publicly funded care (73% of current female clients in each provider setting and 100% of male clients). We further adjusted the number of positive test results by multiplying the totals for each state by 0.63 to account for individuals who already knew they were HIV positive or did not return for their test results; the adjustment was based on an estimate from Holtgrave.<sup>20</sup>

To estimate the impact of the positive test results, we applied a rate of 7.8 transmissions averted per year per 100 persons newly aware of their serostatus, based on an estimate from Hall and colleagues accounting for the reduction of risky behavior and of infectivity after receiving treatment.<sup>19</sup> The preventive effects of learning about one’s serostatus do

not last for merely 1 year, however. In their study of a publicly funded HIV testing program, Hutchinson and colleagues assumed that in the absence of that testing program, patients would receive an HIV test from another source an average of 3 years later.<sup>22</sup> We applied that assumption to our own estimates for testing received through publicly funded family planning by multiplying the annual number of HIV infections averted by 3.

To estimate the public-sector cost savings from averted HIV infections, we started with an estimate of the total lifetime medical costs associated with HIV. Farnham and colleagues reported a cost of \$330,000 in 2011 dollars, discounted by 3% annually to the year of infection.<sup>18</sup> We applied that figure to the state-level numbers of HIV cases averted to arrive at the total cost to society. Finally, we applied to those state-level savings Holtgrave and colleagues' estimation that 75% of HIV treatment costs nationally are paid for with public dollars.<sup>21</sup>

### *Cervical Cancer Testing and Prevention*

Although the incidence and mortality of cervical cancer have declined in recent years, more than 12,000 women were diagnosed with the disease in 2009, and about 4,000 died from the disease that year.<sup>54</sup> The direct annual health care costs for screening, treating, and managing abnormalities related to cervical cancer and cervical dysplasia in the United States are estimated to be as high as \$4.6 billion.<sup>55</sup> Because family planning providers play an important role in identifying and reducing the risk of cervical cancer, in this analysis, we examined 2 related forms of care: Pap and HPV testing, and HPV vaccination.

*Pap and HPV Testing.* For decades, Pap tests have been used to identify abnormal cervical cells, facilitating early and effective treatment. Now it is common practice to "co-test" with an HPV test to detect for viral strains associated with cervical cancer. Our analysis determined the direct medical benefits and cost savings that accrue from cervical cancer testing of publicly supported clients. The conceptual premise for these benefits is that testing enables the early identification of HPV-attributable abnormal cells, precancer, and cervical cancer and thus the early (and less costly) treatment and prevention of more serious diagnoses and death.

To calculate these benefits, we began by determining the number of publicly supported clients receiving a Pap test. We used the proportion of unduplicated clients who received a Pap test at a Title X–supported health center in 2010<sup>25</sup> as a proxy for all public clients. We determined the ratio of women tested to all women served at the state level and then applied, by state, that ratio to the total number of public clients served at Title X and non-Title X health centers, who would be expected to forgo services in the absence of publicly funded care (73% of current clients). We also applied the national-level ratio to the number of female Medicaid recipients receiving family planning services from private providers.<sup>3</sup> Thirty-one percent of all clients were tested for cervical cancer and its precursors.

The next step was to calculate the number of cervical cancer cases and deaths averted by testing. We used data from Mandelblatt and colleagues<sup>56</sup> on the number of cases and deaths that would occur without testing and under various testing scenarios, including Pap testing only and both Pap and HPV testing, in which women are tested every 3 years from ages 20 to 65 and receive a maximum of 16 tests. By comparing the testing scenarios with the no-testing scenario, we were able to determine the number of cases averted in each scenario. These scenarios were chosen because of their similarity to the testing recommendations that were current at the time of this analysis.

We thus were able to produce ratios of cancer cases averted (148 cases per 100,000 women for Pap testing only and 165 for Pap and HPV testing) and deaths averted (87 per 100,000 women for Pap testing only and 94 for Pap and HPV testing) for 1 year of testing. We applied these ratios to the proportions of all publicly funded clients who would have received the Pap-only testing regimen and the co-testing regimen (59% and 41%, respectively, based on information from the 2010 Survey of Clinics Providing Contraceptive Services<sup>35,57</sup>) to get the number of cancer cases and deaths averted. To calculate the cost savings from these tests, we multiplied the number of cancer cases averted by the per-case cost to treat cervical cancer. Costs were calculated from Chesson and colleagues<sup>58</sup> (\$38,800) and discounted at 3% per year to account for the average number of years between testing<sup>59</sup> and cervical cancer diagnosis (23),<sup>60</sup> which resulted in a final discounted 2010 per-case cost of \$19,692.

Finally, we determined the proportion of these total cost savings attributed to the public sector by estimating the proportion of women

diagnosed with cervical cancer who were covered by public insurance, stratified by age at cancer incidence. Specifically, we used the 2008-2010 ACS to identify state-level proportions of women with Medicaid, Medicare, or Indian Health Services coverage by age group.<sup>61</sup> We multiplied that proportion for each age group by the national-level proportion of total cancer diagnoses for women in that age group<sup>60</sup> and then summed the results for each age group to yield state-level and national-level totals. Nationally, an estimated 28.9% of cervical cancer costs were public costs. Finally, for each state, we applied the result to total cost savings to arrive at public-sector cost savings.

*HPV Vaccination.* Vaccination against HPV has become an essential component of reproductive health care. Because HPV is responsible for almost all cases of oncogenic dysplasia of the cervix, the 2 vaccines currently on the market could significantly reduce the incidence of cervical cancer, as well as other HPV-attributable cancers of the vulva,<sup>62</sup> vagina, anus/rectum, and oropharynx.<sup>63</sup>

For this analysis, we estimated the direct medical benefits and cost savings that accrue from HPV vaccinations administered to women at publicly funded family planning visits. We began by determining the number of HPV vaccine injections administered during family planning visits at publicly funded centers. We used data from the Planned Parenthood Federation of America's annual report<sup>26</sup> to estimate the ratio of vaccine injections administered to all clients (0.014), and used that as a proxy for the ratio of all female clients receiving publicly supported care who would have forgone care in the absence of publicly funded services (73% of current clients). (Earlier research indicates that similar proportions of Planned Parenthood clinics, health departments, and federally qualified health centers provide the HPV vaccine.<sup>57</sup>)

A complete vaccination sequence entails 3 injections. We converted the number of injections to the number of individuals vaccinated based on National Immunization Survey data on the proportion of women vaccinated by the number of vaccine doses received: Of clients vaccinated at a public facility, 46% received at least 3 doses, 32% received 1, and 22% received 2.<sup>64</sup>

Virtually all HPV vaccines distributed in the United States are quadrivalent, meaning that they are designed to prevent 4 types of HPV, including types 16 and 18, which cause 70% of cervical cancers. Because the quadrivalent vaccine has a 99% efficacy in preventing cervical precancers in women not previously exposed to HPV, we applied that

efficacy rate to women who received 3 doses.<sup>65,66</sup> We discounted the efficacy rate by a conservative 10% per dose missed, for an estimated 2-dose efficacy of 89%, and a 1-dose efficacy of 80%. These estimates are in line with the literature, which indicates that 2 doses might be nearly as effective as 3 and that receiving 1 or more doses is 82% effective.<sup>67-69</sup>

These estimated efficacy rates were based on the assumption that vaccinations are given to 12-year-old girls who have not yet become sexually active. In reality, however, some girls are vaccinated after they have become sexually active and thus already might have been exposed to HPV. Therefore, we adjusted the efficacy rates by first multiplying the percentage of vaccines administered to women of each year of age up to 26 (the oldest age for which the vaccine is recommended) by an age-specific vaccine efficacy adjustment factor published by Chesson and colleagues.<sup>70,71</sup> We then summed these products to get 1 adjustment proportion.

Next we obtained an estimate of the proportion of women who would have contracted HPV and experienced selected medical sequelae—abnormal Pap tests, precancerous lesions, and cervical cancer—over their lifetime had they not been vaccinated. To do so, we calculated the difference between published estimates of the number of cases that would occur in nonvaccinated women minus the number of cases in vaccinated women. For abnormal Pap tests, precancerous lesions, and cervical cancer, these differences were 50,000, 10,000, and 500 cases per 100,000 women vaccinated, respectively.<sup>72</sup> We applied these rates to the population of vaccinated women. Using the rate of 200 deaths per 100,000 women vaccinated, we also calculated the number of women who would have died from cervical cancer within 5 years of receiving a cancer diagnosis.<sup>72</sup>

We then calculated the number of other cancer cases averted by vaccination using published data<sup>46</sup> on the annual incidence of HPV-attributable vulvar, vaginal, anal/rectal, and oropharyngeal cancer in the United States. To get the absolute number of noncervical cancer cases averted among women receiving public services, we calculated the ratio of annual incidence of each HPV-attributable cancer to the annual incidence of cervical cancer. For vulvar cancer, this ratio was 1,560 vulvar cancer cases to 11,370 cervical cancer cases. For vaginal, anal/rectal, and oropharyngeal cancers, the ratios were 460, 2,770, and 1,450 cases to 11,370 cervical cancer cases. We then multiplied each ratio by the

absolute number of cervical cancer cases averted in women receiving public services.

The per-case costs of treating cervical dysplasia and precancerous lesions were estimated based on a study of administrative and laboratory records that are related to HPV health care costs from 2002 and that account for false positives.<sup>73</sup> We adjusted the costs to 2010 dollars and then discounted them 3% annually to account for the average number of years between vaccination and diagnosis of dysplasia and precancer (12 and 7, respectively). Data on median age at vaccination came from a large national network of family planning centers, and the median age at each diagnosis was calculated based on the diagnosis rate by age for each diagnosis.<sup>74</sup> The resulting costs were \$690 per case of dysplasia and \$1,863 per case of precancer.

To calculate the cost to treat cervical cancer, we started with the same 2010 estimate of \$38,800<sup>58</sup> used in the Pap and HPV testing analysis. We discounted the cost 3% per year to account for the average number of years between vaccination and cervical cancer diagnosis (28),<sup>60</sup> which resulted in a figure of \$16,732. Similar calculations were made to determine the cost of treating cases of other HPV-attributable cancers, discounting the time between the average age at vaccination and the median age at diagnosis for each cancer type (\$6,404 per case of vulvar cancer, discounted by 44 years; \$7,366 per case of vaginal cancer, discounted by 44 years; \$11,263 per case of anal/rectal cancer, discounted by 40 years; and \$12,889 per case of oropharyngeal cancer, discounted by 41 years).

Finally, we calculated the proportion of these averted costs that would have been public costs. For dysplasia and precancerous lesions, we assumed that the proportion borne by public funding was equal to the proportion of women who have public insurance. For cervical cancer, we used the proportion of women diagnosed with cervical cancer who were covered by public insurance, stratified by age at cancer incidence. We used a similar approach to determine the public cost of treating other HPV-attributable cancers. These estimates were calculated at the state level and then totaled to produce national estimates of 28.0% for precancerous lesions, 28.9% for cervical cancer (which is the same proportion used in the Pap and HPV testing analysis), 60.6% for vulvar cancer, 60.4% for vaginal cancer, 46.1% for anal/rectal cancer, and 48.5% for oropharyngeal cancer.

*Extended Cost Savings From Averting  
Unplanned Births*

As indicated earlier, publicly funded contraceptive services helped US women prevent an estimated 2.2 million unintended pregnancies in 2010, 1.1 million of which would have resulted in an unplanned birth.<sup>3</sup> The detailed methodology for estimating unintended pregnancies averted has been described elsewhere,<sup>24</sup> so we offer only a brief summary here. Alternative estimates of unintended pregnancies averted are given in the following sensitivity analyses. Our estimates are based on a comparison of the actual mix of contraceptive methods used by current clients of publicly funded providers with a hypothetical mix of methods that we expect these women would use in the absence of such services.

The hypothetical method-mix scenario was based on the contraceptive behavior of sexually active women who were not trying to get pregnant but who did not visit a publicly funded family planning provider in the prior 12 months or who visited a private doctor and paid for that visit themselves. These women were of similar age and income as women using publicly funded services (ie, were at risk for unintended pregnancy and either younger than 20 or aged 20 to 44 and under 250% of poverty), were eligible for publicly funded care and in need of contraceptive services to prevent an unintended pregnancy, but did not receive any publicly funded contraceptive care in the previous year (though they may have received such care at an earlier date).

For each group, we estimated the number of unintended pregnancies that would be expected over a 1-year period by combining the distribution of methods used and the failure rates of each method (using subgroup-specific data when available, broken down by age, marital status, racial and poverty status). (Our method failure rates were further adjusted to compensate for the difference between typical first-year failure rates and actual rates of failure among contraceptive users who may have used their method for longer or shorter durations. The basis for this adjustment is a comparison of the number of pregnancies expected among all current contraceptive users and the actual number of pregnancies for US contraceptive users in 2008.)

Out of 1,000 actual users of publicly funded contraceptive services 62 would have had an unintended pregnancy; in our hypothetical scenario, 350 per 1,000 would have had an unintended pregnancy. Subtracting the

former from the latter resulted in the number of unintended pregnancies (288) that are prevented per 1,000 users of publicly funded family planning care. We then applied this ratio to the numbers of contraceptive clients served by publicly funded centers in 2010 and to the data on numbers of Medicaid recipients receiving contraceptive services from private doctors to arrive at 2.2 million unintended pregnancies averted. These were classified according to births, abortions, and miscarriages based on the 2008 distribution (for adult women and teens separately) of unintended pregnancies by outcome.

The public cost savings of preventing unplanned births for 2010 were originally estimated by Frost and colleagues<sup>3</sup> for all unplanned births to women eligible for Medicaid-covered maternity care and included costs for prenatal care, delivery, postpartum care, and 12 months of infant care. We built on those findings by adjusting the number of unplanned births included in the cost analysis and by including the direct medical costs paid by Medicaid for care of children for months 13 to 60.

First, we reviewed the assumption that all averted births would result in public savings. Other researchers have instead assumed that at least some births would be delayed, not averted altogether, and because such births would eventually end up as costs or public costs, they should not count as current savings.<sup>10,11,75</sup> We felt that such an adjustment was important to incorporate into this analysis, especially because we are considering public cost savings that extend beyond 1 year. To make this adjustment accurately, however, it is necessary to differentiate 4 types of averted unplanned births: unwanted births, mistimed births that would have contributed to “extra” births (ie, those resulting in women having a higher completed parity than they would have had otherwise), mistimed “nonextra” births that would have been privately funded if they had been delayed until the woman wanted the birth, and mistimed “nonextra” births that would have continued to be publicly funded even if they had been delayed until the woman wanted the birth.

Next we describe our methodology for categorizing into the 4 groups the unplanned averted births among publicly funded family planning clients. Then we explain our estimations of the public cost savings for unplanned averted births that fall into the first 3 categories. Averted births that fall into the fourth category do not represent public savings, as their costs would still be covered by public funds.

*Unwanted Births.* Of the unplanned births to women most likely to be using publicly funded family planning services (ie, all teens, plus adult women under 250% of poverty), 37% are unwanted and 63% are mistimed.<sup>33</sup>

*“Extra” Births.* Using the 2006-2010 NSFG, we compared the mean parity for women aged 30 and older with at least 1 mistimed birth with that for same-aged women with no mistimed births.<sup>33</sup> Because this comparison assumes that both groups of women have the same overall desired parity and that some groups of women may be more likely than others to have a mistimed birth and to desire more children, we compared the overall parity for women with and without mistimed births within each racial and ethnic group and estimated separately for each group the differences in overall parity between women with and without mistimed births.

We then recalculated the average difference, weighting the results according to the racial and ethnic distribution of women served at Title X-funded health centers.<sup>25</sup> The difference in overall parity between women with and without mistimed births using this methodology and adjusting for race and ethnicity was 0.80 births. By comparing this excess parity with the total average number of births to women with mistimed births (2.89), we estimated that 28% of mistimed births could be considered “extra.”

*Mistimed Births Not Paid for With Public Funds.* Using the 2006-2010 NSFG, we estimated the actual number of years in which all mistimed births had occurred too soon.<sup>33</sup> We made separate estimates for teen births and adult births and also weighted the results by race and ethnicity using the distribution of women served at Title X centers.<sup>25</sup> On average, women reported that the mistimed births they had had as a teen had occurred 4.7 years too soon and those they had had as an adult had occurred 2.4 years too soon.

To estimate how many women with an averted mistimed birth would have been eligible for Medicaid maternity care had that birth been delayed (4.7 years for teens and 2.4 years for adults), we looked at the percentage of births paid for by Medicaid according to the woman’s age at birth (in 2-year increments) and to whether the birth was planned or unplanned. For teens, we looked at payment for first births, because 92% of mistimed births to teens are first births,<sup>33</sup> and for adults, we looked at payment for all births.

Specifically, we compared the percentage of *unplanned* first births for 2 age groups of teens (<18 and 18-19) paid for by Medicaid with the percentage of *planned* first births paid for by Medicaid for women who were 4.7 years older than those aged <18 and 18-19 and then calculated the percentage change between these 2 proportions. Partial years were interpolated between age groups, assuming the change over the interval was constant. The average for all teens, adjusting for the age distribution of teens served at Title X centers, was 33%.

We used a similar process for 8 two-year age groups of adults between ages 20 and 35, comparing the percentage of unplanned births that were paid for by Medicaid with the percentage of planned births that were paid for by Medicaid for women 2.4 years older. The age-adjusted average decline in use of Medicaid for all adult women was 44%.

By applying these adjustments to the 1.1 million unplanned averted births in 2010, we estimated that 37% (409,000) were unwanted births, all of which could have incurred public savings; 17% (193,000) were “extra” births, all of which could have incurred public savings; and 46% were “nonextra” mistimed births (on average, such births occurred to women 2.9 years too early). Of the “nonextra” mistimed births, 4 in 10 (19% of all unplanned births, or 209,000) would not have been publicly funded if they had occurred at the desired time, and all of them could have incurred public savings. The other 6 in 10 (27% of all unplanned births, or 285,000) would still have needed to be covered by public funding even if they had occurred at the desired time; therefore, none of these would have incurred public savings.

Overall, we considered 811,000 unplanned averted births as potentially contributing to public cost savings. Of these, an estimated 94% (762,000) would have been to women currently eligible for Medicaid maternity care (a proportion that varies by state).<sup>24</sup>

The public cost per birth for the first 12 months of maternity and infant care varied by state and was previously estimated to be \$12,770 nationally, unweighted.<sup>3</sup> To estimate the public cost of medical care for children aged 13 to 60 months, we analyzed state-level data from the Medicaid Statistical Information System (MSIS)<sup>76</sup> and found that the annual amount paid by Medicaid per eligible child was about \$2,300 nationally. We then applied 3 adjustments to the state-level public cost per child and summed the results across 4 years. First, we reduced the number of eligible children each year to account for changes in family income; this was based on an analysis of the ACS that estimated

the proportionate drop in Medicaid coverage among children by single years of age.<sup>61</sup> Using the proportion of infants covered by Medicaid as the base, 94% were covered at age 1, 91% at age 2, 88% at age 3, and 85% at age 4. Second, we discounted costs 3% annually. Finally, we made an adjustment to account for multiple births by drawing on US vital statistics data: Some 3.95 million children were born in 2011 through 3.88 million deliveries, for a ratio of 1.018 children per birth.<sup>77</sup> With these adjustments, we estimated the final unweighted national cost per birth for 4 years of public medical care to be \$7,950. After multiplying the state-level costs per birth by the number of births averted and summing across states, we arrived at our estimates of the total medical cost savings from unplanned births averted.

*Extended Cost Savings From Averting  
Unplanned Pregnancies Ending in Miscarriage  
and Abortion*

Publicly funded contraceptive services also helped women avoid 360,000 miscarriages and 760,000 abortions in 2010.<sup>3</sup> The cost savings estimated by Frost and colleagues did not account for these averted outcomes; we made those estimates here.

For miscarriages, we first applied the estimate from Frost and colleagues of the proportion of births averted by publicly funded contraceptive services that would have been born to women currently eligible for Medicaid maternity care (94% overall, varying by state).<sup>24</sup> Next, because state-level estimates for the public cost per miscarriage were not available, we derived our own estimates. We did so by dividing a national estimate of the public cost of miscarriage (including ectopic pregnancies) from Monea and Thomas<sup>10</sup> (\$1,252, after adjusting for inflation) by Frost and colleagues' estimated national average of the public cost per birth for the first 12 months of maternity and infant care (\$12,770)<sup>24</sup> and then applying the result (9.8%) to Frost and colleagues' state-level per birth cost estimates to arrive at state-level estimates for the public cost per miscarriage. We assumed that state-level costs for miscarriage effectively varied in the same way as state-level costs did for births. We then multiplied those state-level costs per miscarriage by the number of Medicaid-funded miscarriages averted and summed across states.

The estimates for abortions were complicated because Medicaid coverage of abortion is barred by federal law (except in the rare cases of

rape, incest, or endangerment of the woman's life), but as of 2010, 17 states had policies requiring them to use state funds to pay for abortions for women enrolled in Medicaid.<sup>23</sup> To estimate the proportion of averted abortions in each state that would have been paid for with public funds, we divided the state-level number of publicly funded abortions in 2010 from Sonfield and Gold (181,000 nationally)<sup>23</sup> by the total state-level number of abortions to state residents in 2008 (1.2 million nationally),<sup>78</sup> which was the most recent available year. The result—the proportion of abortions that were publicly funded—was 15% nationally but varied from 0% in many states to more than 40% in several. For the several states for which data were not available, we used the average proportion among states with similar abortion-funding policies. These are conservative estimates because they include abortions for all women in the state, rather than only those for the lower-income women who used publicly supported family planning, but state-level breakdowns of abortion incidence by income were not available.

We calculated state-level estimates for the public cost per abortion from Sonfield and Gold<sup>23</sup> by dividing each state's public expenditures for abortion in 2010 by its reported number of publicly funded abortions that year (\$376 nationally). For those several states for which data were not available, we used the average cost per abortion in states with similar abortion-funding policies. We then multiplied together the state-level estimates (number of averted abortions, proportion paid for with public funds, and public cost per abortion) and summed them across states.

### *Net Savings*

All estimates of the gross cost savings attributable to the benefits described in each of the preceding sections were then summed together and compared with the estimated public cost to provide publicly funded contraceptive care in 2010 (previously estimated at \$2.2 billion).<sup>3</sup>

## **Results**

In 2010, nearly 9 million women received contraceptive services from publicly supported providers in the United States,<sup>3</sup> which represents more than one-third of the 25 million US women who receive contraceptive services each year.<sup>59</sup> Without access to subsidized family planning

visits, these women would have experienced a host of additional adverse health outcomes with far-reaching consequences for themselves and their families. In addition, these outcomes would have cost the government far more than it paid to provide the women with family planning and related preventive services. Approximately 75% of the measured health benefits and cost savings reported here are attributable to the services that women received from publicly funded health centers, and more than half are attributable to Title X–funded centers.

Tables 2 and 3 present national-level estimates for all averted outcomes and cost savings according to provider type. Our summary here focuses on estimates for the overall publicly funded family planning effort. (State-level estimates for many of these indicators are presented in supplementary Tables 1, 2, 3, and 4, available online at <http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.12080/abstract>).

### *Benefits From Contraceptive Use*

Women who rely on publicly supported providers for their family planning care use a more effective mix of contraceptive methods than they would if they did not have these subsidized services. In addition, publicly funded family planning services allow women to better plan the timing and spacing of the births they do want, which leads to better health outcomes for themselves and their infants. Of the estimated 1.1 million unplanned births avoided by women receiving publicly funded contraceptive care in 2010, an estimated 287,500 would have been closely spaced, and 164,190 would have been premature, LBW, or both (Table 2).

### *Benefits From STI Testing*

During family planning visits at publicly funded providers, women and men receive a range of other related preventive care services. Nearly half (49%) of female clients, some 4.4 million in 2010, received a chlamydia test; 49% were tested for gonorrhea; and 19% received an HIV test. STI testing also was common among the much smaller group of men who made family planning visits at publicly funded providers. Without access to publicly funded contraceptive services in 2010, an estimated 3.2 million women (73%) would have forgone chlamydia or gonorrhea testing, which would have resulted in tens of thousands of undetected and untreated STIs.

Table 2. Health Benefits From Contraceptive and Related Noncontraceptive Services Received During Family Planning Visits at Publicly Funded Providers, According to Provider Type, National Summary, 2010

Adverse Health Outcomes Averted	Publicly Funded Health Centers			Private Doctors Serving Medicaid Recipients	All Publicly Supported Providers
	All	Title X-Funded			
<i>From contraception:</i>					
Unintended pregnancies	1,677,200	1,181,500		552,700	2,229,900
Unplanned births	831,700	585,900		274,100	1,105,800
Abortions	572,200	403,100		188,600	760,800
Unplanned births after short interpregnancy intervals (< 18 months IPI)	216,240	152,310		71,260	287,500
Unplanned preterm/low birth weight (LBW) births	122,820	87,110		41,370	164,190

*Continued*

Table 2. *Continued*

Adverse Health Outcomes Averted	Publicly Funded Health Centers		Private Doctors Serving Medicaid Recipients	All Publicly Supported Providers
	All	Title X-Funded		
<i>From STI testing:</i>				
Chlamydia infections	76,680	53,450	22,420	99,100
Gonorrhea infections	12,440	8,810	3,790	16,240
HIV infections	350	250	65	410
PID cases	9,910	6,920	3,260	13,170
Ectopic pregnancies	850	590	280	1,130
Infertility cases	1,660	1,160	550	2,210
<i>From Pap and HPV testing:</i>				
Cervical cancer cases	2,710	1,900	890	3,600
Cervical cancer deaths	1,570	1,100	520	2,090
<i>From HPV vaccination:</i>				
Abnormal cervical cell cases	5,640	3,970	1,860	7,500
Precancer cases	1,130	790	370	1,500
Cervical cancer cases	61	43	20	81
Cervical cancer deaths	15	11	5	20
Other HPV-attributable cancer cases	33	24	11	44

**Table 3. Cost Savings From Contraceptive and Related Noncontraceptive Services Received During Family Planning Visits at Publicly Funded Providers, According to Provider Type, National Summary, 2010**

Cost Savings (in 000s of dollars)	Publicly Funded Health Centers			Private Doctors Serving Medicaid Recipients	All Publicly Supported Providers
	All	Title X-Funded			
Maternity and birth-related costs to 60 months	11,072,327	7,805,411		4,162,828	15,235,155
Miscarriage and ectopic pregnancy costs	296,630	209,195		112,755	409,385
Abortion costs	33,272	23,228		10,630	43,902
Chlamydia and gonorrhea testing	24,886	17,418		7,663	32,550
HIV testing	76,994	54,968		13,539	90,533
Pap and HPV testing	15,416	10,807		5,080	20,496
HPV vaccination	1,621	1,142		534	2,156
<b>Total gross savings</b>	<b>11,521,147</b>	<b>8,122,170</b>		<b>4,313,030</b>	<b>15,834,177</b>
<b>Family planning costs</b>	<b>1,640,731</b>	<b>1,140,753</b>		<b>594,005</b>	<b>2,234,736</b>
<b>Total net savings</b>	<b>9,880,416</b>	<b>6,981,417</b>		<b>3,719,025</b>	<b>13,599,441</b>

The identification and treatment of these infections prevented future infections among the partners of clients and resulted in direct health benefits for the clients tested. By reducing their transmission to partners, an estimated 99,100 chlamydia infections, 16,240 gonorrhea infections, and 410 HIV infections were prevented. And among the clients who tested positive for chlamydia or gonorrhea and were treated, an estimated 13,170 cases of PID were avoided, which would have resulted in 1,130 ectopic pregnancies and 2,210 women becoming infertile (Table 2).

### *Benefits From Cervical Cancer Testing and Prevention*

In 2010, an estimated 59,000 young women received at least 1 dose of the HPV vaccine during family planning visits at publicly funded providers. By vaccinating women before they contracted HPV, publicly funded providers helped them avoid an estimated 7,500 cases of abnormal cervical cells, 1,500 cases of precancer, and 81 cases of cervical cancer. An estimated 20 women avoided dying of cervical cancer, and 44 women avoided contracting other HPV-attributable cancers, such as anal or vulvar cancer (Table 2).

Most women who receive family planning services from publicly funded providers are not, however, vaccinated against HPV, and vaccination does not protect against all high-risk (ie, oncogenic) strains of HPV. Periodic testing therefore remains the standard of care to detect potential cervical cancer. In 2010, an estimated 3.2 million women received cervical cancer testing during a publicly funded family planning visit. In the absence of publicly funded family planning services, an estimated 2.3 million women would have forgone or postponed cervical cancer testing that year. Through this testing, an estimated 3,600 potential cervical cancer cases were identified and treated before the cancer developed, and 2,090 cervical cancer deaths were averted (Table 2).

### *Cost Savings*

For each of the adverse health outcomes averted, we estimated both the total direct medical costs of sequelae attributable to those outcomes and how much of those costs would have been paid for by public funds, primarily Medicaid and Medicare. Only public costs and savings are presented here. As described earlier, and following the methodology of prior studies, our estimates include only the public cost savings for

services provided to clients who, in the absence of publicly supported care, would have used a less effective mix of contraceptive methods or would have delayed obtaining other preventive care services. We did not estimate the gross benefits or savings that would have accrued if the clients had stopped using *all* contraceptive methods or had never received any of the other preventive care services.

The biggest share of averted public costs was attributed to contraceptive services, which help prevent unplanned pregnancies and their associated costs (Table 2). Without such services, an estimated additional \$15.2 billion would have been spent in 2010 on Medicaid-covered maternity and infant care and on publicly funded medical care for children aged 13 to 60 months. An estimated additional \$409 million would have been spent on Medicaid-covered care for miscarriages (including ectopic pregnancies), and \$44 million for abortion care (almost all of which would have been spent in the 17 states that use their own funds to pay for abortions for Medicaid enrollees).

In 2010, an estimated \$123 million in cost savings was attributable to STI and HIV testing during family planning visits: Specifically, without chlamydia and gonorrhea testing, an estimated additional \$33 million would have been spent on treating PID or epididymitis in women and men with untreated chlamydia or gonorrhea infections or on treating clients with STI-attributable HIV infections, and without HIV testing, an estimated additional \$91 million would have been spent on HIV care for clients' partners who contracted the virus because the clients did not know their serostatus. Finally, an estimated \$23 million in cost savings was attributable to HPV sequelae being identified and treated earlier because of testing for cervical cancer (\$20.5 million) or prevented because of vaccines (\$2.2 million).

Together, publicly supported services averted an estimated total of \$15.8 billion in gross public costs in 2010. Subtracting the total public cost to provide family planning and related sexual and reproductive health services that year—\$2.2 billion—results in an estimated total net savings of \$13.6 billion. Of the total net savings, an estimated \$9.9 billion was attributable to publicly funded health centers—\$7 billion to Title X-funded centers alone—and \$3.7 billion was attributable to the Medicaid-funded family planning services provided by private physicians. Overall, by providing clients with the services they want and need to avoid unintended pregnancies and to protect their health against reproductive cancers and STIs, these services saved taxpayers an estimated \$7.09 for every public dollar spent.

### *Sensitivity Analyses*

All these findings rely on a wide array of parameters drawn primarily from earlier published research. Although we attempted to choose the best parameters available, in many cases we could have chosen other data and assumptions as part of a given estimate. As reported earlier, we often chose those indicators that produced conservative estimates, so to test these choices further, we performed a series of sensitivity analyses.

*Cost Savings.* Our estimates of net cost savings from publicly funded family planning and related services depend primarily on 4 factors: (1) the rate of unintended pregnancies averted per 1,000 contraceptive clients; (2) the adjustment for mistimed births that would not be cost saving; (3) the cost per Medicaid-funded birth (including maternity care and care through 60 months of age); and (4) the cost per family planning client. We tested changes in all 4 of these parameters. (Although the savings from STI testing and cervical cancer prevention services do not have a major impact on net cost savings, we did test changes to the key parameters used in our estimates of those benefits.)

First, we performed threshold tests to determine how high or low these variables would have to be for the net savings to equal zero. We found that for these services not to produce any net savings, the number of unintended pregnancies averted would have to drop from 288 per 1,000 contraceptive clients<sup>3</sup> to 31 per 1,000. Alternatively, the total cost per Medicaid-funded birth would have to drop from a weighted national average of \$19,902 to \$2,137, or the cost per family planning client would have to increase from a weighted national average of \$251 to \$1,776. None of these scenarios is remotely feasible.

We tested several other extreme scenarios. Even using the highest cost per family planning client (\$512 in Alaska) and the lowest cost per birth (\$5,848 for delivery and months 1 to 12 in New Hampshire, plus \$3,260 for months 13 to 60 in Idaho)—a scenario that ignores the fact that all health care costs vary substantially by state—the results would still be an estimated savings of \$1.66 for every dollar spent. Similarly, even if we assumed that all mistimed births would not be cost saving and therefore limited the savings to unwanted births, publicly funded family planning and related services would still save an estimated \$3.71 for every dollar spent.

Finally, we tested the impact on cost savings from the use of alternative scenarios for the rate of unintended pregnancies averted

per 1,000 contraceptive clients. Researchers (Foster and colleagues) assessing California's Family PACT program have produced several of the most robust cost-benefit studies related to family planning care, drawing on a wealth of individual-level data that are not available nationally.<sup>9,11,12,79</sup> In our test, we used both their base scenario estimate of the rate of unintended pregnancies averted (287 per 1,000 clients, estimated using the method mix of clients before their first Family PACT visit) and their conservative alternative scenario for this rate (80 unintended pregnancies averted per 1,000 clients, estimated using the method mix reported by clients in an exit interview asking what contraceptive method they would use without this program). Since their base scenario rate is almost identical to our rate, 288, our cost savings are almost identical as well. Their alternative scenario rate is roughly one-quarter of both their and our base scenario rate and returns proportionately lower cost savings, but would still result in an estimated \$2.16 saved per dollar spent. Finally, we tested the scenario used both by Foster and colleagues<sup>11,79</sup> and by Guttmacher in past studies,<sup>5,6,7</sup> which assumed that all women would use no contraceptive method in the absence of publicly funded services. In this scenario, the number of unintended pregnancies averted per 1,000 clients rose to 828, and the estimated cost savings increased to nearly \$20 saved for every dollar spent.

*STI Testing.* For the chlamydia and gonorrhea testing analysis, we tested the impact of changes to 2 parameters that were known to vary widely. The reported incidence of both chlamydia and gonorrhea among populations tested by federally funded clinics varies widely from state to state; we tested the impact of using either the highest state incidence (10.2% in South Carolina for chlamydia and 2.8% in Wisconsin for gonorrhea) or the lowest state incidence (3.43% for chlamydia in Vermont and 0.04% for gonorrhea in Wyoming).<sup>40,41</sup> A recent review highlighted the difficulty of estimating how many untreated STI cases would ultimately progress to PID.<sup>47</sup> We tested a 50% variance around the average proportions used for both chlamydia and gonorrhea. Overall, the impact was greater when we varied the incidence of each STI based on the states' high and low incidence levels. The number of cases of chlamydia and the savings fell by 40% with the lowest state incidence and rose by 75% with the highest state incidence. The number of cases of gonorrhea and the cost savings fell by 96% using the lowest state incidence and rose by 182% using the highest state incidence.

For the HIV testing analysis, we tested 2 parameters that relied on assumptions from the literature, rather than on actual data. First, we tested the assumption from Hutchinson and colleagues that individuals would be tested, on average, 3 years later in the absence of publicly funded services.<sup>22</sup> Changing that parameter to 2 years would reduce the number of HIV infections averted by this testing and the resulting cost savings by one-third; increasing it to 4 years would increase both results by one-third. Second, we tested the assumption from Holtgrave and colleagues that 75% of HIV treatment costs are paid for with public dollars (which is a rough, national estimate rather than the state-specific estimates used in other parts of this analysis).<sup>21</sup> We replaced that parameter with the proportion of chlamydia and gonorrhea costs paid for with public dollars (data that vary by state but that exclude many avenues of public funding, such as the federal Ryan White program), which averages 33% nationally, and found that cost savings from HIV testing would total \$43 million, slightly under half the base scenario.

*Cervical Cancer Prevention.* For the HPV vaccine analysis, we changed 2 parameters based on available data. We used the low and high ends of the confidence intervals around the vaccine efficacy adjustment factors by age (a measure of the extent to which women of different ages were exposed to HPV before being vaccinated) published by Chesson and colleagues.<sup>71</sup> We also changed the efficacy of 1 and 2 doses of the vaccine. For the low end, the effectiveness of 1 dose was replaced by the low end of the confidence interval of at least 1 dose from Markowitz and colleagues,<sup>67</sup> and the efficacy of 2 doses was the median of 1 and 3 doses. For the high end, 1 and 2 doses were considered as protective as 3 doses, as concluded by Kreimer and colleagues.<sup>68</sup> For the Pap and HPV testing analysis, we changed 1 parameter: the distribution of cervical cancer screening between those who received only a Pap test and those who received a Pap plus an HPV test, in which the low end was based on the proportion receiving each kind of test among Title X clients only and the high end was based on non-Title X clients only.<sup>57</sup> Of these 3 parameters, the only change that resulted in a substantial change in cases averted was the first, the effectiveness adjustment factor. In the low scenario, the number of cases of abnormal cells fell from 7,500 to 3,210, and the number of cases of cervical cancer fell from 81 to 35. In the high scenario, the number of cases increased to 12,160 and 130, respectively. This suggests that exposure to HPV before vaccination can have a noticeable effect on the impact of the vaccine.

### *Limitations*

We tried to use the best available parameters from the literature to model the broader impact of publicly funded family planning services. Nonetheless, many of our assumptions, as well as our data, were deficient in one or more ways. For example, we often relied on data on services provided in Title X health center settings (which cover 53% of all women served by publicly funded providers) and then assumed that such services were delivered similarly in non–Title X settings. Although this assumption is not perfect, we felt that it was reasonable. We looked at both published<sup>59</sup> and unpublished<sup>33</sup> national data on service use by provider type and found that for our target population of women relying on publicly funded care, rates of testing were similar across settings (women served at Title X and non–Title X centers, and Medicaid clients served at private practices) for Pap, HIV, and other STI testing.

In addition, much of our analysis here began with the number of unintended pregnancies prevented by publicly funded services in 2010 estimated by Frost and colleagues.<sup>3</sup> The methodology used in that analysis is subject to potential bias due to unmeasured differences between the comparison group and women currently using publicly funded services, which could mean that the actual contraceptive behavior of women in the absence of publicly funded services would be more or less protective compared with our hypothetical scenario. For example, some of the small subgroup of women who have private insurance, but do not use it for contraceptive services, might do so if their access to public services were eliminated. To address this limitation, we conducted sensitivity analyses, presenting the results using alternative method-mix scenarios.

Although several steps in our analyses may have introduced some errors in our final results, they are the best available assumptions based on the literature, and when in doubt, we erred conservatively. For example, because we lacked actual data on the numbers of all publicly funded family planning clients who tested positive for chlamydia or gonorrhea, or who received treatment for their infection, we used data from other, similar provider settings for this information. We also relied on data from the literature, which are typically derived from cumulative small-scale or targeted studies, to estimate the national percentage of untreated infections that would have resulted in adverse outcomes, as well as the cost of those outcomes. Our HPV vaccine analysis used Planned Parenthood data as a proxy for the proportion of all public clients who received a vaccination, but this is likely not a perfect proxy. Finally, the literature

on the efficacy of receiving an incomplete HPV vaccination series is relatively new but is advancing rapidly. Our assumptions conservatively accounted for the newest literature.

In addition, our analysis did not account for all the health benefits for each service assessed. The HIV testing analysis did not include the health benefits (or any related costs or cost savings) accrued from the early detection of HIV for the HIV-positive individual herself; those benefits would derive from connecting HIV-positive individuals to earlier care and treatment. Nor did this analysis include the benefits from preventing vertical HIV transmission, from mother to infant.

The HPV vaccination analysis did not capture any impact that vaccines may have on noncancerous strains of HPV, although they do protect against some strains that lead to treatable medical conditions, such as genital warts. This analysis also did not account for herd immunity, although some additional benefits are likely. In addition, cervical cancer screening may lead to some unnecessary treatment of cases that would have resolved on their own. But our analysis was based on screening only every 3 years, so it is likely that this would not occur very often. In fact, some agencies even suggest a longer period between screening for some women,<sup>80</sup> so should the recommendations change, the cost-benefit ratio could be higher.

Similarly, our analysis of preterm and LBW births did not attempt to address the fact that by helping women avert such births, publicly supported contraceptive services avert particularly expensive births, which should reduce the average cost of a Medicaid-funded birth. Detailed state-level data on maternity and infant costs would be necessary to assess this impact on average costs and on the overall cost savings that would result.

Finally, we acknowledge that several factors might influence our findings if we updated our analysis for HPV vaccination. For example, once more older women have been vaccinated for HPV, the average age of individuals newly vaccinated will drop, effectively increasing both the efficacy of the vaccine (due to a reduction in prior exposure to HPV) and the resulting cost savings. In addition, advancements in cancer treatment mean that life expectancy may be increasing and death rates decreasing. In future years, the number of deaths averted through Pap testing, HPV testing, and HPV vaccination may decline—which would, of course, be a welcome finding.

## Discussion

Helping women and couples prevent unintended pregnancy and thereby take control of their lives and futures is the primary purpose of the US family planning effort. Research has long demonstrated those successes in the form of millions of unintended pregnancies averted. Yet family planning providers, clients, and advocates have always known that the federal and state dollars spent on this effort have a long list of additional health benefits. This analysis, for the first time, provides estimates of a number of these additional benefits. These results are especially timely, as they document the impact of preventive services such as chlamydia and cervical cancer screening that are promoted under the Affordable Care Act (ACA) and are provided routinely during family planning visits.

Nationwide, the estimated 2.2 million unintended pregnancies averted each year include an estimated 287,500 that would have been closely spaced (<18 months IPI) and 164,190 that would have been preterm or LBW. The STI testing provided as part of publicly funded family planning visits prevents an estimated 99,100 cases of chlamydia, 16,240 cases of gonorrhea, 410 cases of HIV, and 13,170 cases of PID that would have led to 1,130 ectopic pregnancies and 2,210 cases of infertility in a single year. Pap tests, HPV tests, and HPV vaccinations provided at these visits prevent an estimated 3,680 cases of cervical cancer and 2,110 cervical cancer deaths annually; HPV vaccination prevents an estimated additional 9,000 cases of abnormal sequelae and precancerous lesions. The services provided at Title X-supported health centers are estimated to account for more than half of all these benefits.

The other main purpose of this analysis was to extend and refine estimates of the public savings accrued through the US family planning effort by including savings over a longer time frame and for more of the services provided and by excluding savings for some mistimed births. Earlier Guttmacher Institute estimates of cost savings from publicly funded family planning care were limited to the immediate costs associated with helping women avoid unplanned births, that is, the cost of maternity care and 12 months of infant care. Most recently, Frost and colleagues<sup>3</sup> found that the gross public savings from these limited benefits were estimated to be \$12.7 billion in 2010, or \$5.68 for every dollar spent providing contraceptive care. Here we expanded that

window to account for the medical care associated with averted births over 60 months of the child's life. At the same time, we excluded any cost savings from those mistimed births that do not contribute to higher completed parity and that would still be publicly funded, even if delayed until the woman desired the birth. Together, these changes resulted in an additional \$2.5 billion in estimated public savings, for an estimated total of \$15.2 billion in gross public savings due to averting unplanned births. We also factored in an estimated \$453 million in public savings from averting the miscarriages and abortions that would have followed unintended pregnancies. Next, we added in public cost savings accrued from the health benefits derived from chlamydia, gonorrhea, and HIV testing; Pap and HPV testing; and HPV vaccination. Those estimated cost savings were comparatively small, roughly \$146 million in 2010. Finally, we subtracted out the estimated \$2.2 billion in public costs to provide family planning and related sexual and reproductive health services. All told, we estimate that the national public investment in family planning and related services saved \$13.6 billion in 2010, which amounts to \$7.09 saved per public dollar spent. Our sensitivity analysis found that although this ratio of cost savings could vary considerably under different scenarios, even the most extreme and unlikely scenarios would still produce substantial cost savings.

Neither the health benefits nor the cost savings estimated in this analysis represent the complete impact of the US family planning effort. For example, our estimates of the cost savings from preventing unintended pregnancies exclude the additional lifetime costs of preterm and LBW births, and they do not account for any unintended pregnancies averted by the contraceptive services provided to male clients. In addition, no benefits have been measured from counseling and education regarding the importance of preconception care and early access to prenatal care, or how to avoid STIs through the use of condoms and safe-sex practices. Nor did our analysis encompass additional common services, such as breast exams and screenings for high blood pressure and intimate partner violence. Similarly, this analysis did not include any estimates for the noncontraceptive health benefits and risks of contraceptive method use, or any related costs or cost savings.

Finally, our analysis did not extend beyond medical benefits. It did not estimate any of the numerous social and economic benefits to women and families that come from the ability to time and space their childbearing, such as greater opportunities to complete an education and participate

fully in the workforce.<sup>81</sup> It did not measure any nonmedical public costs associated with unintended pregnancy, such as food stamps or welfare payments. And it did not include any estimates of indirect cost savings—for example, the cost to society of lost productivity in the workplace or lost tax revenue to government coffers.

These estimates are based only on services provided by publicly funded family planning providers in 2010, well before the implementation of most elements of the ACA. But the importance of providing essential preventive services and of being able to quantify their impact remains relevant, and these results can still be used to demonstrate that impact overall, as well as to illustrate variation among states. As more individuals gain insurance coverage under the ACA, particularly under the law's expansion of Medicaid, the numbers served by publicly funded health centers and by private doctors under Medicaid can be expected to increase as well. And a growing proportion of the costs averted by preventive services can be expected to be paid for by Medicaid and other public dollars. Future work will be needed to monitor the impact of those changes.

In sum, our estimates provide new evidence of the national-level and state-level value of public programs that support family planning and related preventive services. These programs and providers not only help women and couples avoid unintended pregnancy but also make valuable contributions to reducing the incidence and impact of cervical cancer, STIs, infertility, and preterm and LBW births. And by supporting these vital preventive care services, the government also ends up saving many billions of public dollars.

## References

1. Finer L, Zolna M. Shifts in intended and unintended pregnancies in the United States, 2001-2008. *Am J Public Health*. 2014;104 (Suppl. 1):S44-S48.
2. Guttmacher Institute. State policies in brief: Medicaid family planning eligibility expansions. [www.guttmacher.org/statecenter/spibs/spib\\_SMFPE.pdf](http://www.guttmacher.org/statecenter/spibs/spib_SMFPE.pdf). Published September 1, 2014. Accessed April 1, 2014.
3. Frost J, Zolna M, Frohwirth L. *Contraceptive Needs and Services 2010*. New York, NY: Guttmacher Institute; 2013.

4. Chamie M, Henshaw S. The costs and benefits of government expenditures for family planning programs. *Fam Plann Perspect.* 1981;13(3):117-124.
5. Forrest J, Singh S. Public-sector savings resulting from expenditures for contraceptive services. *Fam Plann Perspect.* 1990;22(1):6-15.
6. Forrest J, Samara R. Impact of publicly funded contraceptive services on unintended pregnancies and implications for Medicaid expenditures. *Fam Plann Perspect.* 1996;28(5):188-195.
7. Frost J, Finer L, Tapales A. The impact of publicly funded family planning clinic services on unintended pregnancies and government cost savings. *J Health Care Poor Underserved.* 2008;19(3):777-795.
8. Jaffe F, Cutright P. Short-term benefits and costs of U.S. family planning programs, 1970-1975. *Fam Plann Perspect.* 1977;9(2):77-80.
9. Amaral G, Foster D, Biggs M, Jasik C, Judd S, Brindis C. Public savings from the prevention of unintended pregnancy: a cost analysis of family planning services in California. *Health Serv Res.* 2007;42(5):1960-1980.
10. Monea E, Thomas A. Unintended pregnancy and taxpayer spending. *Perspect on Sex Reprod Health.* 2011;43(2):88-93.
11. Biggs M, Foster D, Hulett D. Cost-benefit analysis of the California Family PACT Program for calendar year 2007. San Francisco, CA: Bixby Center for Global Reproductive Health; April 2010.
12. Foster DG, Biggs MA, Malvin J, Bradsberry M, Darney P, Brindis CD. Cost-savings from the provision of specific contraceptive methods in 2009. *Womens Health Issues.* 2013;23(4):e265-e271.
13. Kavanaugh M, Anderson R. *Contraception and Beyond: The Health Benefits of Services Provided at Family Planning Centers.* New York, NY: Guttmacher Institute; 2013.
14. Gipson J, Koenig M, Hindin M. The effects of unintended pregnancy on infant child and parental health: a review of the literature. *Stud Fam Planning.* 2008;39(1):18-38.
15. Logan C, Holcombe E, Manlove J, Ryan S. The consequences of unintended childbearing: a white paper. Washington, DC: Child Trends and National Campaign to Prevent Teen and Unplanned Pregnancy; 2007.
16. Conde-Agudelo A, Rosas-Bermudez A, Kafury-Goeta A. Birthspacing and risk of adverse perinatal outcomes: a meta-analysis. *JAMA.* 2006;295(15):1809-1823.
17. Wendt A, Gibbs C, Peters S, Hogue C. Impact of increasing interpregnancy interval on maternal and infant health. *Paediatr Perinat Epidemiol.* 2012;26(Suppl. 1):239-258.

18. Farnham P, Holtgrave D, Gopalappa C, Hutchinson A, Sansom S. Lifetime costs and Quality-Adjusted Life Years saved from HIV prevention in the test and treat era. *J Acquir Immune Defic Syndr*. 2013;64(2):e15-e18.
19. Hall H, Holtgrave D, Maulsby C. HIV transmission rates from persons living with HIV who are aware and unaware of their infection. *AIDS*. 2012;26(7):893-896.
20. Holtgrave D. Costs and consequences of the US Centers for Disease Control and Prevention's recommendations for opt-out HIV testing. *PLoS Med*. 2007;4(6):1011-1018.
21. Holtgrave D, Hall H, Wehermeyer L, Maulsby C. Costs, consequences and feasibility of strategies for achieving the goals of the national HIV/AIDS strategy in the United States: a closing window for success? *AIDS Behav*. 2012;16(6):1365-1372.
22. Hutchinson A, Farnham P, Duffy N, et al. Return on public health investment: CDC's expanded HIV testing initiative. *J Acquir Immune Defic Syndr*. 2012;59(3):281-286.
23. Sonfield A, Gold R. *Public Funding for Family Planning, Sterilization and Abortion Services, FY1980-2010*. New York, NY: Guttmacher Institute; 2012.
24. Frost J, Frohwirth L, Zolna M, Adam S. Contraceptive needs and services, 2010: methodological appendix. New York, NY: Guttmacher Institute; July 2013.
25. Fowler C, Lloyd S, Gable J, Wang J, Krieger K. Family planning annual report: 2010 national summary. Research Triangle Park, NC: RTI International; September 2011.
26. Planned Parenthood Federation of America. Planned Parenthood Federation of America: annual report 2009-2010. [http://issuu.com/actionfund/docs/ppfa\\_financials\\_2010\\_122711\\_web\\_vf?e=1994783/2039600](http://issuu.com/actionfund/docs/ppfa_financials_2010_122711_web_vf?e=1994783/2039600). Published December 29, 2011. Accessed August 1, 2013.
27. Bureau of Labor Statistics. Consumer Price Index—all urban consumers (current series). 2011. [www.bls.gov/cpi/home.htm](http://www.bls.gov/cpi/home.htm). Accessed February 17, 2011.
28. Institute of Medicine Committee on Understanding Premature Birth and Assuring Healthy Outcomes, Board on Health Science Policy. *Preterm Birth: Causes, Consequences, and Prevention*. Washington, DC: National Academies Press; 2007.
29. Zhu B. Effect of interpregnancy interval on birth outcomes: findings from three recent US studies. *Int J Gynaecol Obstet*. 2005;89(Suppl. 1):S25-S33.
30. Gemmill A, Lindberg L. Short interpregnancy intervals in the United States. *Obstet Gynecol*. 2013;122(1):64-71.

31. Jamieson D, Buescher P. The effect of family planning participation on prenatal care use and low birth weight. *Fam Plann Perspect.* 1992;24(5):214-218.
32. Yeakey M, Muntifering C, Ramachandran D, Myint Y, Creanga A, Tsui A. How contraceptive use affects birth intervals: results of a literature review. *Stud Fam Plann.* 2009;40(3):205-214.
33. Special tabulations of data from the 2006-2010 National Survey of Family Growth (NSFG). 2010.
34. Centers for Disease Control and Prevention, National Center for Health Statistics. VitalStats. [www.cdc.gov/nchs/vitalstats.htm](http://www.cdc.gov/nchs/vitalstats.htm). Published February 24, 2010. Accessed March 30, 2013.
35. Frost J, Gold R, Frohwirth L, Blades N. Variation in service delivery practices among clinics providing publicly funded family planning services in 2010. New York, NY: Guttmacher Institute; May 2012.
36. Institute of Medicine. *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*. Washington, DC: Institute of Medicine; 2013.
37. Satterwhite C, Torrone E, Meites E, et al. Sexually transmitted infections among US women and men: prevalence and incidence estimates, 2008. *Sex Transm Dis.* 2013;40(3):187-193.
38. Centers for Disease Control and Prevention. CDC grand rounds: chlamydia prevention: challenges and strategies for reducing disease burden and sequelae. *MMWR Morb Mortal Wkly Rep.* 2011;60(12):370-373.
39. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Division of STD Prevention. Gonorrhea—CDC fact sheet (detailed version). [www.cdc.gov/std/gonorrhea/STDFact-gonorrhea-detailed.htm](http://www.cdc.gov/std/gonorrhea/STDFact-gonorrhea-detailed.htm). Published February 13, 2013. Accessed August 1, 2013.
40. Centers for Disease Control and Prevention. Chlamydia profiles, 2010, figure C data, chlamydia positivity by age group in women attending family planning clinics. [www.cdc.gov/STD/chlamydia2011/national-figC.htm](http://www.cdc.gov/STD/chlamydia2011/national-figC.htm). Published February 27, 2013. Published 2010. Accessed August 1, 2013.
41. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance, 2010. Atlanta, GA: US Department of Health and Human Services; 2011. [www.cdc.gov/std/stats](http://www.cdc.gov/std/stats). Accessed July 30, 2013.
42. Foglia G, Rhodes P, Goldberg M, St Louis M. Completeness of and duration of time before treatment after screening women for Chlamydia trachomatis infections. *Sex Transm Dis.* 1999;26(8):421-425.

43. Chesson H, Blandford J, Gift T, Tao G, Irwin K. The estimated direct medical cost of sexually transmitted diseases among American youth, 2000. *Perspect Sex Reprod Health.* 2004;36(1):11-19.
44. Chesson H, Collins D, Koski K. Formulas for estimating the costs averted by sexually transmitted infection (STI) prevention programs in the United States. *Cost Eff Resour Alloc.* 2008;6(10).
45. Chesson H, Gift T, Owusu-Edusei KJ, Tao G, Johnson A, Kent C. A brief review of the estimated economic burden of sexually transmitted diseases in the United States: inflation-adjusted updates of previously published cost studies. *Sex Transm Dis.* 2011;38(10):889-891.
46. Owusu-Edusei KJ, Chesson H, Gift T, et al. The estimated direct medical cost of selected sexually transmitted infections in the United States: supplementary appendix, 2008. *Sex Transm Dis.* 2013;40(3):197-201.
47. Haggerty C, Gottlieb S, Taylor B, Low N, Xu F, Ness R. Risk of sequelae after Chlamydia trachomatis genital infection in women. *J Infect Dis.* 2010;201(S2):S134-S155.
48. Yeh J, Hook E, Goldie S. A refined estimate of the average lifetime cost of pelvic inflammatory disease. *Sex Transm Dis.* 2003;30(5):369-378.
49. US Department of Health and Human Services. Delayed update of the HHS poverty guidelines for the remainder of 2010. *Fed Regist.* 2010;75(148):45628-45629.
50. Fowler C, Lloyd S, Gable J, Wang J, McClure E. Family planning annual report: 2011 national summary. Research Triangle Park, NC: RTI International; November 2012.
51. Fowler C, Lloyd S, Gable J, Wang J, Krieger K. Family planning annual report: 2012 national summary. Research Triangle Park, NC: RTI International; 2013.
52. Centers for Disease Control and Prevention. HIV testing at CDC-funded sites, United States, Puerto Rico, and the U.S. Virgin Islands, 2010. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention; September 2012.
53. Centers for Disease Control and Prevention. HIV testing at CDC-funded sites, United States, Puerto Rico, and the U.S. Virgin Islands, 2008-2009. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention; July 2011.
54. Centers for Disease Control and Prevention. Interactive Cancer Atlas (InCA). Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control

- and Prevention; 2010. [http://apps.nccd.cdc.gov/DCPC\\_INCA/DCPC\\_INCA.aspx](http://apps.nccd.cdc.gov/DCPC_INCA/DCPC_INCA.aspx). Accessed April 1, 2014.
55. Lipsy R. Assessing the short-term and long-term burden of illness in cervical cancer. *Am J Manag Care*. 2008;14(6)(Suppl. 1):S177-S184.
  56. Mandelblatt J, Lawrence W, Womack S, et al. Benefits and costs of using HPV testing to screen for cervical cancer. *JAMA*. 2002;287(18):2372-2381.
  57. Special tabulations of data from Guttmacher's 2010 Survey of Clinics Providing Contraceptive Services. 2013.
  58. Chesson H, Ekwueme D, Saraiya M, Watson M, Lowy D, Markowitz L. Estimates of the annual direct medical costs of the prevention and treatment of disease associated with human papillomavirus in the United States. *Vaccine*. 2012;30(42):6016-6019.
  59. Frost J. US women's use of sexual and reproductive health services: trends, sources of care and factors associated with use, 1995-2010. New York, NY: Guttmacher Institute; 2013.
  60. SEER Cancer Statistics Review, 1975-2010. Bethesda, MD: National Cancer Institute, based on November 2012 SEER data submission; April 2013.
  61. Special tabulations of data from the 2008-2010 American Community Survey (ACS). 2010.
  62. Watson M, Saraiya M, Ahmed F, et al. Using population-based cancer registry data to assess the burden of human papillomavirus-associated cancers in the United States: overview of methods. *Cancer*. 2008;113(Suppl. 10):2841-2854.
  63. Jayaprakash V, Reid M, Hatton E, et al. Human papillomavirus types 16 and 18 in epithelial dysplasia of oral cavity and oropharynx: a meta-analysis, 1985-2010. *Oral Oncol*. 2011;47(11):1048-1054.
  64. Special tabulations of data from the 2010 National Immunization Survey. 2013.
  65. Centers for Disease Control and Prevention. Human papillomavirus vaccination coverage among adolescent girls, 2007-2012, and postlicensure vaccine safety monitoring, 2006-2013—United States. *MMWR Morb Mortal Wkly Rep*. 2013;62(29):591-595.
  66. Centers for Disease Control and Prevention. HPV vaccine information for clinicians—fact sheet. [www.cdc.gov/std/hpv/stdfact-hpv-vaccine-hcp.htm](http://www.cdc.gov/std/hpv/stdfact-hpv-vaccine-hcp.htm). Published July 12, 2012. Accessed June 30, 2013.
  67. Markowitz L, Hariri S, Lin C, et al. Reduction in human papillomavirus (HPV) prevalence among young women following HPV vaccine introduction in the United States, National Health and Nutrition Examination Surveys, 2003-2010. *J Infect Dis*. 2013.

68. Kreimer A, Rodriguez A, Hildesheim A, et al. Proof-of-principle evaluation of the efficacy of fewer than three doses of a bivalent HPV16/18 vaccine. *J Natl Cancer Inst.* 2011;103(9):1444-1451.
69. Dobson S, McNeil S, Dionne M, et al. Immunogenicity of 2 doses of HPV vaccine in younger adolescents vs 3 doses in young women: a randomized clinical trial. *JAMA.* 2013;309(17):1793-1802.
70. Chesson H, Flagg E, Koutsky L, et al. Modeling the impact of quadrivalent HPV vaccination on the incidence of Pap test abnormalities in the United States. *Vaccine.* 2013;31(29):3019-3024.
71. Chesson H, Flagg E, Koutsky L, et al. Modeling the impact of quadrivalent HPV vaccination on the incidence of Pap test abnormalities in the United States: supplemental appendix. *Vaccine.* 2013;1-13.
72. Rogoza R, Ferko N, Bentley J, et al. Optimization of primary and secondary cervical cancer prevention strategies in an era of cervical cancer vaccination: a multi-regional health economic analysis. *Vaccine.* 2008;26(Suppl. 5):F46-F58.
73. Insinga R, Glass A, Rush B. The health care costs of cervical human papillomavirus-related disease. *Am J Obstet Gynecol.* 2004;191(1):114-120.
74. Insinga R, Glass A, Rush B. Diagnoses and outcomes in cervical cancer screening: a population-based study. *Am J Obstet Gynecol.* 2004;191(1):105-113.
75. Trussell J. The cost of unintended pregnancy in the United States. *Contraception.* 2007;75(3):168-170.
76. Special tabulations of data from the 2010 Medicaid Statistical Information System (MSIS). 2010.
77. Martin J, Hamilton B, Ventura S, Osterman M, Mathews T. Births: final data for 2011. *Natl Vital Stat Rep.* 2013;62(1).
78. Guttmacher Institute Data Center. Number of abortions, by state of residence, 2008. <http://www.guttmacher.org/datacenter/>. Accessed June 2, 2014.
79. Foster D, Biggs M, Rostovtseva D, Thiel de Bocanegra H, Darney P, Brindis C. Estimating the fertility effect of expansions of publicly funded family planning services in California. *Womens Health Issues.* 2011;21(6):418-424.
80. U.S. Preventive Services Task Force. Screening for cervical cancer. 2012. [www.uspreventiveservicestaskforce.org/uspstf/uspsscerv.htm](http://www.uspreventiveservicestaskforce.org/uspstf/uspsscerv.htm). Accessed April 15, 2014.
81. Sonfield A, Hasstedt K, Kavanaugh M, Anderson R. The social and economic benefits of women's ability to determine whether and when to have children. New York, NY: Guttmacher Institute; March 2013.

82. Thiel de Bocanegra H, Rostovtseva D, Menz M, Karl J, Darney P. *The 2007 Family PACT Medical Record Review: Assessing the Quality of Services*. Sacramento, CA: Bixby Center for Global Health, University of California, San Francisco; 2009.

---

*Funding/Support:* This study was made possible by a grant from the JPB Foundation. Our findings and conclusions are ours and do not necessarily reflect the donor's positions and policies. The Guttmacher Institute gratefully acknowledges the general support it receives from individuals and foundations—including major grants from the William and Flora Hewlett Foundation, the David and Lucile Packard Foundation, and the Ford Foundation—which undergirds all of the Guttmacher Institute's work.

*Conflict of Interest Disclosures:* All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. No disclosures were reported.

*Acknowledgments:* We would like to thank Harrell Chesson, Kwame Owusu-Edusei, and Thomas Gift, Centers for Disease Control and Prevention; David R. Holtgrave, Johns Hopkins Bloomberg School of Public Health; Jennifer Kates, Kaiser Family Foundation; Eleanor Bimla Schwarz, University of Pittsburgh; and Ralph Insinga, Merck & Co., Inc., for providing guidance on the analyses; and James Trussell, Princeton University, and Diana Greene Foster, University of California, San Francisco, for reviewing the manuscript. We also would like to thank our Guttmacher Institute colleagues Megan Kavanaugh and Lori Frohwirth for their significant contributions to this project; Jacqueline E. Darroch, Rachel Benson Gold, Susheela Singh, and Michael Vlassoff for reviewing the manuscript; Jared Rosenberg for editing the manuscript; and Marjorie Crowell for administrative support.

*Address correspondence to:* Jennifer J. Frost, Guttmacher Institute, 125 Maiden Ln, 7th fl, New York, NY 10038 (email: [jfrost@guttmacher.org](mailto:jfrost@guttmacher.org)).

## Supplementary Material

Additional supporting information may be found in the online version of this article at <http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.12080/abstract>.

Appendix Table 1

Appendix Table 2

Appendix Table 3

Appendix Table 4

## Appendix

**Table A1. Summary of Medical Cost Estimates and Additional Selected Parameter Values**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
<b>Direct medical costs (in 2010 \$US), discounted to year of service</b>				
<i>Pregnancy and birth</i>				
Average public cost per birth for: prenatal care, delivery, infant care to month 12 care of the child, months 13-60	12,770	—	✓	24
Average public cost per miscarriage	7,950	—	✓	76
Average public cost per abortion	1,252	—	✓	<sup>a</sup> 11, <sup>a</sup> 24
<i>Sexually transmitted infections</i>	376	—	✓	<sup>a</sup> 23
Average cost per case:				
PID	3,202	—		46
epididymitis	—	313		46
chlamydia	364	30		46
gonorrhea	354	79		46
HIV	330,000	330,000		18
<i>Cancers</i>				
Average cost per case averted from testing: cervical cancer	19,692	—		<sup>a</sup> 46, <sup>a</sup> 58

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
Average cost per case averted by vaccines:				
cervical dysplasia	690	—		<sup>a</sup> 73
precancer	1,863	—		<sup>a</sup> 73
cervical cancer	16,732	—		<sup>a</sup> 46, 58
vulvar cancer	6,404	—		<sup>a</sup> 46, 58
vaginal cancer	7,366	—		<sup>a</sup> 46, 58
anal/rectal cancer	11,263	—		<sup>a</sup> 46, 58
oropharyngeal cancer	12,889	—		<sup>a</sup> 46, 58
<i>Medical costs paid for with public funds</i>				
Proportion of costs that are public:				
births and miscarriages	0.94	—	✓	<sup>a</sup> 24
abortions	0.15	—	✓	<sup>a</sup> 23, 78
chlamydia and gonorrhea	0.33	0.33	✓	61
HIV	0.75	0.75	✓	21
precancer	0.28	—	✓	61
cervical cancer	0.29	—	✓	61
vulvar cancer	0.61	—	✓	61
vaginal cancer	0.60	—	✓	61

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
anal/rectal cancer	0.46	—	✓	61
oropharyngeal cancer	0.49	—	✓	61
<b>Other parameters</b>				
<i>Unintended pregnancy and contraceptive use</i>				
Proportion of unplanned births to women <250% federal poverty level conceived < 18 months postpartum	0.26	—		33
Proportion of births that are LBW or preterm	0.15	—	✓	34
<i>Chlamydia, gonorrhea and their sequelae</i>				
Proportion of clients tested for:				
chlamydia	0.50	0.58	✓	25
gonorrhea	0.49	0.58	✓	25
Proportion of tested clients who are positive:				
chlamydia	0.06	0.05	✓	<sup>a</sup> 40
gonorrhea	0.01	0.01	✓	<sup>a</sup> 41
Proportion of positive clients who are treated:				
chlamydia and gonorrhea	0.97	0.97		42

*Continued*

**Table A1. *Continued***

Parameter	National-Level Value		State-Level	Source
	Females	Males		
	Proportion of treated clients who were symptomatic: chlamydia and gonorrhea	0.31		
Adjustment to account for women who would be tested without public funding	0.73	—		33
Absolute reduction in probability of sequelae due to treatment: chlamydia and gonorrhea, symptomatic cases	0.15	0.02		46
chlamydia and gonorrhea, asymptomatic cases	0.08	0.02		46
Adjustment to chlamydia costs averted to account for gonorrhea coinfection	0.93	0.93		44
Adjustment to gonorrhea costs averted to account for chlamydia coinfection	0.79	0.90		44

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
Adjustment to account for reinfection: chlamydia and gonorrhea	0.70	0.70		44
Number of cases of STI averted in population per STI case treated	0.50	0.50		44
Probability of a new case of HIV attributable to chlamydia	0.0011	0.0011		44
Probability of a new case of HIV attributable to gonorrhea	0.0007	0.0007		44
Adjustment for time frame for STI-attributable HIV infections	0.25	0.25		44
Adjustment for partner overlap (heterosexuals)	0.75	0.75		44
Proportion of women with PID who: experience pelvic pain	0.19	—		48
experience ectopic pregnancy	0.09	—		48
become infertile	0.17	—		48

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
<i>HIV</i>				
Ratio of HIV tests performed per family planning clients served	0.22	0.51	✓	<sup>a</sup> 25, 50, 51
Proportion of tested clients who are positive:				
HIV (overall)	0.0014	0.0014	✓	<sup>a</sup> 25, 50, 51
HIV (sex-specific)	0.0010	0.0035	✓	<sup>a</sup> 52, 53
Adjustment to account for women who would be tested without public funding	0.73	—		33
Adjustment to account for HIV infections previously known	0.63	0.63		20
HIV transmissions averted per 100 persons newly aware of their infection	7.80	7.80		19
Years of transmissions averted from testing	3.00	3.00		22

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
<i>Pap and HPV testing</i>				
Proportion of female clients tested	0.36	—	√	<sup>a</sup> 25, 33
Adjustment to account for women who would be tested without public funding	0.73	—		33
Number of cervical cancer cases averted per 100,000 women tested:				
Pap-only testing regimen	148	—		<sup>a</sup> 56
Pap plus HPV testing regimen	165	—		<sup>a</sup> 56
Number of cervical cancer deaths averted per 100,000 women tested:				
Pap-only testing regimen	87	—		<sup>a</sup> 56
Pap plus HPV testing regimen	94	—		<sup>a</sup> 56
Proportion of women tested using Pap-only testing regimen	0.59	—		<sup>a</sup> 57

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
<i>HPV vaccines</i>				
Ratio of HPV injections provided to female clients served	0.014	—		<sup>a</sup> 3, 26
Adjustment to account for women who would be tested without public funding	0.73	—		33
Proportion of female clients vaccinated receiving:				
3 doses	0.46	—		64
2 doses	0.22	—		64
1 dose	0.32	—		64
Effectiveness of regimen:				
3-dose regimen	0.99	—		66
2-dose regimen	0.89	—		<sup>a</sup> 66-68
1-dose regimen	0.80	—		<sup>a</sup> 66-68
Adjustment factor to account for exposure to HPV prior to vaccination	0.38	—		<sup>a</sup> 71

*Continued*

**Table A1. Continued**

Parameter	National-Level Value		State-Level	Source
	Females	Males		
Cases averted per 100,000 women vaccinated:				
abnormal cervical cell cases	50,000	—		72
precancer cases	10,000	—		72
cervical cancer cases	500	—		72
cervical cancer deaths	200	—		72
Ratio of other HPV-attributable cancers averted per cervical cancer case averted:				
vulvar cancers	0.14	—		46
vaginal cancers	0.04	—		46
anal/rectal cancers	0.24	—		46
oropharyngeal cancers	0.13	—		46

<sup>a</sup>National- and/or state-level values are calculated from figures in the reference(s) listed.