EXPERT REPORT OF JOAN C. BARRETT AND ELAINE T. CORROUGH SUBMITTED ON BEHALF OF THE PLAINTIFFS

Cody Flack, Sara Ann Makenzie, Marie Kelly and Courtney Sherwin, Plaintiffs
v.
Wisconsin Department of Health Services and Linda Seemeyer, in her official capacity as Secretary of the Wisconsin Department of Health Services, Defendants

CASE NO. 3:18-CV-00309-WMC (W.D. WIS.)

March 22, 2019

Presented by:
Joan C. Barrett, FSA, MAAA
Consulting Actuary
Axene Health Partners, LLC

Elaine T. Corrough, FSA, FCA, MAAA
Partner and Consulting Actuary
Axene Health Partners, LLC

This report has been prepared solely for the use of the plaintiffs and their legal counsel for the purpose of providing expert information and analysis for the above-mentioned lawsuit.

axene health partners
HEALTH ACTUARIES & CONSULTANTS

Table of Contents

Executive Summary

The law firm of Relman, Dane & Colfax, PLLC, (Relman) on behalf of Cody Flack, Sara Ann Makenzie, Marie Kelly, and Courtney Sherwin (Flack, et al.), plaintiffs (the "Plaintiffs"), engaged us, Joan C. Barrett, FSA, MAAA and Elaine T. Corrough, FSA, FCA, MAAA of Axene Health Partners, LLC (AHP), to provide an expert report in *Flack, et al. v. Wisconsin Dep't of Health Servs., et al.*, Case No. 3:18-cv-309-WMC (W.D. Wis.) (the "Case"), in rebuttal to the actuarial estimates of the costs associated with eliminating the Challenged Exclusion submitted by David V. Williams on behalf of the Wisconsin Department of Health Services and Linda Seemeyer in her official capacity as Secretary of the Wisconsin Department of Health Services (DHS), defendants ("the Defendants"). In addition to this report, Joan C. Barrett has agreed to provide expert testimony in depositions and at trial as necessary.

In preparation for this report, we reviewed the two expert reports of David V. Williams submitted on behalf of the Defendants on August 22, 2018 [Dkt. No. 74-1] (The August Report) and November 16, 2018 [Dkt. No. 119] (The November Report) (collectively, "the Williams Reports"), and the supporting information referenced in the Williams Reports as well as other related sources of information. In the August Report, Mr. Williams provided his cost estimate for removing the Challenged Exclusion and outlined his methodology. The November Report was a supplemental declaration to respond to the supplemental expert declaration of Jaclyn White Hughto, PhD, MPH, filed on October 18, 2019 [Dkt. No. 96] (the Hughto Supplemental Declaration). The purpose of the Williams Reports was to estimate the healthcare costs associated with removing a longstanding Wisconsin regulation, Wis. Adm. Code §DHS 107.03(23)-(24) (the "Challenged Exclusion"), which categorically excludes gender-confirming surgical care and other gender-confirming treatments from Wisconsin Medicaid coverage.

In preparing this report, we tested the calculations and assumptions in the Williams Reports for reasonability and consistency with standard actuarial principles. We did not attempt to duplicate the calculations described in the Williams Reports due to time constraints. Similarly, we did not attempt to provide an independent estimate of the costs. As part of our review of the Williams Reports, however, we did compare Mr. Williams' estimate to independent sources of cost estimates.

In both the August Report and the November Report, Mr. Williams relied on the analysis he performed in support of the defendants in the case of *Boyden v. Conlin*, Case No. 17-cv-264-WMC (W.D. Wis.) ("the Boyden Case"). Similarly, in preparing this rebuttal report, we relied on the analysis we did in support of the plaintiffs in the Boyden Case.

Conclusions

In our expert opinion, the methods used by Mr. Williams are generally appropriate, but his estimate of an annual cost to the Wisconsin Medicaid program of $300,221, or 0.009% of the State of Wisconsin's share of total Wisconsin Medicaid spending, is on the high end of the range we would consider reasonable. In our expert opinion, any benefit that is less than 0.1% of total cost is considered immaterial from an actuarial

perspective since it is basically a rounding error. Mr. Williams also offered an alternate estimate of $1.2 million in the November Report, which is 0.036% of total costs. Although we strongly preferred the methodology described in the August Report to the higher estimate in the November Report, in our expert opinions, even that estimated cost impact is immaterial.

Professional Qualifications

This report has been prepared by Joan C. Barrett, FSA, MAAA and peer-reviewed by Elaine T. Corrough, FSA, FCA, MAAA in accordance with the following Standards of Practice as promulgated by the Actuarial Standards Board of the American Academy of Actuaries:

- Actuarial Standards of Practice No. 1, "Introductory Standard of Practice"
- Actuarial Standards of Practice No. 5, "Incurred Health and Disability Claims"
- Actuarial Standards of Practice No. 17, "Expert Testimony by Actuaries"
- Actuarial Standards of Practice No. 23, "Data Quality"
- Actuarial Standards of Practice No. 25, "Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages"
- Actuarial Standards of Practice No. 41, "Actuarial Communication"

Compensation

The billing rates for Ms. Barrett and Ms. Corrough are $400 per hour and $445 per hour respectively. The compensation is not dependent on the outcome of the case or on the opinions contained in this report.

Personal Qualifications

Both Ms. Barrett and Ms. Corrough are Fellows of the Society of Actuaries (FSA) and Members of the American Academy of Actuaries (MAAA) in good standing and are qualified to perform this work.

Before joining AHP, Ms. Barrett led the National Accounts Actuarial area for UnitedHealth Care. In that role Ms. Barrett and her team provided pricing and benefit strategy work for large self-insured groups, including developing the complex actuarial systems underlying this work. As part of that work, she often estimated the cost of specific benefits like gender-confirming surgery.

Ms. Corrough provided similar support during her tenure at Aon/Aon Hewitt. In that position, she frequently reviewed the work of other actuaries. Since joining AHP, Ms. Corrough has provided expert witness services and developed a measurement system for a targeted condition management program.

Brief biographies and curricula vitae, which include a list of publications, are included in the appendix of this report. Neither Ms. Barrett nor Ms. Corrough have provided expert testimony in any case in the past 4 years.

Background

We relied on our knowledge of actuarial pricing principles in reviewing the Williams Reports. In this section we describe those principles and their application to the circumstances of this case.

In preparing our earlier report in the Boyden Case, we reviewed the following documents: the second amended complaint; the Defendants' Responses to Plaintiffs' First Set of Requests to Admit, Interrogatories and Requests for Production ("Interrogatories"); the Williams Report; two reports by Segal Consulting on the costs of providing surgical and related services for treatment of gender dysphoria; the Terms and Conditions for Comprehensive Medical Plan Participation in the State of Wisconsin Group Health Benefit Program and Uniform Benefits for the 2016 Benefit Year; the World Professional Association for Transgender Health (WPATH) Standards of Care; and each of the references listed in Mr.Williams' bibliography with the exception of the Diagnosis and Statistical Manual from the American Psychiatric Association. In addition to the sources included in the discovery process, we reviewed the Behavioral Risk Factor Surveillance System website https://www.cdc.gov/brfss) and the American Society of Plastic Surgeons website (https://www.plasticsurgery.org).

For this case we reviewed the Williams Reports, the amended complaint [Dkt. No. 85], and the Hughto Supplemental Declaration.

The Estimation Process

The general formula for calculating the estimated net cost of adding a benefit to a plan or removing an exclusion reflects:

- The direct costs associated with adding the benefit
- The incremental costs in currently covered benefits due to the new benefit
- Savings in currently covered benefits as a result of adding the benefit
- A risk premium

A few comments on this concept:

- Costs are based on a specific time period, usually a calendar year.
- Cost of a benefit may be expressed in terms of total dollars or as a percent of total costs, in which case both the numerator and denominator need to be consistent in terms of time period and applicable population.
- The estimate should reflect typical clinical treatment patterns and accepted standards of care for the procedure or underlying condition in question.

- Similarly, the estimate should reflect the plan provisions regarding which services are covered, which services are excluded as well as any limitations or exceptions to those services.
- Whenever possible, the starting point for the estimate should be the plan's own historical experience. To the extent that is not possible, the experience of similar plans may be used, with appropriate adjustments.
- Other sources of information, like published papers and data, should be used to test the reasonableness of the estimate.
- The determination of the risk premium depends on the purpose of the estimate. If the purpose of the estimate is to provide a best estimate, then the value of the risk premium should be zero. If the purpose of the estimate is to reflect some measure of risk, then the risk premium should be greater than zero. Typically, the risk premium does not reflect the "worst case" scenario. Instead, it is calculated assuming that there is about an 80% to 90% chance that the actual costs will not exceed the estimate.
- The final value of the risk premium should reflect potential overstatements and understatements in the best estimate calculation.

There are always uncertainties in estimating the cost of a new benefit, so approximations are necessary. In reviewing the Williams Report we consistently looked to see if the general principles described above were followed, if the approximations were reasonable and the potential impact, if any, on the risk premium.

Clinical Considerations

Clinical care for transgender individuals diagnosed with Gender Dysphoria may include:

- Counseling and therapy before gender-confirming surgery, after the surgery or instead of the surgery
- Hormone replacement therapy
- Gender-confirming surgical procedures to feminize or masculinize the chest and genitals
- Other gender confirmation surgeries to alter the body to feminize or masculinize the patient's physical appearance

The World Professional Association for Transgender Health (WPATH) has established standards of care which include both eligibility and readiness requirements. The transition process may take multiple years to complete.

The Challenged Exclusion

The Challenged Exclusion expressly prohibits Wisconsin Medicaid coverage for "[t]ranssexual surgery" and "[d]rugs, including hormone therapy, associated with transsexual surgery or medically unnecessary alteration of sexual anatomy or characteristics." As these terms are undefined in the regulation, for purposes of this

report, we assume the excluded services to include any surgical treatment for gender dysphoria (gender-confirming surgery) or hormone therapy to treat gender dysphoria. The Wisconsin Medicaid program excludes "procedures, services and supplies related to surgery and sex hormones associated with gender reassignment". Based on our general knowledge of the Medicaid benefit structure, we assumed that in addition to this exclusion, the program excludes cosmetic and experimental procedures, but covers other medically necessary surgeries. Accordingly, our interpretation of this benefit structure is that Wisconsin Medicaid currently covers surgeries like mastectomies, hysterectomies, breast reconstruction and similar procedures unless there is a diagnosis code or other indicator that implies that the procedure is related to treatment for gender dysphoria and/or gender-confirming care. We have no way to validate that with the available information, but that interpretation is consistent with our knowledge of typical benefit structures, claims-payment policies and procedures.

For purposes of this analysis, we further assume that if the Challenged Exclusion is removed, there will be coverage for members under age 18 and that all gender confirmation surgeries recognized by the WPATH Standards of Care will be covered.

Baseline Numbers

In our review we assumed that all numbers relate to calendar year 2016 unless otherwise noted since that was the time period for the claims used by Mr. Williams in the Boyden Case. Mr. Williams assumed that there were 1.2 million Wisconsin Medicaid beneficiaries in 2016 and we were able to verify that this number was reasonable. We were also able to verify that Mr. Williams' assumption that the DHS share of the total Medicaid spend was 40.6% of the total was reasonable. To do our tests, we relied on the 2018 MACStats, the Medicaid and CHIP Data Book published by the Centers for Medicare and Medicaid Services (CMS).

Mr. Williams did not estimate the total Medicaid spending for 2016, but we estimated that number was $3,334,792,077. To estimate this number, we multiplied the DHS portion of total Medicaid spending in 2016 ($8,213,773,588) by 0.406, the DHS share of the total spending referenced above. Our source for the 2016 spending number was the Medicaid.gov website (https://www.medicaid.gov/state-overviews/scorecard/national-context/annual-expenditures/index.html).

Claims-Based Analysis

In preparing his August Report, Mr. Williams relied primarily on a claims-based analysis described in this section. Specifically, he reviewed the analysis he did in the Boyden Report and made adjustments based on the specifics of this case. We reviewed Mr. Williams' description of the steps that he used to calculate his estimate, and we compared these steps to the general principles described above. Except for the last step, each of the steps in the analysis described below was also done in the Boyden Case.

Methodology

The specific steps he described are:

1. Define the benefit. Mr. Williams states that he used a broad approach in defining the benefit for his initial estimate. Specifically, he included individuals with a diagnosis of gender dysphoria and services that may be related to gender reassignment surgery, both in preparation for surgery and for post-surgical treatment as a starting point for his analysis. Later in his analysis, he adjusted the initial estimate to account for a potential overstatement.

2. Define criteria for identifying individuals with relevant claims. The first step in Mr. Williams' analysis was to determine which individuals submitted a gender dysphoria claim. To do that, he compiled a list of diagnostic and procedure codes that indicate a potential diagnosis of gender dysphoria. To compile the list, Mr. Williams relied on the Blue Cross and Blue Shield of Massachusetts (BCBSMA) medical policy for gender dysphoria since that policy included extensive information about coding procedures. He then compared the substance of that policy to the policies used by the Wisconsin employee benefit plan's third-party administrators, Dean Health Plan and WPS. He concluded that the policies were similar enough that he could rely on the BCBSMA coding procedures for his analysis.

3. Gather data. Using the criteria described above, Mr. Williams identified 8,200 individuals with a diagnosis of gender dysphoria using the 2016 Truven MarketScan commercial data base. Based on his description of the process, it appears that this process was HIPAA-compliant. He then assumed that the groups associated with those 8,200 individuals and only those groups covered transgender surgery benefits. Using that assumption, he calculated the total number of members for those groups (20,037,382) and the corresponding gender dysphoria claims.

4. Adjustments**.** For the August Report, Mr. Williams adjusted the findings from the Boyden case described in the first three steps for certain differences between the commercial population underlying the Truven data and the Medicaid population. These adjustments included the proportion of adults, incident rates by poverty status, average Medicaid reimbursement rates, and Wisconsin's share of the total cost.

While we are familiar with the Truven data at a high level, we relied on Mr. Williams' work regarding the quality of the data and the accuracy of his calculations. Given time constraints, we did not attempt to duplicate his work for purposes of this rebuttal report.

Findings from August Report

Based on this analysis, Mr. Williams estimated in his August Report that the expected number of individuals incurring claims in a given year is 63.3 and that the average cost per patient is $5,988 for a total cost of $378,971. To adjust for contingencies, he multiplied the $378,971 by 1.5 for the number of patients and 1.3 for the cost per patient. He assumed that the DHS share percentage was 40.6%. After adjusting for contingencies and the DHS share of the cost, his final estimated annual additional cost to Wisconsin Medicaid was $300,221.

The Hughto Declaration

In the Hughto Supplemental Declaration, Dr. Hughto stated that Mr. Williams' cost estimate was likely overstated because he had failed to account for the short-term and long-term cost savings to the DHS. Specifically, she cited potential favorable impacts from gender dysphoria, depression, anxiety, suicidality, substance abuse, HIV transmission and acquisition, physical assault, sexual assault and improved socioeconomic status.

In his November Report, Mr. Williams responded to Dr. Hughto's comments regarding long-term and short-term savings by indicating that while the economic impacts she described are worth considering when making policy, these considerations are not intended to put a specific price tag on the benefit as he did in his August Report. He also noted that the long-term impact of gender confirmation surgery is not yet known. That said, he did quantify the short-term impact of reduction in suicide. Although he noted some savings associated with suicide reduction, this change was immaterial from an actuarial perspective.

Mr. Williams also revised his cost estimates to reflect Dr. Hughto's statement that approximately 5,000 beneficiaries may be impacted by the Challenged Exclusion. Assuming that number is true and a 10-year time horizon, he revised his estimate of the number of patients from 63.3 to 500 per year, resulting in a total cost to DHS of $1.2 million rather than his original estimate of $300,221.

Review

Overall, in his August Report, Mr. Williams followed sound actuarial principles and made appropriate use of the available data. In our expert opinion, his estimate of $300,221 or 0.009% of total costs is a reasonable estimate of the costs to be funded by DHS, but is on the high end of the range we would consider reasonable. That said, we have a few observations:

- Mr. Williams did not state a time period for his projections. We assumed 2016 since that was the time period for the underlying data. To make the estimate more relevant, we converted his estimate to a percent of total costs as described above.

- The cost estimates represent an average over a few years. In any given year, the costs may be greater than or less than this average because of variations in the number of patients and the scope of services, which is why a contingency margin is added to the best estimate. In our expert opinion, the contingency margins used by Mr. Williams are on the high side of what we would consider reasonable, even in the first year the Challenged Exclusion is removed. In that year, we can expect to see a higher than average utilization of the benefit due to pent-up demand. Although it is standard actuarial practice to reflect the impact of pent-up demand into cost estimates, we do not expect a pronounced impact if the Challenged Exclusion is removed given the specialized nature of the care and the limited availability of surgeons serving the Medicaid population.

- We were able to test the reasonableness of the assumptions used by Mr. Williams as described above.

In our expert opinion, the estimates in the August Report are much more preferable than the estimate in the November Report since the estimate in the August Report was based on actual experience for a commercial population, adjusted for expected differences in the Wisconsin Medicaid population and the commercial population. As noted above, this claims-based approach is always the preferred approach. Also, the estimate by Dr. Hughto referenced in the November Report—that 5,000 beneficiaries may be impacted by the Challenged Exclusion at some point in their lives—was not intended to be used to put a price tag on a specific benefit. Similarly, the 10-year time horizon Mr. Williams used was arbitrary and not based on any available data. As a result, it would be inconsistent for Mr. Williams to use such a number in estimating total cost, but not in factoring in savings. As noted earlier, the sources of savings provided by Dr. Hughto are valid factors for policymakers even if they are not valid for pricing purposes.

Materiality

It is standard actuarial practice to assume that any benefit that is 0.1% of total costs or less is immaterial for several reasons, but mostly because it is considered a rounding error. In our experience, no employer or insurance carrier has made a benefits decision based on cost for a benefit that costs less than 0.1%. Regardless, there would be no way to validate the assumption after the fact because normal variance for a group the size of the Wisconsin Medicaid program is between 3% and 5% based on our experience.

Mr. Williams estimate of $300,221 from the August Report represents 0.009% of the total spending and his estimate of $1.2 million from the November Report represents 0.036% of spending. In our expert opinion, both estimates are immaterial.

Actuarial Disclosures

Reliance on Data Supplied by Others

In preparing this report, we have relied on data and reports supplied by Relman including the Williams Reports and the Hughto Declaration. While we have reviewed the information in detail to determine reasonability, we have not audited the data and report, and do not attest herein to their accuracy.

Responsible Actuary

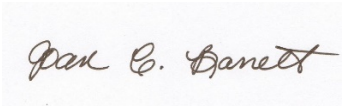
Unless otherwise noted, we are responsible for the assumptions and methodologies presented in this report. Questions regarding this report should be directed to our attention.

Qualifications

Joan Barrett is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries in good standing, and qualified to complete this work.

Elaine Corrough is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries in good standing, and qualified to complete this work.

Respectfully submitted,



Joan Barrett, FSA, MAAA
Consulting Actuary
Axene Health Partners, LLC
March 22, 2019

Elaine Corrough, FSA, MAAA, FCA
Partner and Consulting Actuary
Axene Health Partners, LLC
March 22, 2019

Appendix

JOAN C BARRETT, FSA, MAAA

Senior Consulting Actuary

joan.barrett@axenehp.com
direct: 860.463.9484
fax: 860.269.0621

Joan Barrett is a Senior Consulting Actuary with Axene Health Partners, LLC. She is a well-known and well-respected actuary. Joan brings great value to AHP clients with a knack for developing strong systems for analyzing network value and core actuarial functions, such as trends and pricing.

Joan joined AHP following a successful career at UnitedHealth Group, where she led the National Accounts Actuarial area for many years. In that role, she was instrumental in developing several innovative concepts in risk analysis and consumer analytics.

In 2017 she completed her service as a Society of Actuaries Vice-President. During her terms on the Board of Directors, she chaired both the International Committee and the Audit Committee. In 2011 she was named one of the Top Ten Volunteers for the Society of Actuaries. In part, this was because of her work as Chair of the Group and Health Curriculum Committee, the group that defines what every aspiring health actuary needs to know.

Joan recently chaired the Evolution of the Health Actuary Task Force which was been charged with defining the needs of health actuaries in the years to come and recommending a path to meet these needs. She is also a frequent speaker and author.

Joan received her Bachelor of Arts in mathematics from Frederick College and her Master of Arts in mathematics from Miami University. She is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries.

Joan lives in Tolland, Connecticut near her children and grand-children.

CURRICULUM VITAE

JOAN C. BARRETT, FSA, MAAA
Axene Health Partners, LLC
O: 860.858.5654 | C: 860.463.9484 | joan.barrett@axenehp.com

SUMMARY

Seasoned health actuary with over 35 years of professional experience, recognized for technical experience, leadership, communication skills and professional integrity.

CURRENT POSITION

Advisor to Insurers and Employers
Senior Consulting Actuary, Axene Health Partners, LLC, June 2015 – Present
Role: Consulting with health insurers and employers on a variety of actuarial assignments.
Recent projects:

- Rate-making procedures and strategies
- Rate fling support
- Employee benefits pricing and strategy

PREVIOUS WORK EXPERIENCE

National Accounts Actuary
Vice President, National Accounts, UnitedHealthcare. February 1993 – June 2015
Roles: Providing actuarial support to senior management and employers

1. Actuarial support and risk management for senior management
2. Benefit design and strategic consulting for Fortune 500 employers
3. Consumerism and actuarial research
4. Small and large group rate filings and pricing
5. Actuarial support for union negotiations
6. Analysis of self-funded network reimbursement methodologies
7. Rate-filings and pricing

QUALIFICATIONS AND DESIGNATIONS

- FSA – Fellow of the Society of Actuaries (SOA)
- MAAA – Member of the American Academy of Actuaries (AAA)

EDUCATION

- Bachelor of Arts, Frederick College, Portsmouth Virginia (Mathematics)
- Master of Arts, Miami University, Oxford, Ohio (Mathemetics)

PUBLICATIONS IN THE LAST 10 YEARS

- Barrett, Joan. (2018) Time to Update Your Trend Process?. *HealthWatch* (Society of Actuaries).
- Barrett, Joan (2017). Evolution of the Health Actuary: A Health Section Strategic Initiative. *HealthWatch.*
- Barrett, Joan. (2017) Accountability: Rates. *Inspire Accountability Series*. (Axene Health Partners)
- Barrett, Joan. (2017) The Chronic Disease Burden. *Inspire Series on the U.S. Healthcare Sytem*. (Axene Health Partners)
- Barrett, Joan. (2016). Making Predictive Analytics Our Own. *Predictive Analytics and Futurism* (Society of Actuaries)
- Barrett, Joan. (2016). Ch. 34: Medical Claims Cost Trend Analysis. *Group Insurance*, Skwire, Daniel D., 7th Edition.
- Barrett, Joan and Kessler, Emily. (2015) New Directions: The SOA in China. *The Actuary* (Society of Actuaries.
- Barrett, Joan. (2010) Chairperson's Corner. *Expanding Horizons.* (Society of Actuaries)
- Barrett, Joan. (2009) Chairperson's Corner. *Expanding Horizons.* (Society of Actuaries)
- Barrett, Joan. (2008) Timing's Everything: The Impact of Benefit Rush (Society of Actuaries)

EXPERT WITNESS EXPERIENCE

- None

CURRENT AND RECENT SOCIETY OF ACTUARIES (SOA) ENGAGEMENTS, ACTIVITIES AND ACCOMPLISHMENTS

- Secretary/Treasurer, Health Section Council, 2018 to present
- Vice-President, 2015 to 2017
    - Chair, Value of the Credential Task Force
    - Member, Issues Advisory Committee
    - Member, Policy and Governance Committee
    - Member, Cultivating Opportunities Team
- Elected Board Member, 2011 to 2014
    - Chair, International Committee
    - Chair, Audit Committee
    - Member, Business Analytics Team
    - Academic Partner
- Initiative 18/11: What Can We Do About the Cost of Health Care
    - Planning Committee member
    - Participant
- Section Experience
    - Chair, Education and Research Section Council
    - Board Partner, Health Section Council
    - Board Partner, Predictive Analytics and Futurism Section Council
    - Chair, Evolution of the Health Actuary Task Force, chartered by the Health Section Council
    - Member, Health Section Council
- Basic Education Experience
    - General Officer, General Insurance Curriculum

  - General Officer, Group and Health
- Continuing Professional Development Experience
  - Chair, Health Meeting
  - Board Partner, Continuing Professional Development Committee
  - Frequent speaker
- Research
  - Chair, Project Oversight Group, “Enterprise Risk Management Practice as Applied to Health Insurers, Self-Insured Plans and Health Financial Professionals”
  - Chair, Project Oversight Group, “Risk and Mitigation for Health Insurance Companies”
  - Chair, Project Oversight Group, “Measurement of Healthcare Quality and Efficiency: Resources for Healthcare Professionals”

BRIEF BIOGRAPHY

JOAN C. BARRETT, FSA, MAAA
Axene Health Partners, LLC
O: 860.858.5654 | C: 860.463.9484 | joan.barrett@axenehp.com

Joan Barrett is a Senior Consulting Actuary with Axene Health Partners, LLC. She is a well-known and well-respected actuary. Joan brings great value to AHP clients with a knack for developing strong systems for analyzing network value and core actuarial functions, such as trends and pricing.
Joan joined AHP following a successful career at UnitedHealth Group, where she led the National Accounts Actuarial area for many years. In that role, she was instrumental in developing several innovative concepts in risk analysis and consumer analytics.

In 2017 she completed her service as a Society of Actuaries Vice-President. During her terms on the Board of Directors, she chaired both the International Committee and the Audit Committee. In 2011 she was named one of the Top Ten Volunteers for the Society of Actuaries. In part, this was because of her work as Chair of the Group and Health Curriculum Committee, the group that defines what every aspiring health actuary needs to know.

Joan recently chaired the Evolution of the Health Actuary Task Force which was been charged with defining the needs of health actuaries in the years to come and recommending a path to meet these needs. She is also a frequent speaker and author.

Joan received her Bachelor of Arts in mathematics from Frederick College and her Master of Arts in mathematics from Miami University. She is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries.

Joan lives in Tolland, Connecticut near her children and grand-children.

ELAINE CORROUGH, FSA, FCA, MAAA

Partner & Consulting Actuary

elaine.corrough@axenehp.com
office: 503.272.6036
cell: 847.271.1470
fax: 951.616.3973

Elaine Corrough is a partner at Axene Health Partners, LLC and is based out of the Portland, Oregon office. She has over 25 years of health actuarial experience. Her recent work has focused on the transfer and management of risk between health insurers and health systems/provider organizations for Medicaid and Medicare managed care populations. She particularly enjoys assignments requiring assimilation and documentation of new regulations, technologies, and data sources into existing actuarial processes and methods.

Prior to joining AHP, Elaine consulted on all aspects of health and welfare benefits for plan sponsors ranging from small public entities to Fortune 100 companies. In addition to traditional consulting activities such as pricing and claims analysis, her expertise includes actuarial analysis of legislative and regulatory developments; ROI assessments; health risk migration and mapping; and complex model design and development. In addition, she is a past Staff Fellow in health for the Society of Actuaries.

Elaine has presented at multiple industry conferences on a variety of health and actuarial topics. She is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries.

Elaine earned a Bachelor of Arts in Classics (with an emphasis on languages) from Washington University in St. Louis. She resides with her husband in the Portland area.

CURRICULUM VITAE

Elaine Corrough, FSA, FCA, MAAA
Axene Health Partners, LLC
O: 503.272.6036 | C: 847.271.1470 | elaine.corrough@axenehp.com

SUMMARY

Seasoned health actuary with over 20 years of professional experience, recognized for technical experience, communication skills and professional integrity.

CURRENT POSITION

Advisor to Health Systems, Insurers, and Related Organizations.
Partner & Consulting Actuary, Axene Health Partners, LLC, January 2016 – Present
Senior Consulting Actuary, Axene Health Partners, LLC, March 2012 – December 2016
Role: Consulting with health systems and health insurers on Medicaid, Medicare, and commercial blocks of business on a variety of actuarial assignments.
Recent projects:

- Expert witness services regarding health actuarial practice and provider payment levels
- Contract review and analysis, cost model development, reimbursement schemes, and risk-based rate analysis
- Actuarial support for provider-payor contract negotiations and network development
- Analysis of self-funded rates for trusts and self-funded employers
- Strategies and structures for alternative payment models
- Evaluation of operational expenses for health plan, including negotiated MSO rates
- Cost analysis for setting network provider reimbursement rates on fee-for-service and risk (capitation) bases
- Claims analysis and payment model development for health systems
- Evaluation of risk readiness for health systems
- Measurement model for targeted condition management program

PREVIOUS WORK EXPERIENCE

Employee Benefits Actuary.
Vice President, Aon/Aon Hewitt, January 2009–December 2011. Employee benefits consulting.
Actuary/Consultant, Hewitt Associates, October 1995–December 2006 and December 2007–December 2008
Role: Consulting with employers on all aspects of their health and welfare benefits.

- Analysis of self-funded network reimbursements and overall health plan performance
- Claims analytics and reserves calculations
- Benefit design and strategic consulting
- Various national roles at Hewitt including national development leader and manager of actuarial operations for the health practice

Staff Fellow.
Health Staff Fellow, Society of Actuaries, January 2007 – November 2007.
Role: Unique national position focusing on the educational and research needs of practicing health actuaries.

QUALIFICATIONS AND DESIGNATIONS

- FSA – Fellow of the Society of Actuaries (SOA)
- MAAA – Member of the American Academy of Actuaries (AAA)
- FCA – Fellow of the Conference of Consulting Actuaries (CCA)

EDUCATION

- Bachelor of Arts 1992, Washington University in St. Louis, Classics (Languages)

EXPERT WITNESS WORK

- None

PUBLICATIONS IN THE LAST 10 YEARS

- Corrough, Elaine. (2017) Data Intermediaries: Pulling Insights from Confidential Data. *Inspire* Series (Axene Health Partners)
- Corrough, Elaine. (2016). Chairperson's Corner. *HealthWatch*. (Society of Actuaries)
- Elaine, Corrough. (2016) Ch. 18: The Affordable Care Act. *Group Insurance*, 7th Edition (Skwire)

CURRENT AND RECENT PROFESSIONAL ENGAGEMENTS, ACTIVITIES AND ACCOMPLISHMENTS

- Project Oversight Group member (Society of Actuaries Research – MACRA), 2018
- Merit Reviewer (multiple grant applications – improving healthcare systems), PCORI, 2018
- SOA Nominating Committee – 2017-18
- Merit Reviewer (multiple grant applications – dissemination & implementation), PCORI, 2017
- Project Oversight Group member (Society of Actuaries Research – Healthcare Fraud), 2017
- Presenter (Health Research), 2016 SOA Annual Meeting – Outstanding Session Award
- Presenter (ACA co-op failures), September 2016 Portland Actuarial Club
- Presenter (ACA marketplace sustainability), 2016 State of Reform-Portland
- Panelist (Actuarial Standards of Practice), 2016 SOA Spring Health Meeting
- Editorial Board member, *HealthWatch*, 2016
- SOA Health Section Council – 2015-16 Chair (elected position)
- Contributing author, *Group Insurance* (textbook, 7th edition)
- Presenter (provider reimbursement models), 2016 State of Reform-Seattle
- Presenter (actuarial communications and writing), 2015 SOA Spring Health Meeting
- Panelist (clinical measures for payment models), 2015 SOA Spring Health Meeting
- Presenter (provider reimbursement models), 2015 State of Reform-Los Angeles
- Moderator (options for small groups under ACA), SOA Webcast, July 2015
- SOA Health Section Council – 2014-15 Vice-Chair (elected position)
- SOA Health Research Committee – 2014-17 member
- SOA Health Research Oversight Committee – 2016-17 member
- CCA – 2015 Health Reform Meeting planning committee member

- Actuarial Standards Board (ASB) MV/AV Task Force and related Actuarial Standard of Practice (ASOP) – task force member
- Joint Discipline Panel – 2016 member
- Panel moderator, 2014 CCA Health Reform Meeting, *State Perspectives on Rate Filing Reviews*
- SOA Public Relations – 2013-2014 media interviews
    - "Is This the Hardest Job in America?" Wall Street Journal, 5/1/2014
    - Commentary on ACA and rate development interviews with media outlets including CNN (11/2013), BloombergBusinessWeek (11/2013), Politico (12/2013), Modern Healthcare (4/2014), Vox.com (4/2014), Kaiser Health News (4/2014), MarketWatch (4/14), Associated Press (4/2014)
- CCA – 2014 Health Reform Meeting planning committee member
- SOA Basic Education – 2013 volunteer, General Insurance track
- Panel moderator, 2013 SOA Annual Meeting & Exhibit, *Healthcare Cost Trends*
- Scorecard committee member, Healthcare Cost Institute, April 2012
- Public testimony, Joint Legislation Audit & Review Subcommittee (State of Washington), February 2011
- SOA Basic Education – 2007-08 volunteer, Health track (wrote original content)

BRIEF BIOGRAPHY

Elaine Corrough, FSA, FCA, MAAA
Axene Health Partners, LLC
O: 503.272.6036 | C: 847.271.1470 | elaine.corrough@axenehp.com

Elaine is a Partner and Consulting Actuary with Axene Health Partners, and has recently opened our new office in Portland, Oregon after working in the Murrieta headquarters for several years. With over 20 years of health actuarial experience, Elaine's recent work has focused on actuarial analysis, cost modeling, and formal certifications for carriers and health systems, including state ACA rate filings; actuarial reviews for the Round 2 Centers for Medicare and Medicaid Innovation (CMMI) Health Care Innovations Awards; and strategic and tactical support for health systems taking on risk. Elaine especially enjoys projects linking regulatory and contractual requirements with actuarial methods.

Prior to joining AHP, Elaine consulted on all aspects of health and welfare benefits for plan sponsors ranging from small public entities to Fortune 100 companies. In addition to traditional consulting activities such as pricing, discount analysis, and claims analysis for self-funded employer plans, her expertise includes actuarial analysis of legislative and regulatory developments; ROI assessments; health risk migration and mapping; and complex model design and development. She was also the national measurement leader for the healthcare consulting practice of a large consulting firm. In addition, Elaine is a past Staff Fellow in health for the Society of Actuaries.

Elaine has presented at multiple industry conferences on a variety of topics. She is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries. In addition to serving on multiple committees for these organizations, she was a member of the Actuarial Standards Board Health Committee's Task Force focused on developing an actuarial standard of practice for determining minimum value and actuarial value under the Affordable Care Act. She was the 2015-16 chairperson of the SOA Health Section Council (elected position), and is also a member of the SOA's Health Research Advisory Committee.

Elaine earned a Bachelor of Arts degree in Classics (with an emphasis on languages) from Washington University in St. Louis.