# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

CODY FLACK SARA ANN MAKENZIE, MARIE KELLY, and COURTNEY SHERWIN

Plaintiffs,

v.

Case No. 18-CV-0309

WISCONSIN DEPARTMENT OF HEALTH SERVICES and LINDA SEEMEYER, in her official capacity as Secretary of the Wisconsin Department of Health Services,

Defendants.

# SUPPLEMENTAL EXPERT WITNESS DECLARATION OF DAVID WILLIAMS

- I, David Williams, pursuant to 28 U.S.C. § 1746, declare as follows:
- 1. I have been retained by counsel for Plaintiffs as an expert in the above-captioned lawsuit. I submitted an expert witness report regarding the expected cost to the State of Wisconsin of covering gender dysphoria surgical treatments for all Wisconsin Medicaid beneficiaries. (Dkt. 74-1.) That report sets forth my professional qualifications and expert witness compensation.

- 2. In this supplemental declaration, I respond to the supplemental expert report of Jaclyn White Hughto, PhD, MPH, filed October 18, 2018 (the "Hughto Declaration"). (Dkt. 96.)
- 3. In preparation for this report, in addition to my previously submitted report, I consulted the following sources: Citations listed in Dr. Hughto's declaration, additional journal and publicly available articles regarding surgical complications and costs. References are attached as Exhibit A to this declaration.

## **Summary of Opinions**

- 4. In my prior report, I provide an estimated cost of \$739,000 per year to provide surgical benefits for treating Medicaid transgender patients, 40% of which would be funded by the State of Wisconsin. I further estimate that these costs would vary widely from year to year due to the small number of expected transgender surgical patients. These estimates are based on carefully considered enrollment data, age-adjusted expected utilization of the surgical benefit, and estimates of the average cost of gender reassignment surgeries. The expected utilization and costs have their basis in empirical evidence of individuals actually receiving gender reassignment surgical procedures. These costs are not disputed in the Hughto Declaration.
- 5. The Hughto Declaration states that my report failed to account for the short- and long-term cost savings associated with covering gender

reassignment surgeries under Wisconsin Medicaid. Hughto's analysis mirrors a report she references called the State of California Department of Insurance Economic Impact Assessment of Gender Nondiscrimination in Health Insurance (the "California Report"). (Dkt. 96-2.) Economic Impact assessments, required by some states when considering legislation, focus on the impact to the economy, taxes, job creation, safety, adverse impacts on certain classes of individuals, and the like. By regulation, the report must include an economic analysis for employment, business, and health and welfare. While economic impact statements may be useful for making policy decisions, the California Report was not intended to put a specific price tag on adding coverage for surgical gender dysphoria treatments, as I did in my original report.

6. Estimating identifiable, discrete cost savings resulting from adding a specific surgical benefit like the one here is difficult because of the quality of empirical evidence necessary to quantify any savings, and because the long term effectiveness of gender reassignment surgery is not well understood. (Byne et al., 2012; Dhejne et al., 2011; Simonsen, Hald, Kristensen, & Giraldi, 2016.) The Hughto Declaration fails to provide a quantified savings amount associated with providing coverage for gender reassignment surgeries, nor does it provide the empirical evidence necessary to produce a calculated savings for any of the potential savings categories she

discusses. I would not have used any of the sources she has identified to estimate the cost (or potential savings) to the Wisconsin Medicaid program resulting from covering gender reassignment surgeries.

7. The Hughto Declaration extends the definition of costs and purported savings into employment, criminal justice, incarceration, socioeconomics and other non-medical related costs, which are unquantified socioeconomic costs that do not directly impose costs on Wisconsin's Medicaid program through claims for medical services. Therefore, I would not include these potential savings in an analysis of the financial impact of this new benefit on Wisconsin's Medicaid program, even if Hughto had provided more specific data that could support a reliable cost savings analysis.

# Purported Cost Savings Associated With Mental Health

- 8. Unlike the other categories of purported savings described in the Hughto Declaration, information regarding the estimated decline in suicides combined with the average cost of suicide attempts and completions proves at least some basis to estimate a specifically identifiable cost savings associated with covering gender reassignment surgery.
- 9. My calculation is based on the Hughto Declaration, which makes the following assertions:

- a. That denying access to medically-necessary, gender conforming therapies exacerbates gender dysphoria and leads to increased utilization of mental health services. (Dkt. 96:4–5.)
- b. A 24% reduction in suicides results from gender-confirmation surgery. (Dkt. 96:5.)
- c. 41% of transgender adults will attempt suicide in their lifetime. (Dkt. 96:5.)
- d. The average medical cost of a suicide completion is \$2,596 and of a suicide attempt is \$7,234.2
- 10. If this information is inaccurate or flawed, the estimated savings will likewise be inaccurate. For example, I assume that the 24% reduction figure is accurate and complete and is caused by the surgical benefit, but I take no position on the reliability of that figure. Likewise, I assume that the 41% suicide rate and average cost for suicide attempts and completions are accurate figures, but take no position on their reliability.
- 11. Each assumption is the result of an independent study, not synchronized studies of the same individuals or same investigation method

<sup>&</sup>lt;sup>1</sup> It should be noted that Wisconsin Medicaid covers medically necessary hormone therapy and counseling therapies, so the only added benefit would relate to surgeries. However, this is neither well defined from a benefit perspective nor quantified.

<sup>&</sup>lt;sup>2</sup> I was not able to access the cited source for these average attempted and completed suicide costs, and so I cannot verify whether they reflect amounts paid to providers through the Medicaid program. If not, it is likely that these average costs would need to be reduced, since Medicaid reimbursement rates for a given service are typically lower than the amounts billed and paid through private insurance programs.

for the same time period. It is not clear that these independent studies may reasonably be used in concert to produce the cost savings described here.

12. Assuming the information in the Hughto declaration is accurate, I calculate an annual savings of \$1,075 per Medicaid enrollee who underwent surgical treatment for gender transformation and who may have attempted suicide. I estimate that this would impact 6 individuals per year, for a total yearly savings of \$6,450, of which the State of Wisconsin Medicaid program would realize 40%, or \$2,580 per year.

Discussion of Suicide-Related Cost Savings Estimate

- 13. Based on my prior report, Wisconsin Medicaid can expect to cover 633 surgical patients over 10 years, or 63 per year. Based on the Hughto Declaration, of those 633 patients, 41% (or 260) could be expected to attempt suicide. Again, using the Hughto Report's assumptions, providing the surgical coverage at issue would cause a 24% reduction of 62 attempts, or roughly 6 per year.
- 14. The ratio of suicide attempts to completions is approximately 28:1.3 Applying Hughto's average cost of suicide attempts and completions,

6

<sup>&</sup>lt;sup>3</sup> 1.3 Million attempted suicides and 41,149 suicide deaths: https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf (last visited visited November 13, 2018).

the average savings would be at most \$42,420 per year (\$7,070 average suicide cost x 6 patients).

- 15. These savings would need to be offset by the average cost of surgery, which I estimated to be approximately \$6,000 per surgical Medicaid enrollee. (Dkt. 74-1:10 (Table 3).) Thus results in a net yearly cost savings of \$6,420, of which 40% (or \$2,568) would accrue to Wisconsin's Medicaid annual budget. ((\$6,000\$ surgery cost x 6 patients a year) \$42,420 suicide reduction savings = -\$6,420.) I have used the reported cost amounts without regard to medical inflation.
- 16. I have simplified the cost savings calculations above based on a discrete 12 month period of cost and utilization, which may not accurately reflect the number of surgical procedures, number of suicides, or average costs over a longer time horizon. Transgender individuals often take more than 12 months to transition and individuals may attempt suicide more than one time in their lifespan.
- 17. The total expected cost of surgical treatment was \$739,000, of which 40%, or \$295,600 would be paid by the State of Wisconsin Medicaid program. This would be offset by \$2,568 for a net cost to the State of Wisconsin of \$293,032.

## Purported Cost Savings Associated With Substance Use

18. Hughto asserts that studies have demonstrated lower levels of substance use among transgender individuals who have received gender-confirming treatments relative to those who have not obtained care. (Dkt. 96:5–6.) But neither Hughto nor the studies cited provide quantified cost reductions, quantified reduction in benefit usage, or other measures useful in quantifying the purported cost savings. Accordingly, no reliable basis exists to calculate any cost savings to Wisconsin's Medicaid program associated with substance use resulting from covering gender reassignment surgeries.

### Purported Cost Savings Associated With Physical and Sexual Assault

19. Hughto asserts that increased access to gender-confirming surgeries would likely reduce the costs to the Wisconsin Medicaid program associated with stigma-related violence for transgender Wisconsin Medicaid beneficiaries who access such surgeries. (Dkt. 96:6–7.) But neither Hughto nor the cited studies provide quantified cost reductions, quantified reduction in benefit usage, or other measures useful in quantifying the purported cost savings to the Wisconsin Medicaid program. Accordingly, no reliable basis exists to calculate any cost savings to Wisconsin's Medicaid program associated with physical and sexual assault resulting from covering gender reassignment surgeries.

# Purported Cost Savings Associated With HIV/AIDS

20. Hughto asserts that engagement in gender-confirming medical care (i.e., hormones and/or surgery) has been linked to greater engagement in HIV prevention and treatment as well as better adherence to medications. (Dkt. 96:7–8.) But neither Hughto nor the cited studies provide quantified cost reductions, quantified reduction in benefit usage, or other measures useful in quantifying the purported cost savings to the Wisconsin Medicaid program. Accordingly, no reliable basis exists to calculate any cost savings to Wisconsin's Medicaid program associated with HIV/AIDS resulting from covering gender reassignment surgeries.

21. As noted above, there are complex interactions of medical treatment to consider when analyzing the cost of new medical benefits and their impact on existing treatment patterns. For example, increased HIV/AIDS medication adherence, which Hughto says would result from proving coverage for gender reassignment surgeries, would increase pharmacy costs because the patient is consuming more medications. Hughto asserts that this cost increase would be offset with lower medical costs for HIV treatment, but given rising drug prices, this assumption may not always be true.

### Purported Cost Savings Associated With Socioeconomic Status

- 22. Hughto asserts that transgender patients who received hormonal and surgical treatment have higher socioeconomic status and are more likely to be employed than those who have not received such treatment, leading to social and economic benefits for transgender patients by reducing unemployment, sex work, and related criminal justice and health system costs. (Dkt. 96:8–9.)
- 23. Neither Hughto nor the cited studies provide quantified cost reductions, quantified reduction in benefit usage, or other measures useful in quantifying the purported cost savings to the Wisconsin Medicaid program. Accordingly, no reliable basis exists to calculate any cost savings to Wisconsin's Medicaid program associated with socioeconomic status resulting from covering gender reassignment surgeries.
- 24. I also note that unemployment, sex work, and related criminal justice costs are not medical costs, and thus any savings in those areas would fall outside the realm of the Wisconsin Medicaid program.

## Revised Cost Estimate Based on Hughto's Utilization Estimate

25. Hughto estimates that "at least 5,000 Wisconsin Medicaid recipients are transgender adults who may be affected by the surgical

exclusion at some point in their lives." (Dkt. 96:9–10.) If that figure is accurate, then the total cost of removing the gender reassignment surgical benefit exclusion from Wisconsin's Medicaid program is estimated at \$30 million over ten years, ignoring inflation, or \$3 million per year.

- 26. To calculate these costs for the 5,000 Medicaid transgender surgical recipients, I first need to extend the annual costs outlined in my original report over a multiyear period. The annual costs of roughly \$6,000 per patient includes counseling and hormone therapy directly associated with the surgery as well as reassignment surgical costs. The reassignment surgical costs include a wide range of surgeries, from simple cosmetic eye surgery to more costly genital related surgeries such as vaginoplasty, as well as their complications.
- 27. I further assume a uniform distribution of gender transition surgeries per year over a ten year period, or 500 per year, because the reported number of surgeries among transgender individuals is over a lifetime. A 10 year horizon provides a reasonable horizon for purposes of

<sup>&</sup>lt;sup>4</sup> Hughto arrives at 5,000 by referring to CDC surveillance data that indicates approximately 0.43% of Wisconsin's adult population identifies as transgender, applies this 0.43% figure to the approximately 1.2 million adult Medicaid beneficiaries, and then assumes that approximately 97% of these would desire a form of gender-affirming surgery in their lifetime.

discussion and simplifies the analysis, and it also demonstrates the magnitude of the potential expected surgical costs.

28. Using these broad and simplified assumptions, I estimate that removing the Medicaid surgical benefit for transgender surgeries would cost the State of Wisconsin Medicaid program \$30 million or \$3 million per year if the estimate of 5,000 Wisconsin Medicaid enrollees seeking surgical transition is accurate. (5,000 patients x \$6,000 average cost.) The State of Wisconsin would bear 40% of those total costs, or around \$1.2 million per year. This estimate ignores inflation.

#### Conclusion

- 29. Quantifiable savings reported in the Hughto Declaration associated with reductions in suicide amount to around \$2,568 annually, meaning the net yearly cost to the State of Wisconsin of providing coverage for gender reassignment surgery could be around \$293,032. Otherwise, neither Hughto nor the cited studies provide quantified cost reductions, quantified reduction in benefit usage, or other measures useful in quantifying the purported cost savings to the Wisconsin Medicaid program.
- 30. If Hughto's estimate that 5,000 Medicaid enrollees would seek gender reassignment surgeries is accurate, then the added cost to the Wisconsin Medicaid program would total approximately \$3 million a year for

ten years, around \$1.2 million of which would be paid by the State of Wisconsin.<sup>5</sup>

I declare under penalty of perjury that the forgoing is true and correct.

Executed on the 16th day of October, 2018.

DAVID WILLIAMS

Daw V. Willun

<sup>&</sup>lt;sup>5</sup> Assuming Hughto's suicide reduction figures are accurate, this \$1.2 million annual cost would be offset by annual cost savings of around \$21,000.

#### **EXHIBIT A: REFERENCES**

- Bartlett, J. A. (2002). Addressing the challenges of adherence. *Journal of Acquired Immune Deficiency Syndromes* (1999), 29 Suppl 1, S2-10.
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, *15*(1). https://doi.org/10.1186/s12889-015-1867-2
- Beckwith, N., Reisner, S. L., Zaslow, S., Mayer, K. H., & Keuroghlian, A. S. (2017). Factors Associated with Gender-Affirming Surgery and Age of Hormone Therapy Initiation Among Transgender Adults. *Transgender Health*, 2(1), 156–164. https://doi.org/10.1089/trgh.2017.0028
- Byne, W., Bradley, S. J., Coleman, E., Eyler, A. E., Green, R., Menvielle, E. J., ... American Psychiatric Association Task Force on Treatment of Gender Identity Disorder. (2012). Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorder. *Archives of Sexual Behavior*, 41(4), 759–796. https://doi.org/10.1007/s10508-012-9975-x
- Cohen, M. S., Chen, Y. Q., McCauley, M., Gamble, T., Hosseinipour, M. C., Kumarasamy, N., ... Fleming, T. R. (2011). Prevention of HIV-1 Infection with Early Antiretroviral Therapy. *New England Journal of Medicine*, *365*(6), 493–505. https://doi.org/10.1056/NEJMoa1105243
- Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Långström, N., & Landén, M. (2011). Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. *PLoS ONE*, 6(2). https://doi.org/10.1371/journal.pone.0016885
- Dreher, P. C., Edwards, D., Hager, S., Dennis, M., Belkoff, A., Mora, J., ... Rumer, K. L. (2018). Complications of the neovagina in male-to-female transgender surgery: A systematic review and meta-analysis with discussion of management. *Clinical Anatomy*, 31(2), 191–199. https://doi.org/10.1002/ca.23001
- Flack, C., & Makenzie, S. A. (n.d.). IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN, 39.
- Jauk, D. (2013). Gender violence revisited: Lessons from violent victimization of transgender identified individuals. *Sexualities*, *16*(7), 807–825. https://doi.org/10.1177/1363460713497215
- Lawrence, A. A. (2006). Patient-reported complications and functional outcomes of male-to-female sex reassignment surgery. *Archives of Sexual Behavior*, 35(6), 717–727. https://doi.org/10.1007/s10508-006-9104-9
- Murad, M. H., Elamin, M. B., Garcia, M. Z., Mullan, R. J., Murad, A., Erwin, P. J., & Montori, V. M. (2010). Hormonal therapy and sex reassignment: a systematic review and

- meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology*, 72(2), 214–231. https://doi.org/10.1111/j.1365-2265.2009.03625.x
- Nelson, L., Whallett, E. J., & McGregor, J. C. (2009). Transgender patient satisfaction following reduction mammaplasty. *Journal of Plastic, Reconstructive & Aesthetic Surgery: JPRAS*, 62(3), 331–334. https://doi.org/10.1016/j.bjps.2007.10.049
- Padula, W. V., Heru, S., & Campbell, J. D. (2016). Societal Implications of Health Insurance Coverage for Medically Necessary Services in the U.S. Transgender Population: A Cost-Effectiveness Analysis. *Journal of General Internal Medicine*, 31(4), 394–401. https://doi.org/10.1007/s11606-015-3529-6
- Paterson, D. L., Swindells, S., Mohr, J., Brester, M., Vergis, E. N., Squier, C., ... Singh, N. (2000). Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine*, 133(1), 21–30.
- Rivara, F. P., Anderson, M. L., Fishman, P., Bonomi, A. E., Reid, R. J., Carrell, D., & Thompson, R. S. (2007). Healthcare utilization and costs for women with a history of intimate partner violence. *American Journal of Preventive Medicine*, 32(2), 89–96. https://doi.org/10.1016/j.amepre.2006.10.001
- Rossi Neto, R., Hintz, F., Krege, S., Rubben, H., & Vom Dorp, F. (2012). Gender reassignment surgery--a 13 year review of surgical outcomes. *International Braz J Urol: Official Journal of the Brazilian Society of Urology*, 38(1), 97–107.
- Simonsen, R. K., Hald, G. M., Kristensen, E., & Giraldi, A. (2016). Long-Term Follow-Up of Individuals Undergoing Sex-Reassignment Surgery: Somatic Morbidity and Cause of Death. *Sexual Medicine*, 4(1), e60–e68. https://doi.org/10.1016/j.esxm.2016.01.001
- Sineath, R. C., Woodyatt, C., Sanchez, T., Giammattei, S., Gillespie, T., Hunkeler, E., ... Goodman, M. (2016). Determinants of and Barriers to Hormonal and Surgical Treatment Receipt Among Transgender People. *Transgender Health*, 1(1), 129–136. https://doi.org/10.1089/trgh.2016.0013
- Sperber, J., Landers, S., & Lawrence, S. (2005). Access to health care for transgendered persons: Results of a needs assessment in Boston. *International Journal of Transgenderism*, 8(2–3), 75–91. https://doi.org/10.1300/J485v08n02\_08
- Terrier, J.-É., Courtois, F., Ruffion, A., & Morel Journel, N. (2014). Surgical Outcomes and Patients' Satisfaction with Suprapubic Phalloplasty. *The Journal of Sexual Medicine*, 11(1), 288–298. https://doi.org/10.1111/jsm.12297
- The Economic Cost of Intimate Partner Violence, Sexual Assault, and Stalking. (n.d.). Retrieved November 5, 2018, from https://iwpr.org/publications/economic-cost-intimate-partner-violence-sexual-assault-stalking/