October 3, 2022

Filed electronically

The Honorable Xavier Becerra
Secretary
U.S. Department of Health & Human Services
200 Independence Avenue SW
Washington, DC 20201

Re: Nondiscrimination in Health Programs and Activities (RIN 0945-AA17)

Dear Secretary Becerra,

I am submitting this comment in response to the Notice of Proposed Rulemaking regarding Nondiscrimination in Health Programs and Activities issued by the U.S. Department of Health and Human Services (HHS). I am a health policy expert in the Washington, DC area and my health care commentary has appeared in *Modern Healthcare*, *STAT News*, and *The Hill*, among other outlets. I hold a master's degree from a top 20 business school.

By relying on an overly broad interpretation of Section 1557 of the Patient Protection and Affordable Care Act of 2010 (ACA), the proposed rule will have a negative effect of historical proportions on the entire health care system. However, none of these negative impacts are appropriately reflected in the proposed rule's Regulatory Impact Analysis (RIA). In particular, I am writing to offer concerns over potential effects of the proposed rule on overall health care spending, public health care spending, private health insurance premiums, economic impact on small businesses, economic impact on families and especially low-income families, consolidation of the provider and supplier markets, impact on the provider workforce, impact on access to care, and impact on innovation. As drafted, the proposed rule's cost-benefit analysis and RIA is so inaccurate that it does not provide the public with a sufficient opportunity to comment or challenge the factual assertions on which the agency is proceeding. HHS should consider withdrawing the proposed rule and re-issuing it with an updated, more accurate RIA that enables the public to meaningfully comment on all aspects of the proposed rule.

1. Cost drivers

1.i. Coverage of Transition Surgery, Hormone Replacement Therapy, and Puberty Blockers

Per proposed V. CMS Amendments, providers would have to provide transgender care and insurers, to pay for such care. HHS asserts that lack of coverage of transition surgery and

hormone replacement therapy has long prevented patients from seeking those services.[1] Thus, if HHS anticipates that the proposed rule would allow many people to access the services they want, it should account for how the increased coverage would lead to an increase in demand, as established by the economic literature.[2]

The RIA's cited studies imply that the additional care would come at a negligible cost. However, the assumption of negligible cost relies heavily on a handful of studies. Those studies are outdated,[3] significantly underestimate the proportion of the population identifying as transgender,[4] significantly underestimate the proportion of people likely to seek care following the implementation of the rule,[5] rely on anecdotal evidence,[6] do not employ scientific methods,[7] are limited to small samples,[8] and rely on court statements rather than sound research.[9]

Using recent survey data on people identifying as transgender or non-binary,[10] I estimate that the proposed rule would result in an increase of $16,434,267,000 in health care spending over the first five years of implementation owing solely to the coverage of transition surgery, hormone replacement therapy, and puberty blockers. (See Appendix A.)

This projection is a conservative estimate of the anticipated cost of covering transgender surgery, hormone replacement therapy, and puberty blockers. Accounting for the following additional cost drivers would increase the anticipated spending increases:

---

[1] Nolan, I. T., Kuhner, C. J., & Dy, G. W. (2019). Demographic and temporal trends in transgender identities and gender confirming surgery. *Translational andrology and urology*, *8*(3), 184–190. https://doi.org/10.21037/tau.2019.04.09

[2] Keane, M., & Stavrunova, O. (2016). Adverse selection, moral hazard and the demand for Medigap insurance. *Journal of Econometrics*, *190*(1), 62-78.

[3] State of Cal., Dep't of Ins., Economic Impact Assessment Gender Nondiscrimination in Health Insurance, p. 3 (Apr. 13, 2012), http://translaw.wpengine.com/wp-content/uploads/2013/04/Economic-Impact-Assessment-Gender-Nondiscrimination-In-Health-Insurance.pdf.

[4] Id.

[5] Id.

[6] Id at pp. 6-7.

[7] State of Wis., Dep't of Employee Trust Funds, Correspondence Memorandum Re: Transgender Services Coverage, p. 6–8 (Aug. 14, 2018), https://etf.wi.gov/boards/groupinsurance/2018/08/22/item6a1/download?inline=.

[8] Aaron Belkin, Caring for Our Transgender Troops—The Negligible Cost of Transition-Related Care, 373 New Eng. J. Med. 1089 (2015), https:// www.nejm.org/doi/pdf/10.1056/NEJMp1509230?articleTools=true.

[9] Boyden v. Conlin, 341 F. Supp. 3d 979, 1000 (W.D. Wis. 2018).

[10] Nolan, I. T., Kuhner, C. J., & Dy, G. W. (2019). Demographic and temporal trends in transgender identities and gender confirming surgery. *Translational andrology and urology*, *8*(3), 184–190. https://doi.org/10.21037/tau.2019.04.09

Underestimation of Inflation
I assume a low inflation rate of 2% for prescription drug prices, hospital services, physician services, and health care administrator wages and benefits. Current economy-wide inflation is several percentage points higher, and while prices of health care goods and services are only beginning to rise now, they have historically grown consistently faster than economy-wide inflation.[11] Thus, inflation-related costs are likely to be higher than stated in my analysis.

Underestimation of Individuals Identifying as Transgender or Non-Binary
My analysis relies on recent survey data on individuals identifying as transgender or non-binary. A growing proportion of American youths identifies as transgender or non-binary.[12] If given the opportunity to pay for transgender care using private or public insurance, more patients would avail themselves of the opportunity, further driving up spending.

Omission of the Cost of Mental Health Services
I do not account for additional mental health services that would likely be procured by transgender and non-binary-identifying patients, were they to become more generously covered as a result of the proposed rule. HHS argues that the proposed rule will alleviate the mental health needs of those identifying as LGBTQ; however, scientific evidence shows that mental health challenges are ongoing even after receiving transgender care.[13] Currently, behavioral therapy averages $130 per session, which translates into an annual cost of $3,380 per person for biweekly sessions.[14]

Omission of the Cost of Other Services and Complications Including Abortions
I do not account for costs of other services such as facial surgery, which can be performed for $53,700 (masculinizing surgery) or $70,100 (feminizing surgery),[15] costs related to an increase in the number of abortions, which can cost between $350 and $2,000 per abortion, and costs related to complications following surgery or abortion.[16]

In conclusion, by relying on outdated data and failing to account for significant costs related to the provision of transgender care and abortion, the proposed rule severely underestimates the

---

[11] Charlesworth, Anita. (2014). Why is health care inflation greater than general inflation?. Journal of health services research & policy. 19. 10.1177/1355819614531940.

[12] Herman, J.L., Flores, A.R., O'Neill, K.K. (2022). How Many Adults and Youth Identify as Transgender in the United States? The Williams Institute, UCLA School of Law

[13] Kalin NH: Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: a comment by the editor on the process (letter). Am J Psychiatry 2020; 177:765734ajp.psychiatryonline.org Am J Psychiatry 177:8, August 2020

[14] https://www.choosingtherapy.com/cost-of-therapy/

[15] https://www.investopedia.com/paying-for-transgender-surgeries-5184794

[16] https://spendonhealth.com/abortion-cost/

increases in health care spending that the new regulations would engender. Were I to include more realistic data for inflation, population identifying as transgender and seeking transgender care, facial surgery, abortions, and complications, I estimate that the rule could cost up to $170,261,326,000 over five years. But even when relying on conservative assumptions, I found that the rule would cost an additional $16,434,267,000 in health care spending over five years. HHS's estimate of $0 to $472,000,000 per year for expanded coverage for transition-related medical care is simply not grounded in reality.

1.ii. Section 1557 Coordinators

Per 45 CFR § 92.7, providers with 15 or more employees would need to designate at least one Section 1557 Coordinator to "coordinate their efforts to comply with and carry out the covered entity's responsibilities under Section 1557 and this part with regard to their health programs and activities." In the RIA, HHS accounts for the cost of training employees, updating policies and procedures, and producing documentation, but it fails to account for the costs of designating health care administrators as Section 1557 Coordinators. I believe that the proposed rule grossly underestimates the amount of time that designated Section 1557 Coordinators will spend on Section 1557 coordination-related tasks given the compliance-related complexity, far-reaching impact on the health care industry, and liability exposure created by the proposed rule.

My estimate assumes that only one health care administrator is designated as Section 1557 Coordinator no matter the size of the hospital.

I estimate that the proposed rule would result in an increase of $14,249,079,000 in health care spending over the first five years of implementation owing solely to employment of a health administration work force acting as Section 1557 Coordinators. (See Appendix B.)

1.iii. Demand for Additional Covered Benefits

Per CFR 45 § 92.207, insurers would be forbidden from offering benefit designs that discriminate against beneficiaries belonging to protected classes. While the proposed rule emphasizes the prohibition of discrimination against people on the basis of sex, including gender identity, and termination of pregnancy, other protected classes may read in the proposed rule an obligation to cover other medical goods and services for which they have a need; for instance, people with disabilities frequently run into denials of coverage. The proposed rule may compel public and private insurance companies to cover a greater number of the goods and services needed by members of other protected groups, resulting in an increase in health care spending.

1.iv. Compliance and Legal Liability Costs

In the regulatory impact analysis, the proposed rule anticipates compliance with the rule to engender additional spending by affected entities. Those costs may be much higher than the rule suggests, however: The proposed rule affects the vast majority of health care providers and their

vendors, health insurers and their vendors, and other organizations offering health care financing solutions. All such entities would face a heightened legal risk, which would result in additional liability costs. Hiring and training Section 1557 coordinators would also impose an additional cost onto health care providers.

1.v. Limited Cost Sharing

According to 45 CFR § 92.4, the proposed rule limits health insurance companies' ability to require cost sharing from beneficiaries. Evidence from the health economics literature indicates that diminished cost-sharing invites moral hazard,[17] where individual patients bearing a smaller proportion of the cost of their care choose to consume more health care goods and services, which drives up spending, in turn driving up premium prices.

2. Provider Shortages

The proposed rule runs counter to the values of many Americans. According to a recent Pew Research Center survey, 32% of Americans with a college degree believe that abortion should be illegal in most or all cases.[18] This attitude is associated with opposition to performing transgender surgery and providing hormone replacement therapy.[19] By subjecting providers with religious or moral objections to the provision of abortion or transgender care to agency action and legal liability, the proposed rule risks driving those providers away from the practice of medicine and nursing. As many as 243,700 physicians and 1,002,000 nurses could leave the profession, should the proposed rule become binding. (See Appendix C.) The proposed rule would also deter people with religious or moral convictions from undertaking studies to enter the field. The proposed rule thus threatens to worsen the health care provider shortage at a time when thousands of nurses are striking[20] and one in five doctors express intent to leave the profession in the wake of the COVID-19 pandemic.[21]

3. Impact on Small Businesses

Rising health care spending would result in health premium increases, increasing the amounts employers have to spend on health benefits for employees. Low-income employees are comparatively more costly to cover as they tend to have more extensive health care needs,[22] and

---

[17] Finkelstein, A. (2014). *Moral Hazard in Health Insurance*. New York Chichester, West Sussex: Columbia University Press. https://doi.org/10.7312/fink16380

[18] https://www.pewresearch.org/religion/fact-sheet/public-opinion-on-abortion/

[19] https://illinoisfamily.org/life/yes-abortion-and-transgenderism-are-two-sides-of-the-same-coin/

[20] https://betternurse.org/nurse-strikes/

[21] https://www.ama-assn.org/practice-management/physician-health/medicine-s-great-resignation-1-5-doctors-plan-exit-2-years

[22] https://www.commonwealthfund.org/blog/2018/healthy-low-income-people-greater-health-risks

to enjoy otherwise similar health and other employment benefits without creating as much value for the organization. Thus, the proposed rule might lead small businesses to hire fewer low-paid employees and to offer less generous health benefits.

The proposed rule's RIA severely underestimates affected entities' compliance costs and the cost of additional covered benefits and thus fails to properly account for the significant negative effects of the rule on employers, especially small businesses.

4. Impact on Low-Income Families

Increased spending due to the proposed rule would disproportionately harm low-income families in several regards. Low-income families are already prone to medical debt[23] and subject to predatory practices from health care providers to recoup the costs of the care they receive (as exposed by many journalists and researchers, including in a recent New York Times investigation[24]). By expanding the number of services to which patients are entitled, hospitals would run the risk of incurring additional uncompensated care which would exacerbate their incentives to seek payment. Additionally, as mentioned under 3., low-income families may face barriers to employment as a result of increases in health coverage costs.

Furthermore, by offering more generous benefits for people on government insurance and Medicaid in particular, the proposed rule further exacerbates the challenges faced by Medicaid beneficiaries in accessing timely and high-quality care.[25]

5. Consolidation

Consolidation in the health care sector is accelerating.[26] Data show that, when providers merge, prices tend to increase and not decrease.[27] The burdensome nature of this new rule would make it even more difficult for small providers and insurers to remain compliant and competitive, exacerbating their financial vulnerability and inviting takeovers from larger entities. Rural hospitals are particularly at risk. In 2016, critical access hospitals employed an average of 127

---

[23] https://news.stanford.edu/2021/10/07/study-finds-medical-debt-double-whammy-poor/

[24] https://www.nytimes.com/2022/09/24/health/bon-secours-mercy-health-profit-poor-neighborhood.html

[25] Hsiang, W. R., Lukasiewicz, A., Gentry, M., Kim, C. Y., Leslie, M. P., Pelker, R., Forman, H. P., & Wiznia, D. H. (2019). Medicaid Patients Have Greater Difficulty Scheduling Health Care Appointments Compared With Private Insurance Patients: A Meta-Analysis. *Inquiry : a journal of medical care organization, provision and financing*, *56*, 46958019838118. https://doi.org/10.1177/0046958019838118

[26] https://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/great-consolidation-health-systems.html

[27] Polyakova, M., Bundorf, M. K., Kessler, D. P., & Baker, L. C. (2018). ACA Marketplace premiums and competition among hospitals and physician practices. *American Journal of Managed Care*, *24*(2), 85-90.

people.[28] Complying with the rule's requirement for Section 1557 coordinators would take away resources that could be used for the direct provision of care. Complying with the proposed rule and avoiding legal liability would further weaken those hospitals' financial position. Providers of all sizes caring for patients in both urban and rural settings would also face increased costs due to the proposed rule's effects on upstream goods and services from vendors subject to it.

Consolidation would worsen in the health insurance market as well.[29] Per 45 CFR § 147.104(e) and 45 CFR § 156.125(b), the proposed rule would diminish health insurance companies' ability to make coverage decisions based on medical necessity as opposed to nondiscrimination. As a result, the proposed rule would make creating new insurance products more complex, keeping health insurance innovators out of the market. Like health care providers, health insurer providers would also face higher costs due to the proposed rule's effects on vendors.

6. Impact on Innovation

4.i. Undermining Value-Based Care

Health care providers have long worked in partnership with the U.S. Department of Health and Human Services and the Centers for Medicare and Medicaid Services' Center for Medicare and Medicaid Innovation in particular to usher in the advent of value-based care.[30] By placing nondiscrimination above medical necessity, the proposed rule changes the parameters within which experts on value-based care have been working to deliver superior care at an affordable price, which risks slowing down medical advances for all Americans, including those supposed to benefit most directly from the proposed rule.

4.ii. Undermining Health Insurer Innovation

As mentioned above, the proposed rule would diminish health insurance companies' ability to make coverage decisions based on medical necessity. It would also limit health insurance companies' ability to design plans specifically catering to the needs of patients with limited means and specific economic circumstances. For instance, the proposed rule applies to short-term, limited-duration insurance (STLDI) plans, which offer affordable coverage to people in need of coverage while awaiting another form of coverage to begin, such as starting a new job with health benefits. By limiting insurance companies' ability to offer products that meet the needs of their customers, the proposed rule weakens the competitiveness of the insurance market.

---

[28] https://ruralhealthworks.org/wp-content/uploads/2018/04/Summary-Economic-Impact-Rural-Health-FINAL-100716.pdf

[29] https://www.commonwealthfund.org/publications/issue-briefs/2015/nov/evaluating-impact-health-insurance-industry-consolidation

[30] https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs

4.iii. Undermining Technological Innovation

Per 45 CFR § 92.210, the proposed rule enables HHS to exercise oversight over algorithms used in the provision of medical goods and services and in the coverage decision mechanisms of health insurance companies. From a scientific perspective, algorithms are an ever-evolving technology that is far from perfect. Algorithms are known for replicating existing biases in medical research.[31] The proposed rule seeks to eliminate this problem right away. While a lofty goal in theory, banning supposedly biased algorithms from today's health care system as the proposed rule seeks to do puts targets on the backs of developers who are responsible for today's imperfect technology. The threat of agency action against them would stifle their progress in correcting biases and potentially redirect algorithm development research to non-health care fields not subject to the proposed rule, even though health care represents one of the most promising areas for their application. Additionally, enforcing non-discrimination rules in algorithms would be difficult from a technical standpoint, with HHS needing to get access to sensitive and proprietary information while also making judgment calls about whether those algorithms are providing clinically sound results or incorrectly biasing results.

Conclusion

In summary, relying on conservative assumptions, the rule would increase transgender care-related spending by $16,434,267,000 and administrative spending by $14,249,079,000 for a total of $30,683,346,000 over five years. This amount is significantly higher than the $427,000,000 to $1,093,000,000 estimated by HHS in the proposed rule's RIA. If implemented, the proposed rule also risks driving 243,700 physicians and 1,002,000 nurses away from the health care field, which will impose tremendous costs and hardships on society. The proposed rule would disproportionately harm low-income families and small businesses by imposing higher health care costs on them and limiting access to care. Lastly, the proposed rule risks accelerating consolidation among health care providers and health insurers, squeezing small and innovative businesses out of the market and undermining innovation across the health care industry. I do not believe that the significant costs and hardships outlined in this letter justify the implementation of the benefits proposed by HHS. In order to avoid the anticipated negative consequences on the economy and society that the proposed regulations would have, I believe that HHS should abandon the proposed rule.

Attachments:

Appendix A: Cost of Transgender Care
Appendix B: Cost of Section 1557 Coordinators
Appendix C: Health Care Provider Shortages

---

[31] Panch, T., Mattie, H., & Atun, R. (2019). Artificial intelligence and algorithmic bias: implications for health systems. *Journal of global health*, *9*(2), 010318. https://doi.org/10.7189/jogh.09.020318

Appendix A: Cost of Transgender Care

I estimate the *increase* in health care costs stemming from transgender surgery and hormone replacement therapy following the implementation of the rule.

Assumptions:

- Hospital service price inflation is 2% per annum.
- Drug price inflation is 2% per annum.
- Physician service price inflation is 2% per annum.
- Percentage of the population identifying as transgender: 0.6%. Source: Nolan, I. T., Kuhner, C. J., & Dy, G. W. (2019). Demographic and temporal trends in transgender identities and gender confirming surgery. *Translational andrology and urology*, *8*(3), 184–190. **https://doi.org/10.21037/tau.2019.04.09**
- Percentage of those identifying as transgender who might seek surgery if it became broadly available and covered following the implementation of the rule: 15%. This is based on the fact that 25% of people wishing to undergo surgery do not receive it due to cost. We estimate that 15% of people identifying as transgender would seek surgery if it became broadly available and covered. Source: Nolan, I. T., Kuhner, C. J., & Dy, G. W. (2019). Demographic and temporal trends in transgender identities and gender confirming surgery. *Translational andrology and urology*, *8*(3), 184–190. **https://doi.org/10.21037/tau.2019.04.09**
- 20% of the people wishing to undergo surgical transition would do so each year, meaning that 100% of those wishing to undergo surgery would have undergone it five years into the implementation of the rule.
- 20% of the people wishing to begin hormone replacement therapy (HRT) would do so each year, meaning that 100% of those wishing to do HRT would have started it five years into the implementation of the rule.
- Percentage of those identifying as transgender who might seek HRT if it became broadly available and covered following the implementation of the rule: 30%. This estimate is based on a survey of people identifying as transgender and non-binary in which 78% of respondents expressed a wish to received HRT but only 49% had ever received it. Presumably, not all those who have ever done HRT are continuing with it. I assume that 40% of people identifying as transgender already do HRT and that another 30% of people identifying as transgender would do HRT if it became broadly available and covered following the implementation of the rule. Source: James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality
- Total US population: 333,000,000. Source: https://www.census.gov/popclock/
- Cost of transition surgery: $30,000. Source: https://www.forbes.com/advisor/personal-loans/transgender-surgery-cost/
- Cost of hormone replacement therapy per annum: $1,000. Source: https://ht-ca.com/blog/how-much-does-hormone-replacement-therapy-cost/
- Cost of puberty blockers per annum: $14,500. This is the average of the range of $4,000 to $25,000 found in the scientific literature. Source: Turban, J. L., King, D., Carswell, J. M., &

Keuroghlian, A. S. (2020). Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. *Pediatrics*, *145*(2), e20191725. https://doi.org/10.1542/peds.2019-1725.

- Percentage of minors identifying as transgender: 0.7%. This is a conservative estimate based on the population ages 18-24 identifying as transgender, with younger people being increasingly more likely to identify as LGBTQ. Source: Nolan, I. T., Kuhner, C. J., & Dy, G. W. (2019). Demographic and temporal trends in transgender identities and gender confirming surgery. *Translational andrology and urology*, *8*(3), 184–190. https://doi.org/10.21037/tau.2019.04.09
- Percentage of the population ages 8-16: 5.89%. Children seeking to take puberty blockers start taking them at the outset of puberty until age 16. Sources: https://health.clevelandclinic.org/what-are-puberty-blockers/ and the US Census (https://www.census.gov/popclock)
- Percentage of eligible minors identifying as transgender who might seek puberty blockers if they became broadly available and covered following the implementation of the proposed rule: 50%.

Cost of transition care: 5-year outlook

Year	Cost of surgical transition (adjusted for inflation)	Number of people under-going surgical transition	Total cost of surgery	Annual cost of HRT (adjusted for inflation)	Number of people using HRT	Total cost of hormone replacement therapy	Anual cost of puberty blockers (adjusted for inflation)	Number of minors using puberty blockers	Total cost of puberty blockers	Total cost
1	$30,000	59,940	$1,798,200,000	$1,000	119,880	$119,880,000	$14,500	68,648	$995,395,275	$2,913,475,275
2	$30,600	59,940	$1,834,164,000	$1,020	239,760	$244,555,200	$14,790	68,648	$1,015,303,181	$3,094,022,381
3	$31,212	59,940	$1,870,847,280	$1,040	359,640	$374,169,456	$15,086	68,648	$1,035,609,244	$3,280,625,980
4	$31,836	59,940	$1,908,264,226	$1,061	479,520	$508,870,460	$15,388	68,648	$1,056,321,429	$3,473,456,115
5	$32,473	59,940	$1,946,429,510	$1,082	599,400	$648,809,837	$15,695	68,648	$1,077,447,858	$3,672,687,204
Total			**$9,357,905,016**			**$1,896,284,95**			**$5,180,076,986**	**$16,434,266,955**

Appendix B: Cost of Section 1557 Coordinators

I estimate the cost of designating Section 1557 Coordinators in hospitals.

Assumptions:

- Section 1557 coordinators are assumed to spend 50% of their time on Section 1557 coordination-related tasks.
- I assume that, on average, one coordinator is required per health care facility.
- Owing to consolidation, the number of health care facilities will likely decrease over time, but the coordinators will be responsible for larger facilities as a result of consolidation, so the number of coordinators is kept stable over the years.
- Health care administrator median salary, 2020: $101,340. Source: BLS (**https://www.bls.gov/ooh/management/medical-and-health-services-managers.htm#tab-1**)
- Number of covered entities with 15 or more employees: 41,250. Source: Proposed rule.
- Health care administrator wage inflation: 2%.
- Time spent by designated Section 1557 Coordinator on Section 1557 coordination-related tasks: 50%.
- Employee benefits: 31%. Source: BLS (**https://www.bls.gov/news.release/pdf/ecec.pdf**)

Cost of Section 1557 Coordinators: 5-Year Outlook

Year	Number of FTE Section 1557 Coordinator jobs	Section 1557 Coordinator salary, adjusted for inflation	Total spending on Section 1557 salaries
1	20,625	$132,755	$2,738,080,125
2	20,625	$135,411	$2,792,841,728
3	20,625	$138,119	$2,848,698,562
4	20,625	$140,881	$2,905,672,533
5	20,625	$143,699	$2,963,785,984
Total			**$14,249,078,932**

Appendix C: Health Care Provider Shortages

I estimate the health care provider shortage following the implementation of the proposed rule.

Assumptions:

- Physician workforce, 2019: 761,700. Source: BLS (**https://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm**)
- Nurse workforce, 2021: 3,130,600. Source: BLS (**https://www.bls.gov/ooh/healthcare/registered-nurses.htm**)
- Proportion of people with a college degree or more who believe that abortion should be illegal in all or most cases: 32%. I use attitudes toward abortion as a proxy for attitudes toward transition care. Source: Pew Research Center (**https://www.pewresearch.org/religion/fact-sheet/public-opinion-on-abortion/**)

Healthcare Provider Shortages

Physicians	243,744
Nurses	1,001,792