Medicaid Expansion - Preliminary Estimates

November 2019

If Wyoming were to expand Medicaid to adults below 138% of the Federal Poverty Level (FPL) per the Affordable Care Act, the Department of Health estimates that an expected 19,000 people would be enrolled after 24 months. The total required appropriation for this first biennium is expected to be $154 million, of which $136 million would be Federal Funds and $18 million State General Funds.

These numbers are just the expected values — it’s just as important to note the significant uncertainty inherent in our projections. For enrollment, these are illustrated graphically in Figure 1, below. Here, Panel A illustrates the uncertainty in enrollment for the 24th month, and Panel B shows the uncertainty in overall enrollment trajectories over time, out to 36 months. For the 24th month, 90% of our estimates are between 9,000 and 32,000 people.

Figure 1: Uncertainty in enrollment. Dashed lines represent 67% percentile intervals; dotted lines show 90% percentile intervals. Blue circle and lines show estimates from Milliman (2011).

Panel A: Enrollment at 24 months

Panel B: Enrollment trajectories

These enrollment projections were based off a parametric growth-curve model fitted based on the Medicaid expansion experience in other states.

Overall enrollment, of course is not the only issue that matters. The Department also attempts to answer several other questions that can affect overall cost and benefits:

- “What kind of people will enroll? Who will enroll first?” We assume sicker people — those with a demonstrated need for insurance — will likely enroll first; healthier people are more likely to remain uninsured. This assumption generally means that, the lower the overall enrollment, the higher the per-member per-month costs will be.
“How many of these people will be uninsured? How many will already have insurance?” This is known as “crowd-out.” Since private insurance plans typically pay higher rates than Medicaid, the degree of crowd-out can negatively affect overall provider revenue.

“What services will they use?” How can we forecast what kind of providers will see new revenue? Hospitals vs. physicians vs. pharmacy, etc.

Demographics, poverty, employment. Statistics on employment, insurance status and poverty level may be relevant under specific program designs (e.g. work requirements, < 100% FPL expansion, etc.

Simulation methodology

To answer these questions in a comprehensive and flexible way, we use a series of statistical models chained together in a simulation. This allows us to make certain assumptions about eligibility, take-up, cost-sharing, and the like, set “the rules of the game” in the simulation, and then see the results. The simulation environment further allows us to propagate all the uncertainty inherent in each statistical model.

An example of preliminary results from ~120 iterations of the simulation is shown in Figure 3, below. The figure shows the uncertainty in the required appropriation (FF vs SGF). Again, while $18 million SGF is the expectation, the preliminary results below indicate required amounts anywhere from $10 to $30 million.

Figure 3: Uncertainty in total first biennium FF and SGF appropriation