Technical Assistance Tool | June 2018

Conducting a Program Cost Analysis for Medicaid-Public Health 6|18 Prevention Programs

Investing in prevention activities, such as the Centers for Disease Control and Prevention's 6|18 Initiative, offers state Medicaid-public health partners the potential to both improve health outcomes and reduce program costs. Conducting a cost analysis to quantify the expected financial impact of the program or policy can help Medicaid-public health teams make the case to ensure long-term Medicaid coverage of the 6|18 Initiative's evidence-based interventions. Program cost analyses, typically conducted after an initial pilot or before scaling up a program, can be a powerful tool for gaining greater leadership buy-in and garnering the necessary financial resources to successfully implement and sustain the program.

Key Steps in Developing a Cost Analysis

Following are foundational steps to assist Medicaid and public health partners in designing and implementing a cost analysis to help make the case for 6|18 interventions:

COST ANALYSIS STEPS

1. Identify the Purpose and Audience
2. Identify Key Data and Analytic Considerations
3. Identify Available Resources and Partners
4. Crunch the Numbers: What to Include in Analysis, Where to Pull Data, How to Make Assumptions
5. Make the Case: Create a Compelling Case for Leadership and Stakeholders

1. Identify the Purpose and Audience

Answering the "who?" and "why?" of the cost analysis will provide states with key information for assuring the utility of the exercise. Whether states are looking to build the case for a policy change or add funding to an existing program, a carefully designed cost analysis can help inform program decisions. Depending on the nature of the proposed policy change and how Medicaid is administered in the state, possible audiences for cost analyses findings may include internal leadership (e.g., Medicaid director), policymakers/legislators, Medicaid managed care plans, project funders, and/or providers. A tailored approach will allow states to target their cost analysis efforts to align with program objectives.

2. Identify Key Data and Analytic Considerations

States will need to determine the intervention timeframe and target population to use in their analysis. As a first step, states can review available data and determine whether additional baseline data need to be collected. Trend data after the intervention may be strong enough to make the case for its continuation, or states may choose to compare current data to pre-intervention or "control" data. In some cases, it may make sense to include the full population that participated in an intervention. In other cases, it may be more useful to look at only high-risk individuals and the

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return-on-investment (ROI) for this population subset. For example, an ROI assessment for high-risk individuals may be more practical if funds are limited and the program is only targeted to individuals at greater risk. In Rhode Island, for example, an economic analysis of its Home Asthma Response Program pilot stratified by risk found that serving the "high utilizer" subset — children who were admitted to the hospital or had two or more emergency department (ED) visits — yielded a greater ROI than providing the intervention to all enrolled children with an asthma diagnosis.

3. Identify Available Resources and Partners

After determining the intended audience and key data parameters, the next step for states is to identify the resources and partners necessary to conduct the analysis (see examples in sidebar). Key state data sets from both Medicaid and public health, as well as relevant reports from other state programs, will help build a compelling business case. Conducting cost analyses also requires the capacity to mine data, conduct financial analyses of the data, and manage the overall project. Identifying the appropriate staff members and partners, in addition to contracting out as needed (e.g., with actuaries), can assure the capacity to bring the analyses to completion.

POTENTIAL RESOURCES

- State Medicaid claims and encounter data to measure baseline utilization, identify target populations, etc.
- State public health data sets (e.g., Quitline data; birth and death certificate data; hospital discharges)
- List of relevant diagnosis (ICD), procedure (CPT/HCPCS), and/or medication national drug codes (NDCs) for proposed coverage changes or expansions
- Survey data (such as CAHPS) on members by managed care organization (MCO)
- Data on condition prevalence (BRFSS, YRBSS, state fielded surveys)
- Policy scan of related coverage across states or MCOs to model utilization, expenditures, prevalence and/or outcomes and to conduct comparisons

POTENTIAL PARTNERS

- Accountants, actuaries, and/or financial analysts
- Data managers
- Epidemiologists
- Service providers
- Centers for Disease Control and Prevention

4. Crunch the Numbers

Cost analysis calculations demonstrate either cost avoidance (showing what would have been spent without the new investment) or cost savings over time. Cost avoidance may include health care costs averted (for example, asthma-related ED visits or inpatient hospital stays for diabetes complications) or broader impacts, such as avoiding productivity losses, by implementing the intervention. This may mean focusing on only a higher risk population instead of the broader group (see step 2 above). As part of the analysis, states will identify where potential costs will accrue, whether in the Medicaid budget or in another state program. Ideally, the intervention would demonstrate both near term- and long-term savings. States may monitor measures like the number of people participating in or impacted by the program, number of services delivered, and the cost per service (both delivered and averted) to demonstrate the magnitude of savings. In accounting for the total net costs avoided or saved by an intervention, a cost analysis would also include costs spent to implement the program or policy. This calculation includes both ongoing programmatic costs (such as operational costs for an asthma home visiting program or lost revenue from co pays for tobacco cessation activities) as well as one-time or upfront costs (such as designing the intervention, analyzing the data, and communicating the results).

5. Make the Case

Once states have conducted cost analyses, the next step is to determine how to package the findings in a compelling way for the intended audience. To present findings to leadership or policymakers, teams might generate a condensed overview of the cost analysis as a one-pager or brief slide presentation. If submitting as part of a grant application or lengthier report, teams may produce a more detailed explanation of the program costs, ROI analysis, inputs, and impacts. South Carolina and Rhode Island both held in-person meetings with relevant stakeholders to present 6|18-related cost analysis findings. Succinctly presenting brief overviews of cost analyses in a face-to-face forum provides opportunity for real-time discussion and can often be far more compelling than a document sent via e-mail, which may or may not get the same level of attention.

ADVANCING IMPLEMENTATION OF THE CDC'S 6|18 INITIATIVE

Through support from the Robert Wood Johnson Foundation, the Center for Health Care Strategies, in collaboration with a number of partners, is coordinating technical assistance to facilitate state Medicaid and public health implementation of the Centers for Disease Control and Prevention's (CDC) 6|18 Initiative. The CDC's 6|18 Initiative promotes the adoption of evidence-based interventions that can improve health and control costs related to six high-burden, high-cost health conditions — tobacco use, high blood pressure, inappropriate antibiotic use, asthma, unintended pregnancies, and type 2 diabetes. For more information and additional resources, visit www.618resources.chcs.org.