Estimating the Costs of Foundational Public Health Services

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The Institute of Medicine’s 2012 report on public health financing called for the convening of expert panels to identify the components of a “minimum package” of public health services and cross-cutting capabilities that should be available in every U.S. community to protect and improve population health. This report also called for studies to identify the resources required to make these services universally available across the country. With support from the Robert Wood Johnson Foundation, an expert panel convened by the Public Health Leadership Forum and Resolve developed an initial set of definitions for Foundational Public Health Services (FPHS), informed by state-level definitions developed in Washington, Ohio, and Colorado. The National Coordinating Center for Public Health Services and Systems Research based at the University of Kentucky used an expert panel process to develop a methodology for estimating the costs required to implement the FPHS at national, state and local levels.

The FPHS Cost Estimation Methodology uses a self-administered survey instrument to capture information from state and local public health agency administrators about the labor and non-labor resources currently used by their agencies to implement activities specified in the FPHS definitions. The instrument also includes attainment measures that elicit information about the extent to which agencies currently perform all of the activities specified in each FPHS definition. An anchoring vignette strategy is used to identify and adjust for differences in how public health agency administrators estimate resource use. Survey-based measures of resource use and attainment levels collected from both state and local public health agencies are used as inputs in a Monte Carlo simulation model that generates two sets of cost estimates: (1) costs currently incurred to implement each FPHS at state and local levels (current costs); and (2) the expected costs that would be required to fully implement each FPHS at state and local levels.

The FPHS Cost Estimation Methodology was pilot-tested with public health agencies in Kentucky, and is now being fielded with a national sample of state and local public health agencies to generate national FPHS cost estimates. Two-stage stratified sampling is used to adequately represent states with centralized, decentralized, and shared intergovernmental administrative structures for public health delivery, and to represent local public health agencies serving a range of population sizes. Two centralized states (AR, SC), three shared-administration states (KY, FL, GA), and three decentralized states (NY, CA, OH) are included in the sample, and within each state at least three local public health agencies are sampled from three different population strata (<50k, 50-299k, >300k). Separately collected data from the state of Washington using a similar methodology will be incorporated into the modeling and estimation. Data collection is scheduled for completion in Spring 2015.

Results will include first-generation national estimates of the costs currently incurred in implementing each FPHS and the expected costs required to fully implement each FPHS. State-specific estimates will be generated for the 7 states included in the national sample, and sensitivity analyses will produce estimates how FPHS costs and resource needs vary with population size, state-local centralization, and community characteristics.