

Public Health Activities and Services Tracking

Building the Data and Evidence for Effective Public Health Systems



Costs and Cost-drivers of Providing Foundational Public Health Services in Washington State and Relationships with Structural and Community Factors

Research Brief
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Betty Bekemeier, Justin Marlowe, Sharee Squires, Greg Whitman

Washington's (WA) state-wide Foundational Public Health Services (FPHS) Workgroup is developing a strategy to determine "predictable and appropriate levels of financing" for thirteen "foundational" public health services (FPHS) and capabilities. In this study we: 1) Estimated costs per unit of service for selected Foundational Public Health Services (FPHS) for WA local health jurisdictions; 2) Determined how organizational/community factors influence cost of FPHS in WA State; and 3) Determined how variation in FPHS costs in WA relates to resource allocation.

This study emerged from a previous RWJF-funded study demonstrating variation in quality and effectiveness of Communicable Disease control services across WA and from the efforts of a statewide workgroup interested in establishing costs of the FPHS in WA. The public health leaders that make up WA's FPHS Workgroup were charged with operationally defining what services are essential to public health practice in WA and to determine the costs of providing those services. Working from the framework in the Institute of Medicine report on public health financing, the FPHS Workgroup developed a consensus definition of what constitutes the Foundational Public Health Services (FPHS) in WA. The FPHS include six "foundational capabilities" (assessment, preparedness, communications, policy development, community partnership development, and business competency) and six "foundational programs" (Communicable Disease (CD) Control, Chronic Disease Prevention, Environmental Health, Maternal/Child/Family Health, Access/Linkage with Clinical Health Care, and Vital Records)—core programs that the foundational capabilities are expected to support. In 2013 the FPHS commissioned an analysis of FPHS costs. That analysis produced estimates of those costs based on a cross-sectional survey completed by eight representative local health jurisdictions (LHJs).

KEY FINDINGS

- Prior estimates understate LHJ spending needed to comport with FPHS expectations.
- Unit costs for selected FPHS units are measurable, and vary substantially across LHJs.
- Variation in Unit Costs is Closely-Related to Socioeconomic Factors and Political Context.

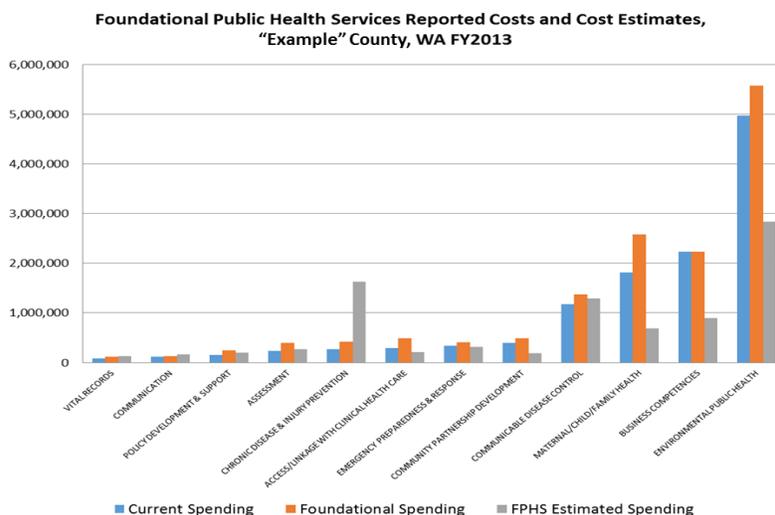
METHODS

The RWJF-funded study described here expanded upon and deepened what was previously commissioned by the FPHS. In this study we employed three separate cost estimation methods. First we used an instrument similar to the original FPHS survey with eight LHJs that had not been part of the previous analysis. This instrument was designed to capture not only the direct costs of providing services such as staff time and supplies utilized in delivering the service but also to derive estimates of indirect costs such as utility charges, costs of administrative support services and facilities costs. It also supported differentiation of variable costs influenced by the volume of service provided from fixed costs that do not change with service volume. Second, we collected detailed budget data directly from three LHJs, to examine changes over time in unit costs and economies of scale for FPHS spending. Lastly, we combined administrative data on public health activities – collected through the PHAST and WA MPROVE projects – with LHJ expenditures reported to the WA State Auditor.

FINDINGS

Our analyses to date reveal three key findings:

- 1) **Prior estimates understate LHJ spending needed to comport with FPHS expectations.** The figure below illustrates this point. In this figure you see three different estimates of FPHS costs for “Example” County, WA FY2013. The blue bar is the LHJ’s self-reported actual spending in each FPHS area. The orange bar is the level of spending the LHJ identified as necessary to provide minimum levels of service per the FPHS definitions. The gray bar estimates minimum spending levels as defined previously by the FPHS workgroup. Those estimates are substantially less than what “Example” County health officials have identified as a minimum level of spending.



- 2) **Unit costs for selected FPHS units are measurable, and vary substantially across LHJs.** For example, the FPHS definition for Communicable Disease services includes a sub-element on sexually transmitted infections. According to the definition each local LHJ should “Assure the availability of partner notification services for newly diagnosed cases of syphilis, gonorrhea, and HIV according to CDC guidelines.” LHJ study participants identified salaries, benefits, and non-labor costs related to delivering this sub-element. Connecting this to WA PHAST and MPROVE studies, we found that WA LHJs also measure “Total STI Contacts Followed.” Combining these data, we found large variations in unit costs across LHJs.

	Kitsap County LHJ	Cowlitz County LHJ
FPHS Element II.A.4 Costs (CD - STI)	119058	15703
STI Contacts Followed, 2012	663	29
Cost/Case Followed	\$179.57	\$541.48

- 3) **Variation in Unit Costs is Closely-Related to Socioeconomic Factors and Political Context.** Multivariate regression analyses show that differences in unit costs across jurisdictions relate closely to socioeconomic factors like poverty and unemployment and that local voters’ willingness to spend on government services accounts for even more variation. For instance, county-level support for statewide initiatives to increase public education spending is strongly and positively related to higher spending on FPHS.

IMPLICATIONS

This study informs ongoing state-wide discussions and activity related to determining the cost of Foundational Public Health Services and Capabilities in WA and for service delivery and capacity planning. Findings also inform nationwide discussions regarding standardized chart of accounts related to public health funding of FPHS and capabilities and suggest that the effectiveness of statewide policies must be considered relative to the local context.