

Systems for Action

Systems and Services Research to Build a Culture of Health



PHSSR Research-In-Progress Webinar

Thursday, October 22, 2015 1:00-2:00 pm ET

Cost, Quality and Value of Public Health Services

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

Note: *Download today's presentation & speaker bios from the 'Resources' box in the top right corner of the screen.*

Agenda

Welcome: C. B. Mamaril, PhD, *Systems for Action* National Program Office,
Research Assistant Professor, U. of Kentucky College of Public Health

“Costs and Cost-Drivers of Foundational Public Health Services in Washington State and Relationships with Structural and Community Factors”

Presenter: Betty Bekemeier, PhD, MPH, Schools of Nursing and Public Health bettybek@uw.edu

Commentary:

Susan Zahner, DrPH, RN, School of Nursing University of Wisconsin-Madison
[sjzahner@wisc.edu](mailto:szahner@wisc.edu)

Torney Smith, MEd, Administrator, Spokane Regional Health District
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Questions and Discussion

Presenter



Betty Bekemeier, PhD, MPH,
Associate Professor, Nursing
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Costs & Cost-Drivers of Foundational Public Health Services in WA State and Relationships with Structural and Community Factors

Betty Bekemeier, PhD, MPH, RN—University of Washington School of Nursing

Justin Marlowe, PhD, CGFM—University of Washington Evans School of Public Policy & Governance

Sharee Squires, RN—University of Washington School of Nursing

Seungeun Park, MSN, RN—University of Washington School of Nursing

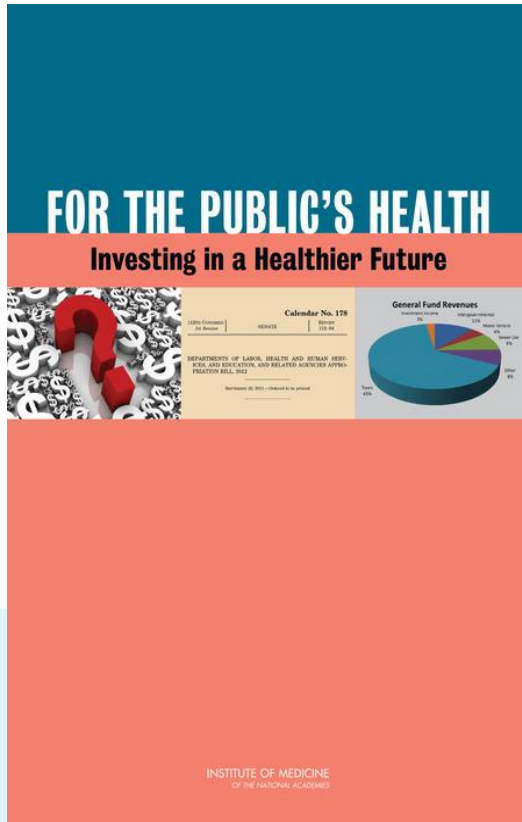
PHSSR Research-in-Progress Webinar October 22, 2015

Funded by RWJF PBRN Program (RWJF #71132)

Practice-Based Research



PH Finance Systems



- “profoundly misaligned” financing system
- National imperative to better define, articulate, & measure PH activities & to estimate their revenues & expenditures
- local communities not equitably served by a core capacity for health promotion & protection

(IOM, 2012)

Implications of “Misalignment”

- Disproportionate reductions in LHD MCH expenditures in counties with high poverty & need (Bekemeier et al, 2012)
- Inefficiencies & “dysfunction” in how PH system is organized, funded, & “equipped”
 - Make PH activities the “least visible & most poorly understood” aspects of our health system (Mays & Mamaril, 2012)
 - Costly to communities, “harmful” to the public’s health (Mays & smith, 2009)



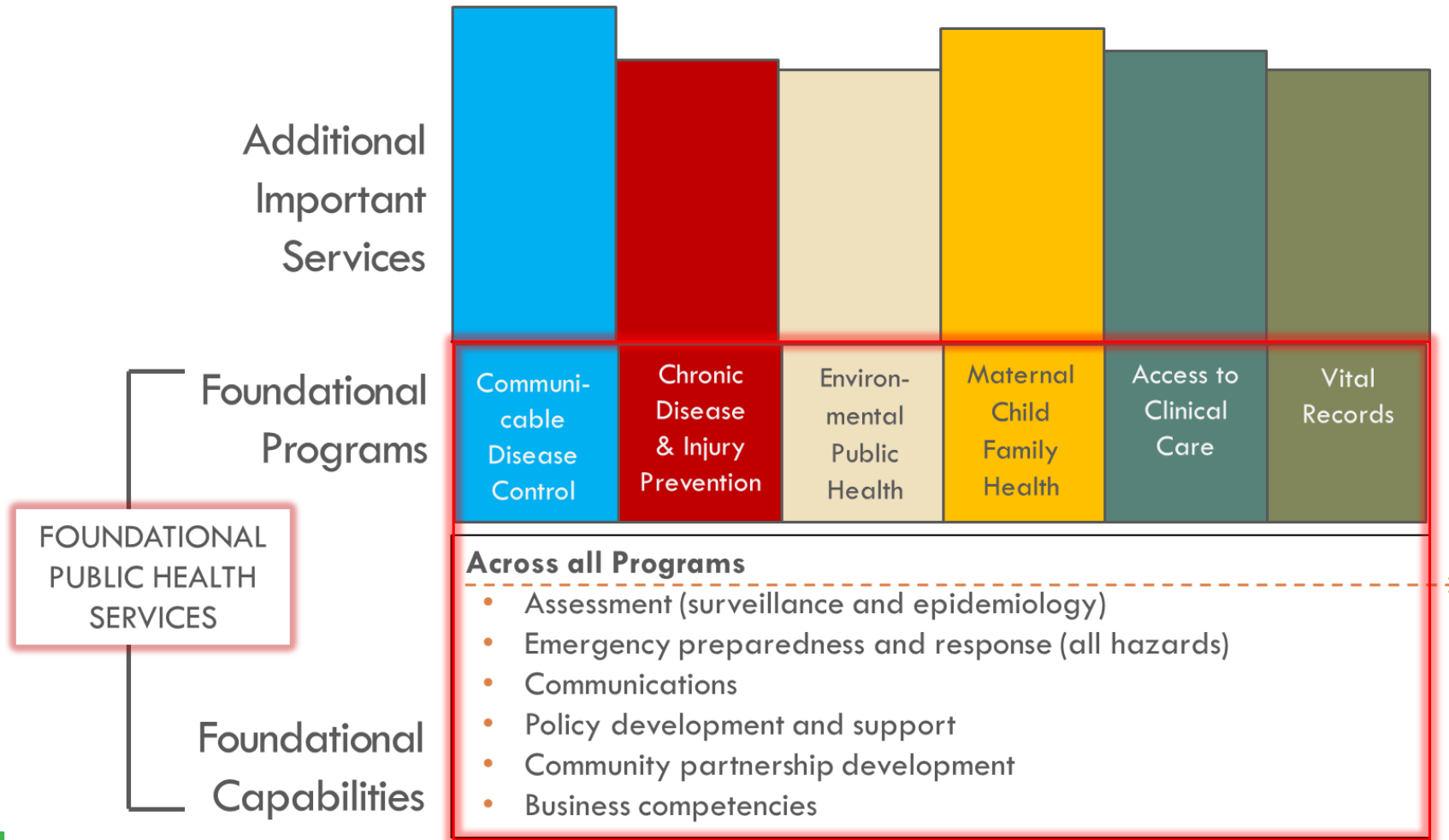
National Delivery & Cost Studies (DACCS) funded

- RWJF's DACCS program launched in 2013
- To examine how **characteristics** of PH delivery systems influence cost, quality, & equity of PH service delivery
 - E.g. size, scope of activity, division of roles, contributing organizations, & methods of resource use
- 11 state PBRNs funded (e.g. FL, NC, OH, NY, CA)

Washington's Delivery & Cost Study (DACCS)

- Using the Foundational PH Services Framework
- Examine what factors promote & inhibit the provision of FPHS
- Study Aims
 - Examine variation in **Unit Costs** in FPHS
 - Determine how organizational & community factors influence costs of PH system service delivery in WA State

Framework for the Foundational Services



Data Collection Instrument

- *FPHS Cost Estimation Instrument* developed
 - For developing cost function estimates & adapted from
 - substance abuse services cost analysis program (SASCAP) instrument
 - used in WA State FPHS Workgroup for data collected in 2014
 - measures where LHJ incur costs, and also perceived need
 - Instructions & support included
 - list of occupation definitions,
 - definitions of each FPH program and capability
 - definitions of non-labor expenses
 - Respondents provided estimates of indirect labor & non-labor costs
 - FTE per occupation across 6 FPH programs & 6 capabilities
 - Ave salary paid per occupation
 - each FTE split within each FPH program & capabilities into its individual duties
 - non-labor expenses estimated (e.g. fleet cars, cellular phones, insurance)

Sample

- Selection criteria considered
 - Survey burden
 - Rural, micropolitan, & urban mix
 - Size of population served
 - Departments and Districts
 - Single county & multi-county
 - Standalone agency or combined with human services
- FPHS Workgroup reviewed final selection, based on these criteria
- 10 WA LHJs completed *FPHS Cost Estimation Instrument*
 - 71% Response Rate

Analysis

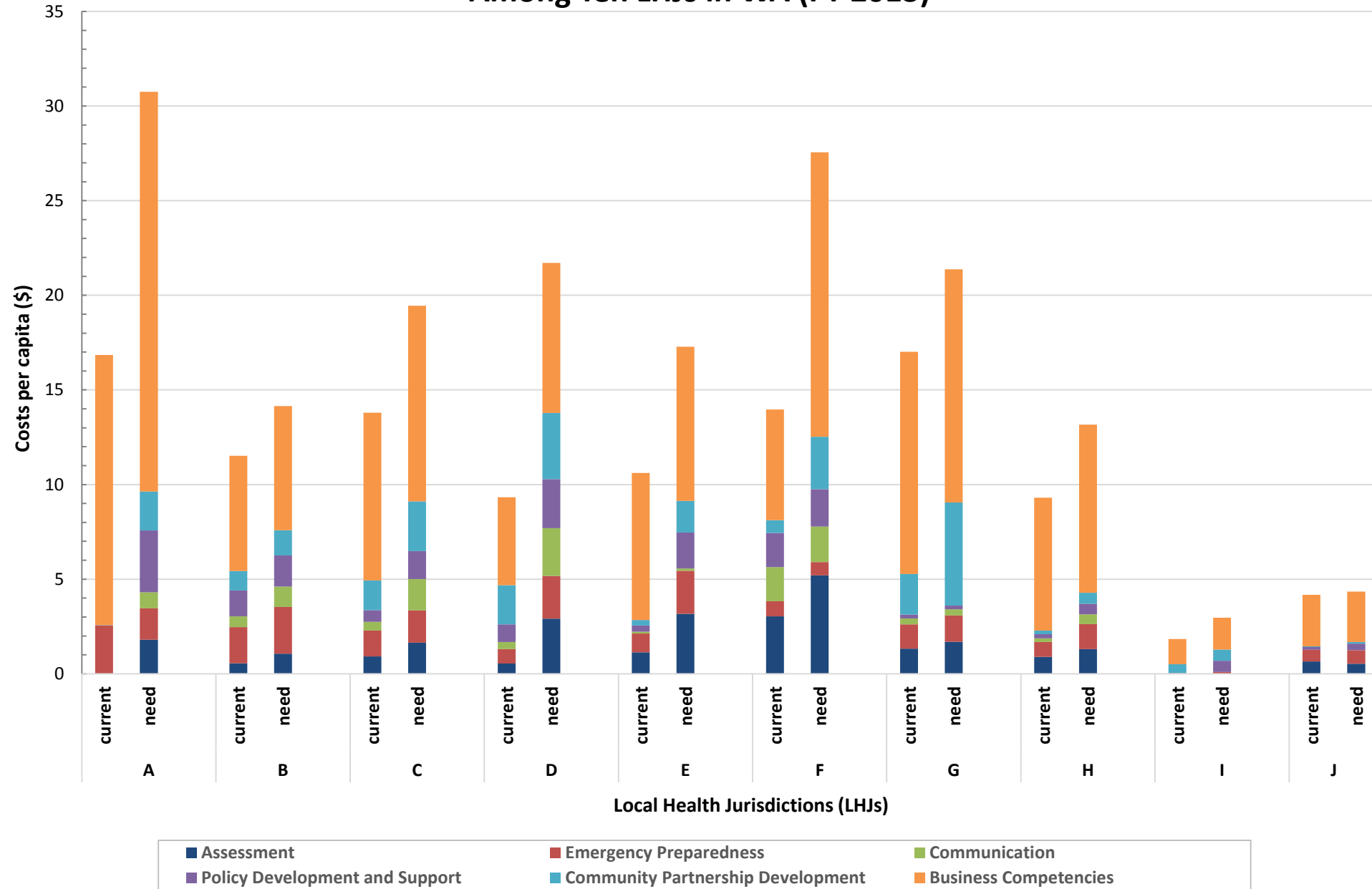
- Combined cost & expenditure data with selected LHJ Service measures from the Activities & Services Inventory
 - Used service data that captured key elements of FPHS
- Examined unit cost estimates while controlling for demographic & other contextual data
 - population, poverty, unemployment, local voters' "willingness to spend" on govt services, metropolitan vs. micropolitan area, NACCHO governance variables

Results

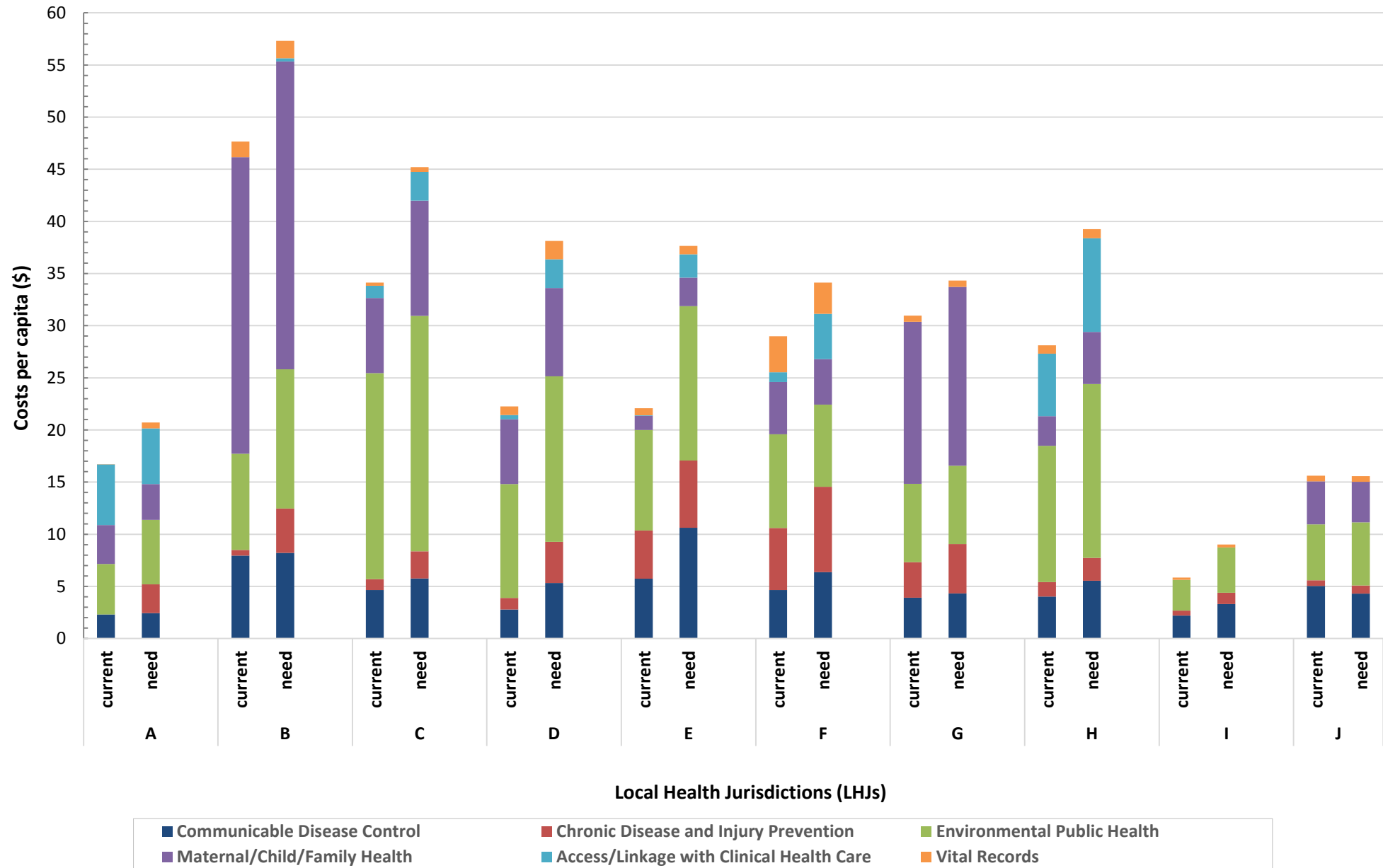
- Unit costs for selected FPHS units are measurable, & vary substantially across LHJs.
- Variation in unit costs is closely related to socioeconomic factors & political context.
- Unexplained variation still exists.



Current and Needed Costs for Foundational Public Health Capabilities Among Ten LHJs in WA (FY 2013)

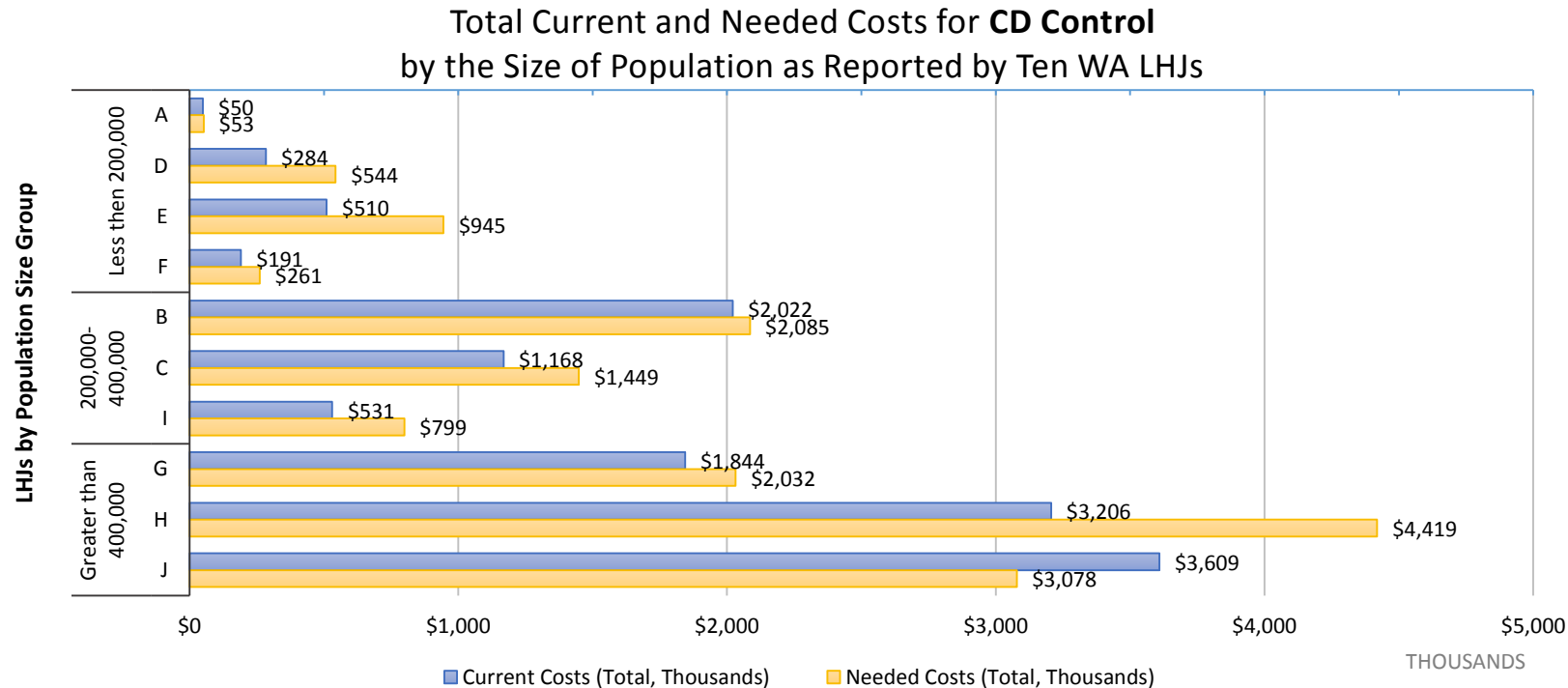


Current and Needed Costs for Foundational Public Health Programs Among Ten LHJs in WA (FY 2013)



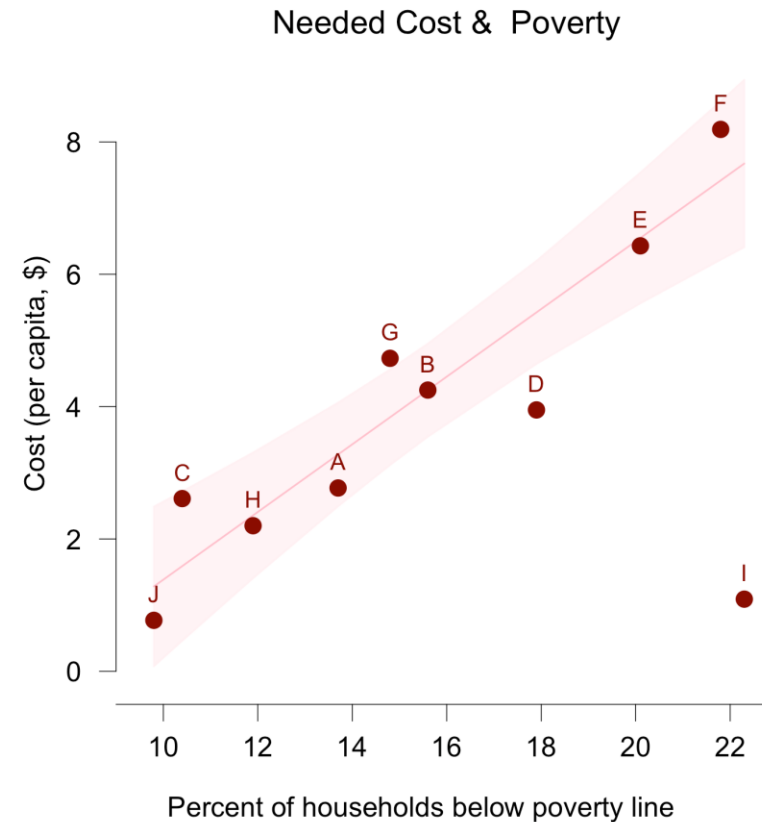
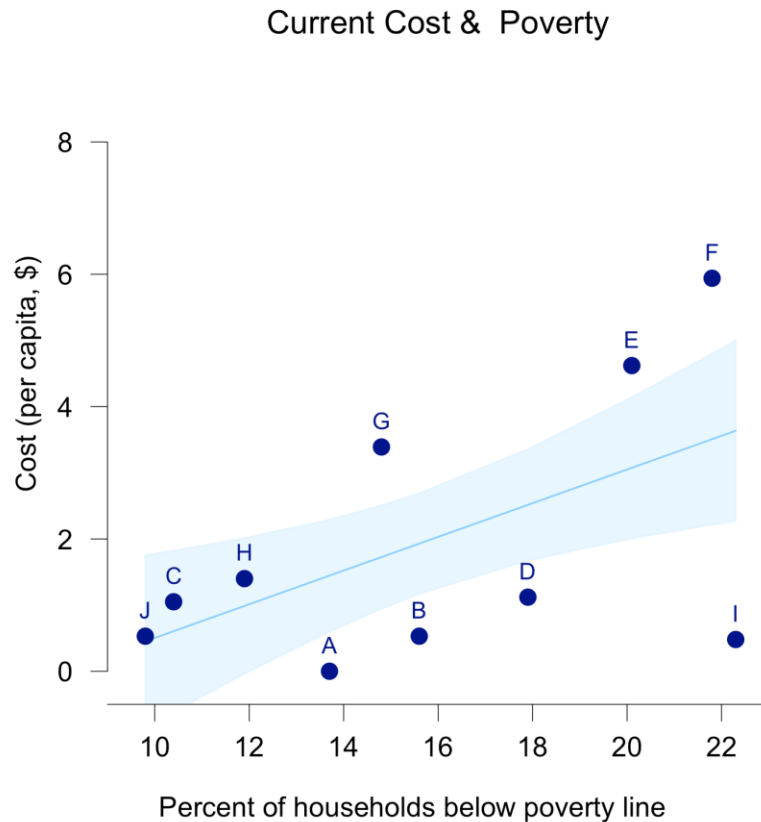
Unit Costs Vary Across LHJs

	WA County LHJ1	WA County LHJ2
FPHS Element II.A.4 Costs (CD - STI)	\$119,058	\$15,703
STI Contacts Followed, 2012	663	29
Cost/Case Followed	\$179.57	\$541.48



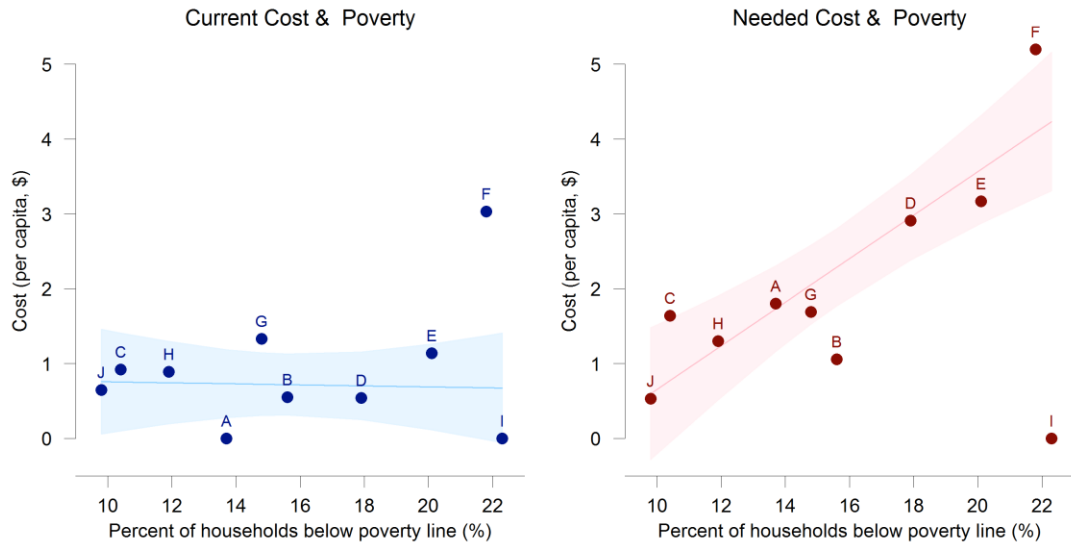
Costs Vary Across LHJs – Why?

Current and Needed Costs on Chronic Disease and Injury Prevention
by Poverty Level as Reported by Ten WA LHJs

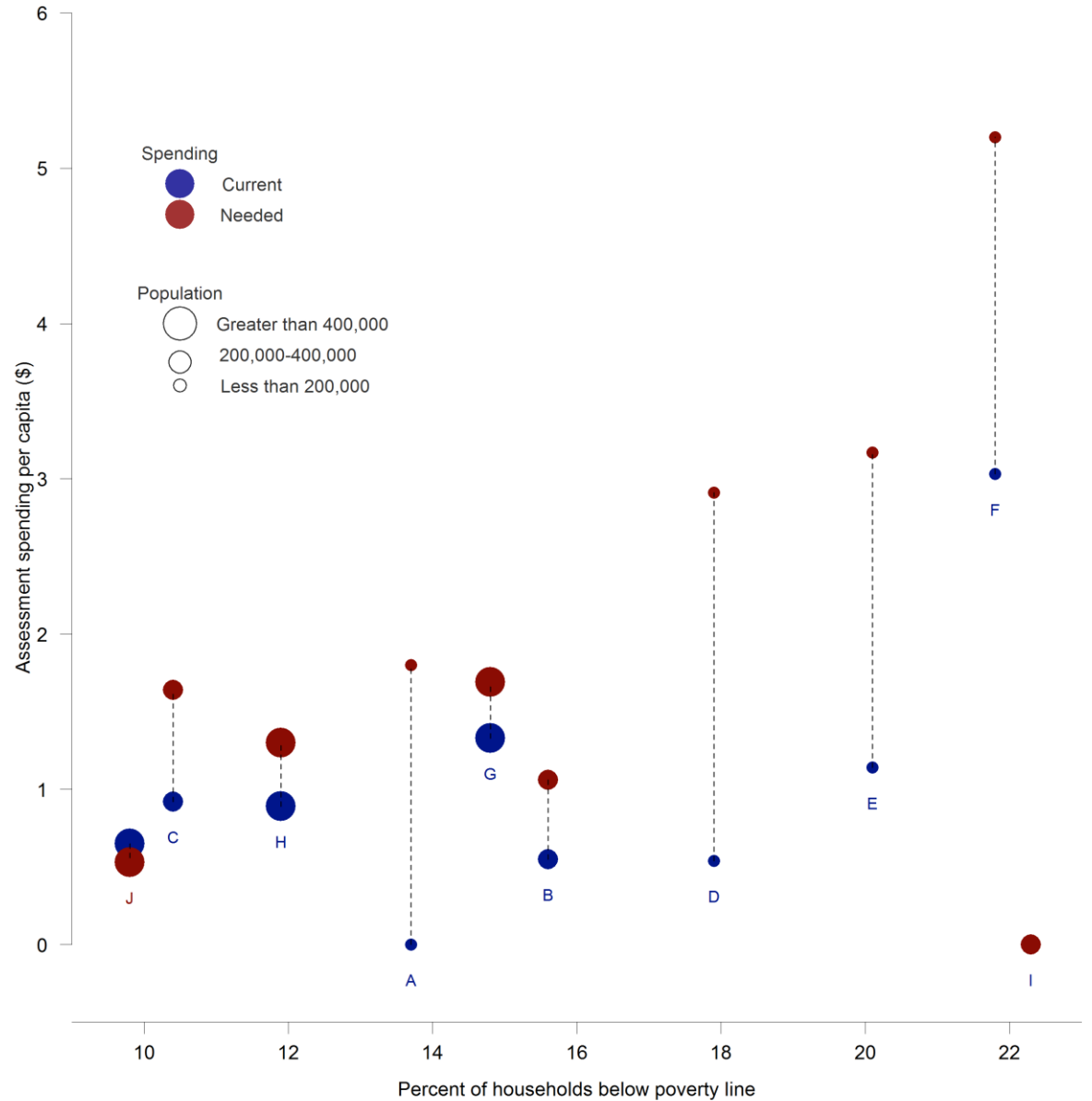


The Gap Also Varies – Why?

Current and Needed Costs on Public Health Assessment by Poverty Level as Reported by Ten WA LHJs



Current and Needed Spending on Public Health Assessment by Poverty Level as Reported by Ten WA LHJs

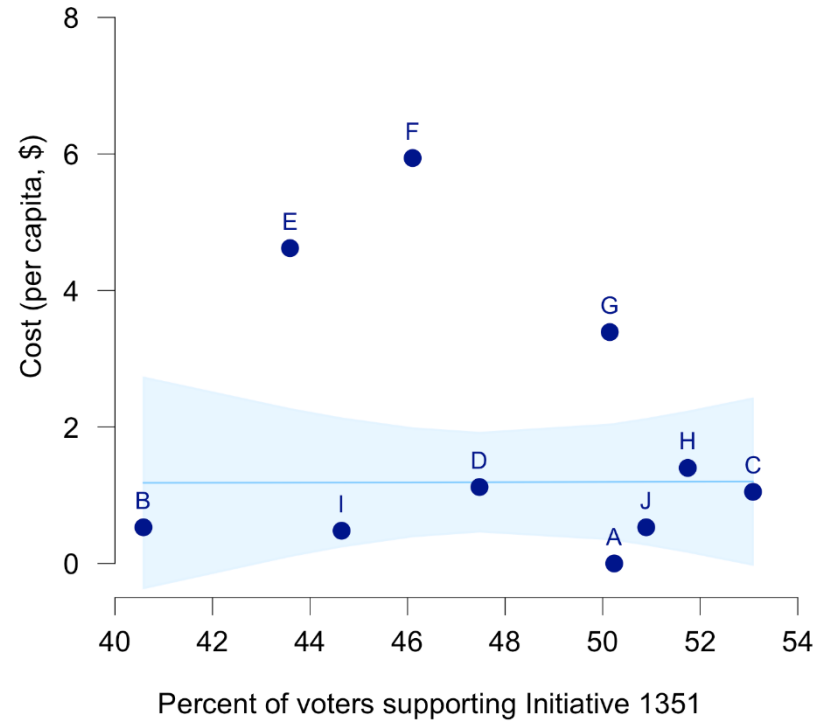


Another Explanation for Variation in the Gap

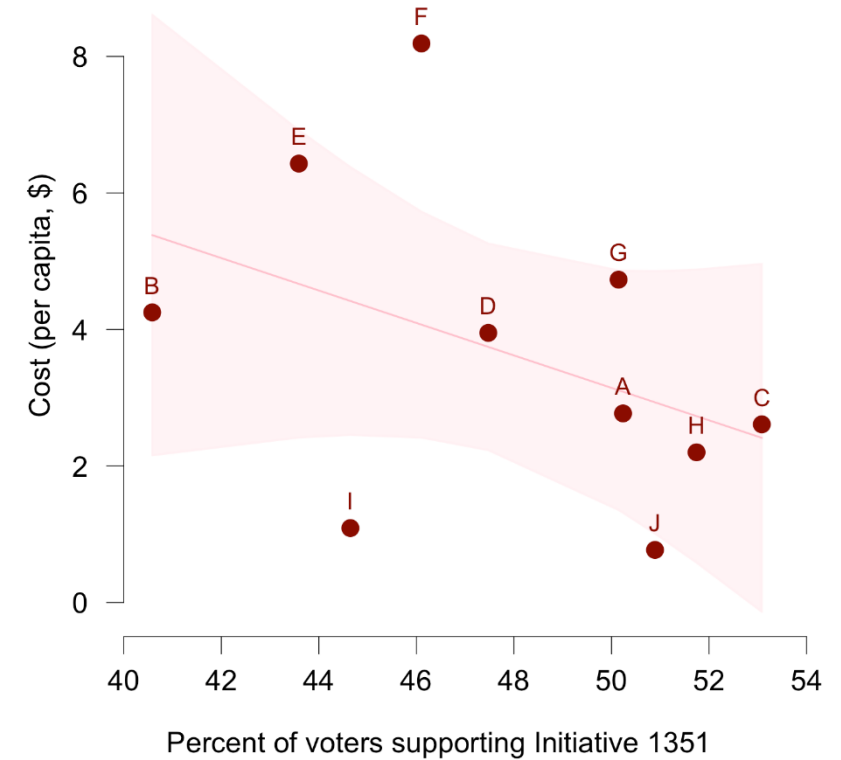
**Initiative 1351:
To Reduce Class Sizes in
Public Schools**

Current and Needed Costs on Chronic Disease and Injury Prevention
by Political Inclination by Ten WA LHJs

Current Cost & Political Inclination



Needed Cost & Political Inclination



Limitations

- Unit costs may affect spending, which may affect outcomes, which may affect costs!
- Differing perceptions of *Instrument* data definitions
- Estimates needed for breaking down FTEs among specific duties
- Potential for data errors
- No consistent, direct measure of “actual” funding needs



Implications

- Expanded & growing research nationally using our *Cost Estimation Instrument*
- Data & evidence needed for educating the public & policy-makers
 - Need evidence of “the what” of what we do
 - Need evidence of the impact of what we do

Data visualizations with participants

If what we're comparing is investment & engagement ... in the types of things we've been filling out [in this data collection instrument], it would tell the story of strategy & philosophy. Across the state, comparing one or another of us [LHJs], can be useful... I'd like to know [for example] how we do against [X] county? What is it they are able or not able to do, particularly with respect to foundational services – things that are supposed to be available everywhere. What's the funding that's driving the difference between like-sized departments, vs ideology?



Practice Applications

- State-wide
 - “Triangulation” of DACS data with data collected in 2014
 - Include DACS data to continue to improve state-wide estimates
 - These findings will add information to crucial statewide policy discussions
- Among LHJs
 - Opportunities for comparisons & quality improvement
 - Generating questions to ask of one another regarding differences in practice

THANK YOU!

*The Robert Wood Johnson
Foundation*

**PHAST Team
members**

**PBRN
Colleagues!!**

**Great teams have the
“right people on the bus.”**

(Jim Collins,
Good to Great, 2001)



Public Health Activities and Services Tracking

Commentary



Susan Zahner, DrPH, RN

Vilas Distinguished Achievement Professor, and
Associate Dean for Academic Affairs
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Questions and Discussion

Archives of all Webinars available at:
<http://www.publichealthsystems.org/phssr-research-progress-webinars>

Upcoming Webinars

Wed, Nov. 4 (12-1pm ET)

EVALUATING THE IMPACT OF ORGANIZATIONAL PARTNERSHIPS ON COMMUNITY RESILIENCE

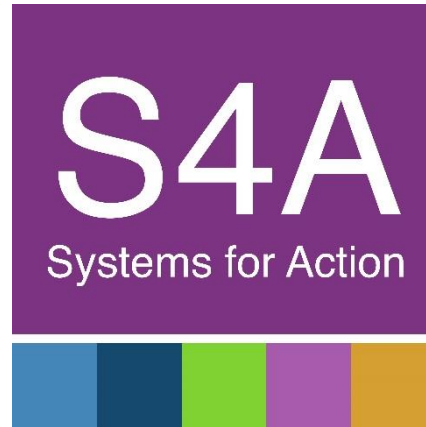
Malcolm Williams, PhD, MPP and Anita Chandra, DrPH, MPH, RAND Corporation

Wed, Dec. 2 (12-1pm ET)

EXPLORING NEW METHODS AND MEASURES TO ASSESS THE IMPACT OF THE ECONOMIC RECESSION ON PUBLIC HEALTH OUTCOMES

Anna Schenck, PhD and Anne-Marie Meyer, PhD, University of North Carolina at Chapel Hill

Thank you for participating in today's webinar!



For more information about the webinars, contact:

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