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Facilitating Uptake of Standardized Local Public Health Service Delivery Measures

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PHAST
Public Health Activities & Services Tracking

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Long term objectives

- Optimize public health system service delivery
- Provide evidence to practice and policy leaders for decision-making

Short term objectives

- Examine and evaluate standardized service delivery measures from MPROVE Study
- Refine MPROVE Study measure definitions to increase their **value**, and develop strategies for widespread **adoption** and **use**

Background: The MPROVE Study

Multinetwork Practice and Outcome Variation Examination Study (Glen Mays, P.I.)

- **Purpose**: support investigations of the causes and consequences of variation in public health service delivery
- Measures were developed in 2012 and data collected in 2013
- Measures characterize volume, intensity, quality, efficiency, and equity of service delivery in three core domains of **chronic disease prevention**, **communicable disease control**, and **environmental health protection**

Data

Quantitative Information

- Public health service data from 300 LHDs in six Public Health-PBRN MPROVE Study states (primary and secondary data)

Qualitative Feedback

- Phone interviews regarding data collection processes from 15 PH-PBRN partners representing six states; Interview data reflected Dearing and Kreuter's (2010) **Push-Pull Infrastructure Model** intended to bridge the research and practice gap through a knowledge distribution system
- Focus group feedback followed by surveys from all MPROVE, Delivery and Cost Study (DACS), and Dissemination and Implementation Research to Improve Value (DIRECTIVE) research study teams regarding refinements to service delivery measure definitions
- PHAST National Advisory Group also guiding measure refinement

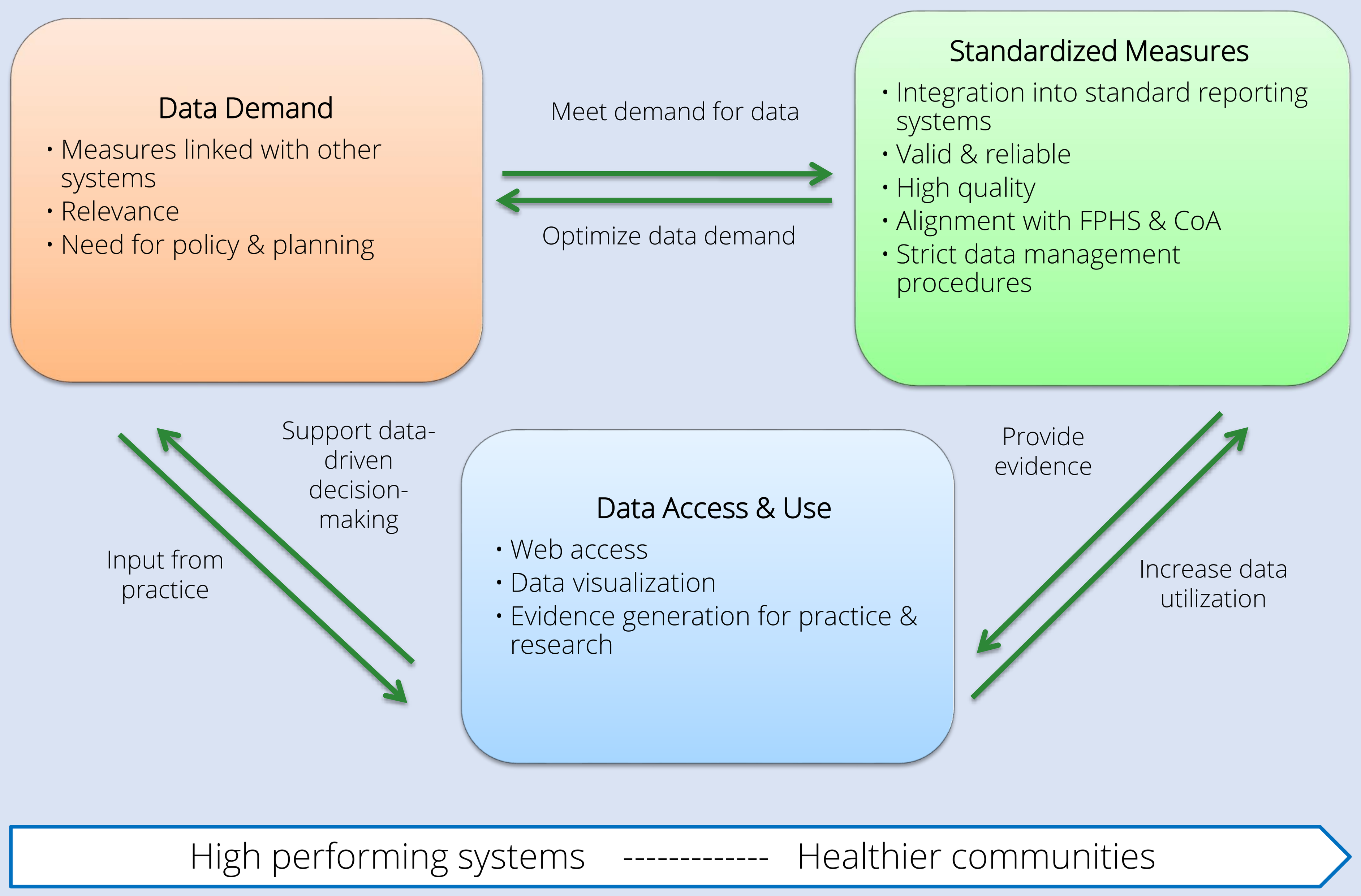
	STI (CD Control)	MISS	UNK	NA	RESP	AVG	0's	AVG no 0
M184 & M181	*# of confirmed cases and contacts followed:*							
	- gonorrhea (confirmed)	-	-	-	100%	94	6%	99
	- chlamydia (confirmed)	-	-	-	100%	703	-	-
	- syphilis (confirmed)	-	-	-	100%	9	54%	19
	- HIV (confirmed)	-	-	-	100%	14	29%	20
	- total (confirmed)	-	-	-	100%	820	-	-
	- gonorrhea (contacts followed)	-	100%	-	-	-	-	-
	- chlamydia (contacts followed)	-	100%	-	-	-	-	-
	- syphilis (contacts followed)	-	100%	-	-	-	-	-
	- HIV (contacts followed)	-	100%	-	-	-	-	-
	- total (contacts followed)	-	26%	-	74%	391	4%	406
M204	# of current LHD FTEs for disease intervention specialists (DIS)	-	34%	-	66%	2	9%	2

	TB Control (CD Control)	MISS	UNK	NA	RESP	AVG	0's	AVG no 0
M195	# of reported tuberculosis cases	-	-	46%	54%	8	53%	16
M196	# of clients provided TB screening services	-	-	46%	54%	54	32%	79
M193	% of TB cases that were placed on directly observed therapy in the past 12 months	-	-	46%	54%	6%	53%	12%
M199	*% of contacts with newly-diagnosed latent TB infection who:*							
	- started treatment	-	-	46%	54%	38%	53%	81%
	- completed treatment	-	-	46%	54%	32%	58%	77%

Example: Interview Questions Related to Data Collection

1. Existing systems: what routine reporting system was in place when you started MPROVE?
2. Existing data: which MPROVE measures were already being collected? [You can send a list separately if this information isn't at your fingertips.]
3. Added data: Were any MPROVE measures added to existing routine reporting systems? If yes, which ones?
4. Technical: Please describe the current public health IT system in your state. (with respect to data collection and reporting -- "do you have the technical expertise?")
5. What were the data collection challenges related to MPROVE measures of services that are delivered by multiple entities in the community? (might be potentially tricky for MPROVE participants relying on LHD respondents)

Dissemination and Implementation Model



Informing the Process

Quantitative Information

- Missing data were found disproportionally across measure bundles and by county and state
- Some measures lacked content validity and external consistency

Qualitative Feedback

- Preliminary analysis of responses provided by PBRN interviewees is summarized here:

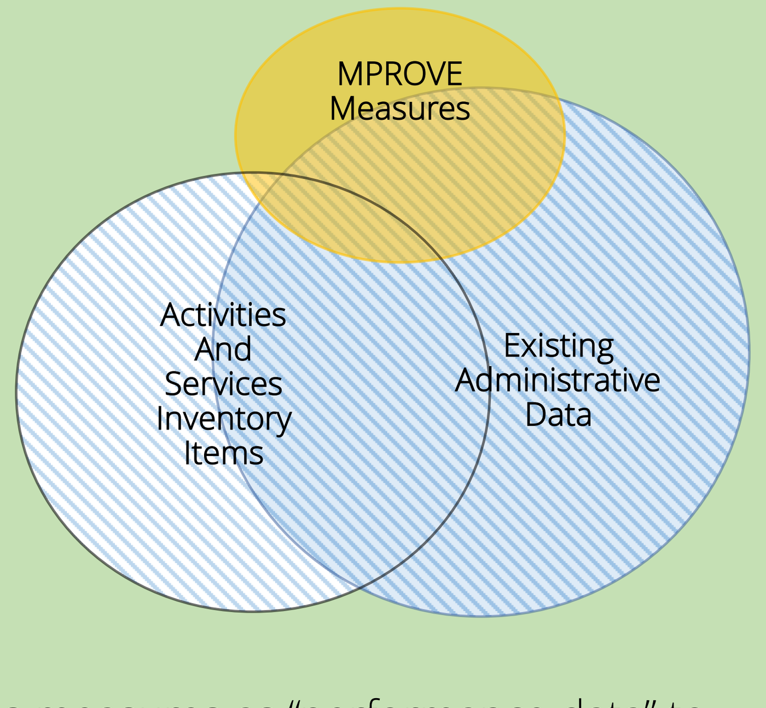
Theme	Elements
Perceived ways to Use MPROVE Data	• comparison with other LHDs in state and at national level • examine priorities for public health services and programs • monitor public health activities and support quality improvement • state level distribution of information • potential audiences: policy makers at LHD and state level, legislators, PH PBRN leaders
Data Reporting Systems	• some incomplete data reporting systems; some inaccessible data • most existing systems not centralized (collected by several agents) • one existing system well developed and mature, creating a barrier to MPROVE measure adoption
Challenges related to MPROVE measure	• data quality: accuracy, reliability, and completeness • initial definitions of measures were unclear • survey burden – limited time, staff, and funding • lack of LHD data expertise and understanding of data in their jurisdiction hampered participation in the process
Respondent Recommendations for System Change	• need for regular centralized reporting system to meet national standards and to reduce inconsistency across the state • training and awareness for the usefulness of the data as well as additional support such as staff or content experts for data collection are needed • use data like these in advocacy and to change policy by showing how funding from state departments is used properly to reduce disparities

- Feedback and consensus on measure definitions and revisions support this **critical progress** toward accurately capturing public health inputs contributed at the community level, by both governmental public health agencies and by other services providers

Adoption and Use of Standardized Measures

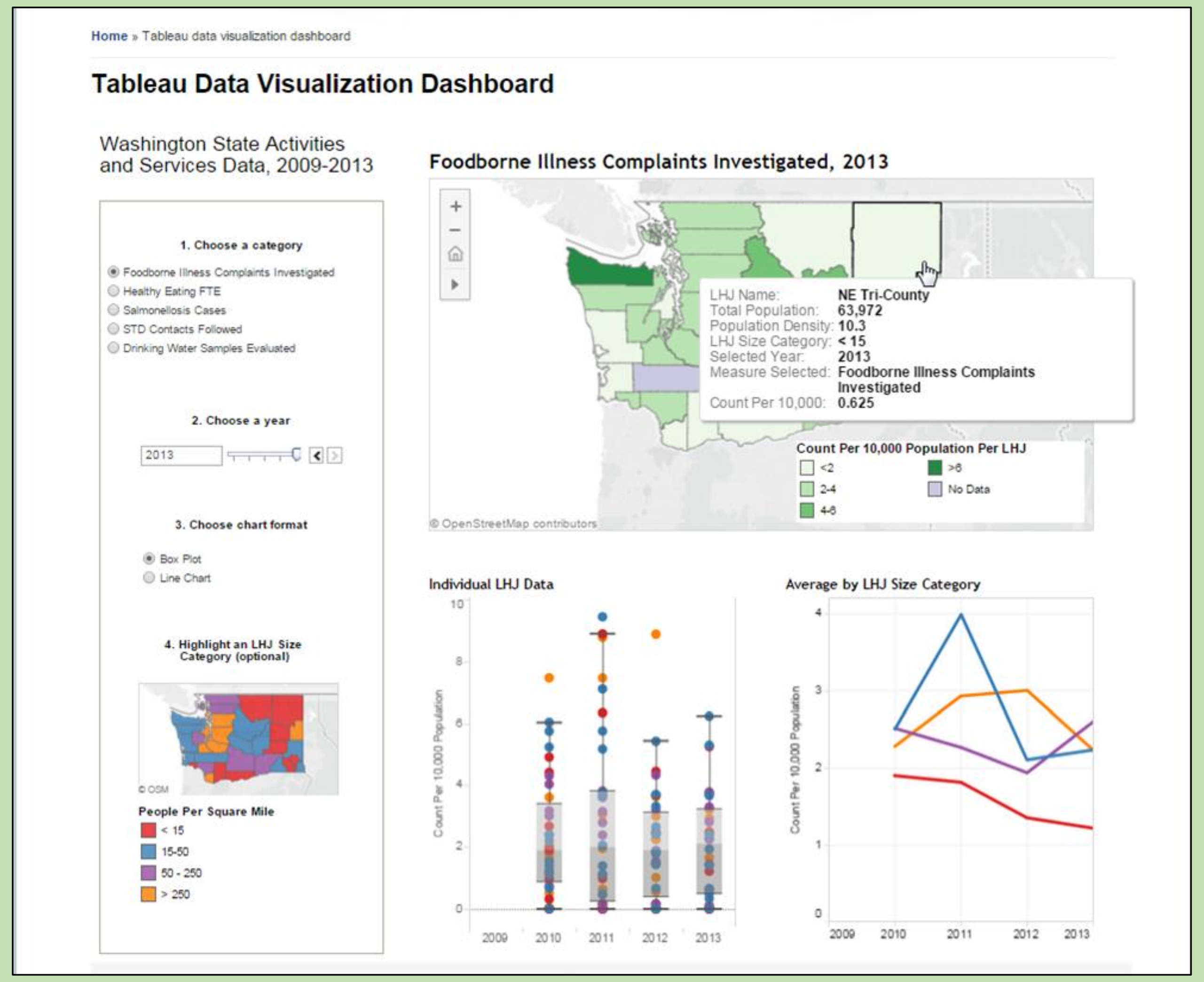
Adoption Example

- Washington State Activities and Services Inventory Committee has **agreed to to incorporate MPROVE items** for collection of 2014 data



Use Examples

- **QI:** Minnesota presented MPROVE Immunizations measures as "performance data" to identify a gap in provider utilization of the IIS
- **Accreditation:** needing/wanting data for community health assessment & planning
- **FPHS:** services and financial data combined (WA DACS)
- **Performance Improvement:** Restaurant inspections per FTE ; inspections per licensed food establishment; examining variation across LHDs for QI, best practices, etc.
- Pilot **interactive data visualization tool** for LHD administrators (at right)



Implications, Conclusions, Next Steps

- Practice partners are committed to:
  - improving data collection systems with detailed local practice activity
  - standardized measures across systems
- Ongoing refinements and collaboration between practice and research leaders are critical to assure:
  - uptake of standardized measures into state systems
  - collection and use of quality data
- Subsequent revisions of MPROVE measures, as needed, include content and measurement experts from PBRN states and PHAST's National Advisory Group

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PUBLIC HEALTH Practice-Based Research Networks

PHAST Public Health Activities and Services Tracking