

Immunization Information Systems for a New Era

IMMUNIZATION INFORMATION SYSTEM DATA USE

AIRA Discovery Session
October 27, 2014, 4pm Eastern
Mary Beth Kurilo, MPH, MSW

OVERVIEW

The case for broad use of IIS data

Strategies for increasing data use

Managing privacy and security

Stellar examples of data use across our community

- A Tdap Study – Ashley Petit, Wisconsin Immunization Program
- Adolescent Immunization Rates – Steve Robison, Oregon Immunization Program

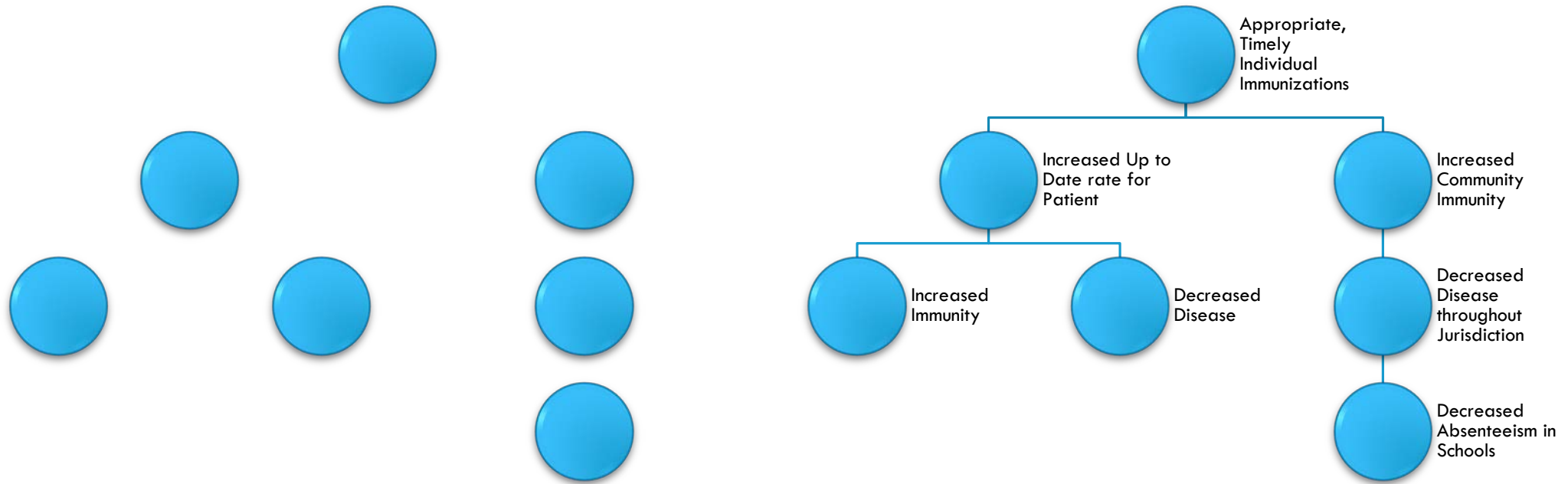
Questions, comments and discussion

ACKNOWLEDGEMENTS

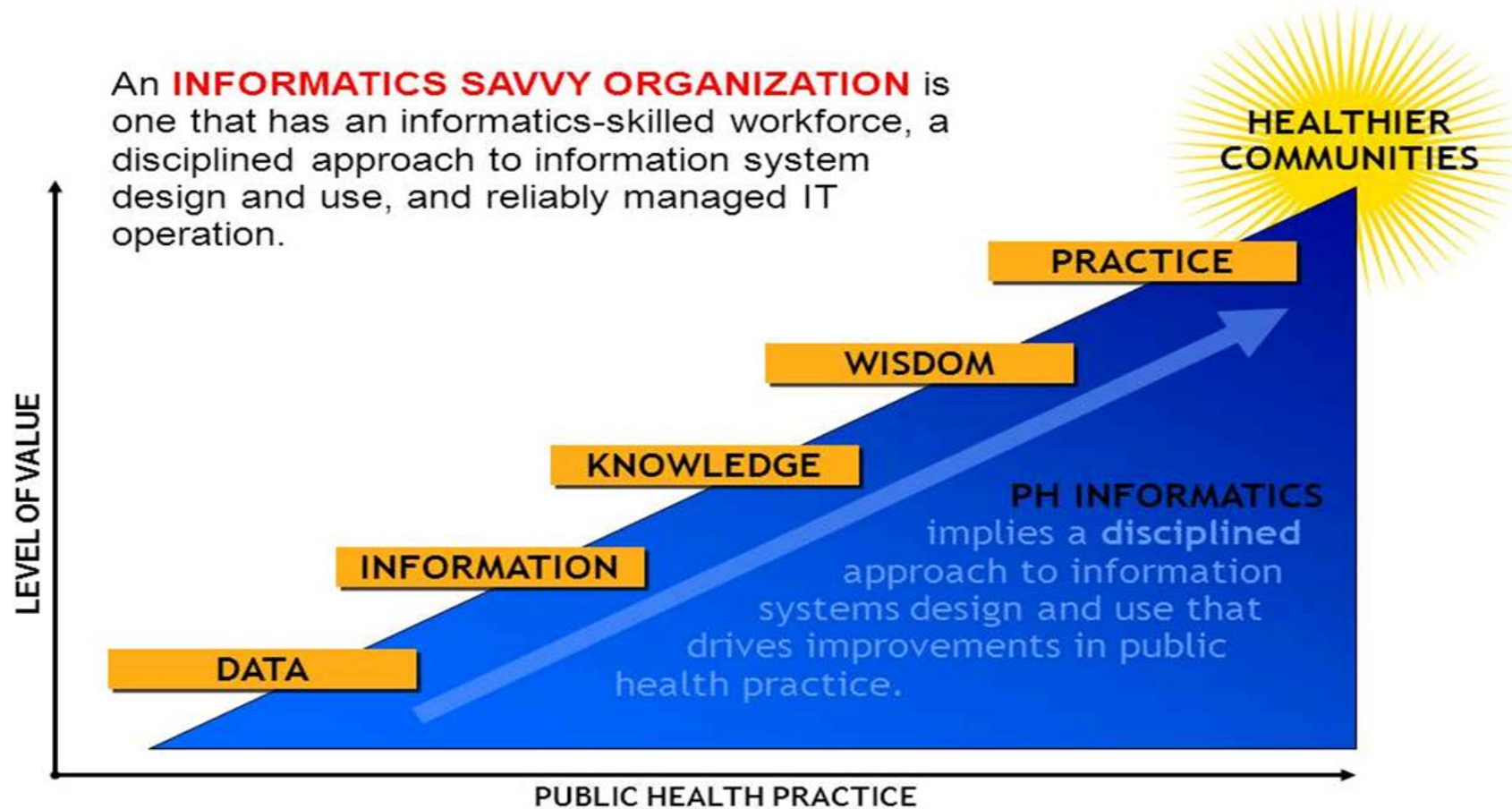
Thanks to PHII for sharing some building blocks from their IIS New Manager Leadership Workshop.

Thanks, also, to the Oregon ALERT IIS Team and the Oregon Immunization Program, from which I am drawing much background on data use.

DATA? OR INFORMATION?



USING INFORMATICS TO IMPROVE PUBLIC HEALTH PRACTICE



Adapted by: Marty LaVenture, Bill Brand, Minnesota Department of Health. Karen Zeleznak, Bloomington Division of Public Health, 2005

NUANCES OF POPULATION-BASED DATA

Strengths and Benefits

Many IIS have close to 100% of the population represented

Data are dynamic, and can often provide real-time perspective

IIS can have hundreds or thousands of contributing sources

Data provides both current and longitudinal look at patients and practices

Challenges

Given number of data sources, data quality, and investment around ensuring data quality, can vary

Data may be initially gathered for another purpose separate from IIS (i.e., Electronic Health Records), and may be used for multiple purposes

Raw data take analysis and synthesis to ensure the right data are answering the right questions

THE IMPORTANT ROLES OF IIS MANAGERS (AND STAFF) AS COMMUNICATORS-IN-CHIEF

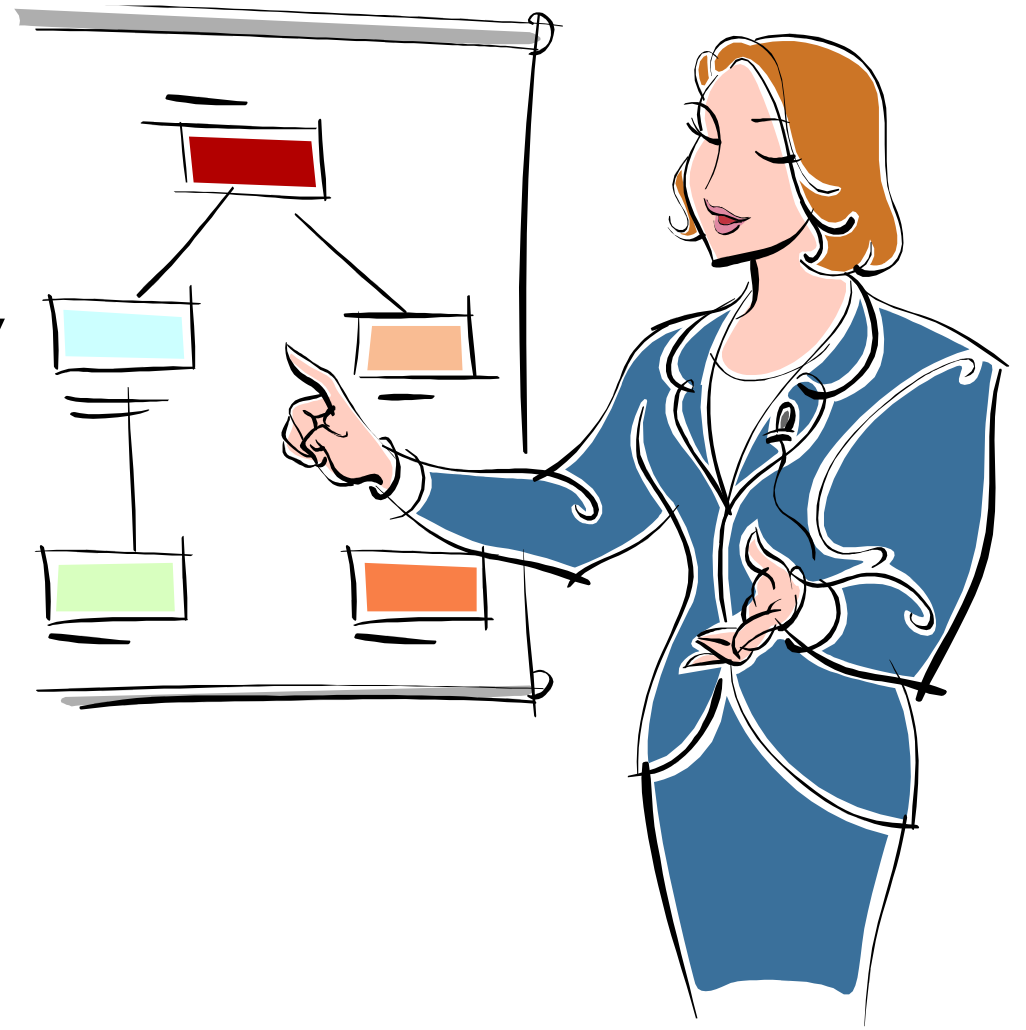
Educating on what the data can and can't say

Addressing data quality issues

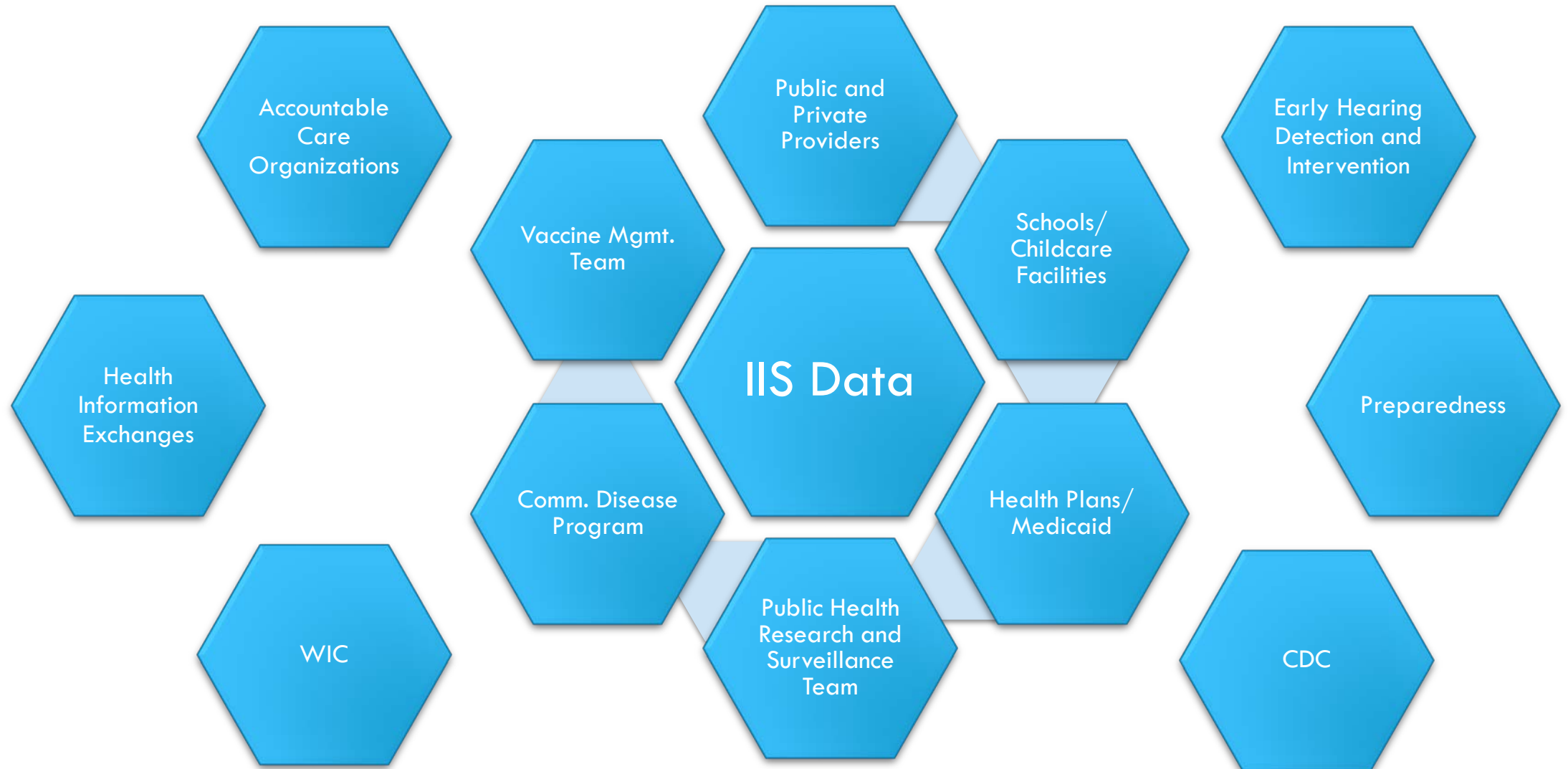
- And advocating for why DQ issues should be fixed

Using data to reveal participation gaps and to recruit stronger participation

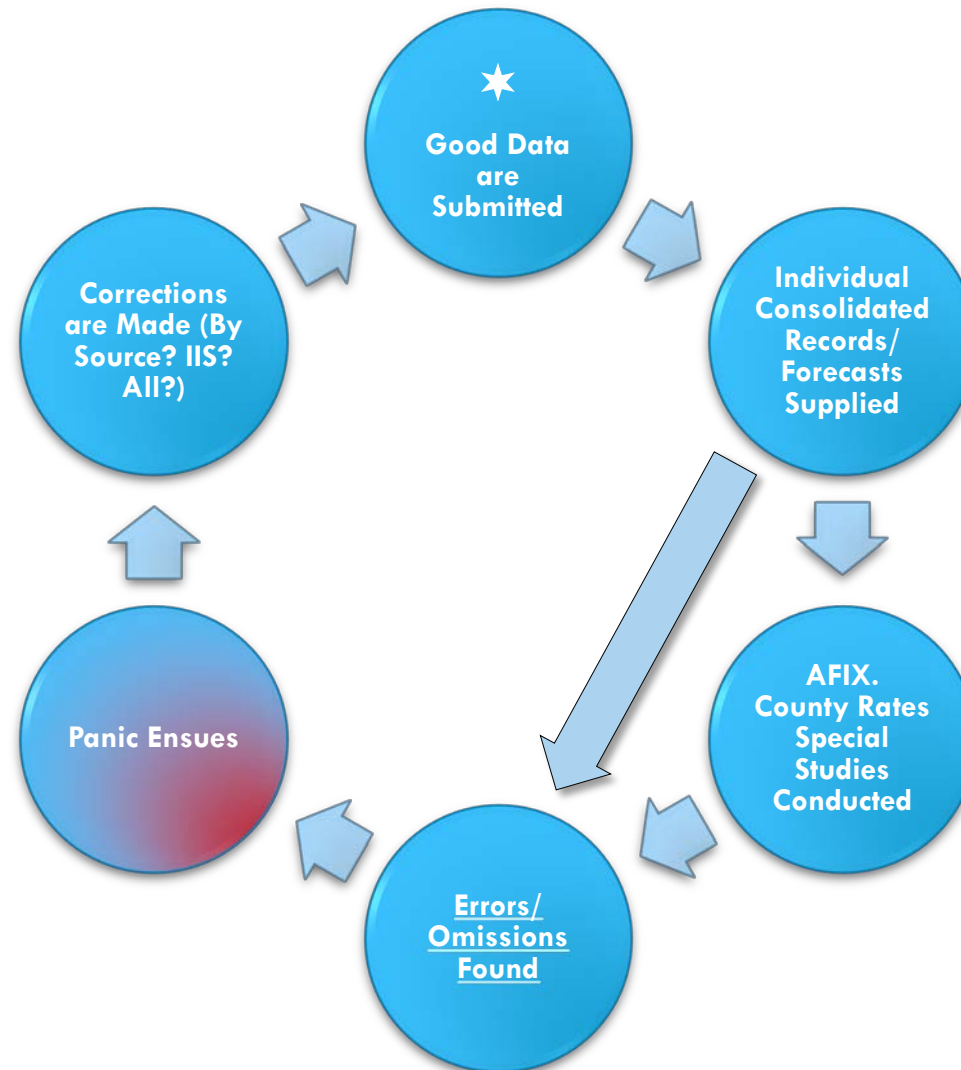
Framing expectations (i.e., why a 50 year old's baby shots may not be found in a 10 year old IIS...)



THE DEMAND FOR IIS DATA IS IMMENSE



THE DATA QUALITY IMPROVEMENT LOOP



PROTECTING THE DATA



Confidentiality



Privacy



Security



PRIVACY AND SECURITY

Applicable Laws and policies

Authorized Users, Levels of Access

- Site Agreements
- User Agreements
- Confidentiality Agreements
- Data Use Agreements/Memorandums of Understanding
- Business Associate Agreements

Responsibilities of IIS Managers/Staff, Immunization Program Managers, Division Administrators, and Legal Department

EXPLORE IN ADVANCE: WHAT TO DO IN CASE OF A DATA BREACH?



STRATEGIES/IDEAS TO INCREASE DATA USE

Provider Groups (including Pharmacies)

- Encourage AFIX/Clinic Rates Analysis, Reminder/Recall, Special Studies

Vaccine Management

- Expand functionality for ordering, inventory, accountability, managing wastage/returns

Evaluation, Research, Surveillance

- Consider publishing small area rates (State, County, Zip Code level)
- Publish special studies to increase IIS visibility in peer-reviewed journals

School Law/Exemptions

- Link with School law tracking systems, compare how school exemptions influence immunization rates
- Partner during outbreaks to supply lists of immunized students and lists of vulnerable students

OPERATIONAL PROCESSES TO SUPPORT DATA USE

Draft a data use protocol to clarify and support who can access what data per law and policy

Create (or borrow and modify!) templates for data use agreements, memorandums of understanding, etc. to speed the process of drafting and signing

Create Standard Operating Procedures (SOPs) for data requests and extracts

Create a code bank or central storage for query language

Document methods for queries/analyses to ensure consistency and repeatability

Partner with other areas of Public Health to stretch analytic skills and resources further

RESOURCES TO CONSIDER FOR DATA USE INSPIRATION

The Community Guide – Increasing Appropriate Vaccination: Immunization Information Systems

<http://www.thecommunityguide.org/vaccines/vpd-jphpm-evrev-IIS.pdf>

“The Community Preventive Services Task Force recommends immunization information systems (IIS) on the basis of strong evidence of effectiveness in increasing vaccination rates.

Evidence is considered strong based on the findings from 108 published studies and 132 conference abstracts showing that IIS are effective in increasing vaccination rates and reducing vaccine-preventable disease through their capabilities to:

- 1. Create or support effective interventions such as client reminder and recall systems, provider assessment and feedback, and provider reminders*
- 2. Determine client vaccination status for decisions made by clinicians, health departments, and schools*
- 3. Guide public health responses to outbreaks of vaccine-preventable disease*
- 4. Inform assessments of vaccination coverage, missed vaccination opportunities, invalid dose administration, and disparities in vaccination coverage; and*
- 5. Facilitate vaccine management and accountability”*

RESOURCES TO CONSIDER FOR DATA USE INSPIRATION

Michigan's Quarterly Immunization Report Cards

http://www.michigan.gov/mdch/0,4612,7-132-2942_4911_4914_68361-321114--,00.html

COUNTY QUARTERLY IMMUNIZATION REPORT CARD

Data as of: September 30, 2014

Hillsdale

	2013 Census	MCIR	Diff.	%
Total	46,101	38,311	7,790	16
Adults (20yrs+)	34,285	25,188	9,097	26
Children (0-19yrs)	11,816	13,123	-1,307	-11

Hillsdale Immunization Sites

	Count	(%)
Active MCIR Immunization Sites	19	
Reported in the last 6 months	18	94
Active Vaccines for Children (VFC) Sites	9	
Reported in the last 6 months	9	100
Influenza Sentinel Sites (Reg. Reporters)	0	

Michigan is ranked 30th for 4313314 coverage (2013 NIS data)

Your County Immunization Rank	
n = 84	
43133142 Coverage: (19-35mos)	64
1323213 Coverage: (13-17 Years)	21
Waivers: (Kindergarten, 6th grade & Other)	24
Flu Coverage : (6months through 17 yrs)	30

How do your Immunization Measures Rank among Michigan's 83 Counties + Detroit (n=84)

Measure	Hillsdale (MCIR)	% Diff.*	BHSJ (MCIR)	MI Avg (MCIR)	US Average 2013 NIS	Your County Rank	HP 2020 Goal
19 through 35 months	%		%	%	%	No.	
Birth Dose Hep B coverage	86.3	0.0	84.2	79.5	74.2	8	85%
4313314 coverage†	76.7	-0.7	78.6	74.2	72.6	33	-
43133142 coverage†	41.8	-2.2	46.9	49.1	-	64	-
2+ Hep A	42.8	-2.6	47.9	51.0	54.7	65	85%
4+ DTaP	79.8	-0.8	81.0	78.6	92.7	45	90%
4+ PCV	86.3	-0.1	87.7	85.0	82.0	39	90%
WIC coverage (4313314)	83.1	0.0	84.8	80.1	69.1	36	-
Medicaid coverage (4313314)	81.0	-0.9	83.5	76.6	-	34	-

RESOURCES TO CONSIDER FOR DATA USE INSPIRATION

Health Plan Use of Immunization Information Systems for Quality Measurement

http://www.immunizeca.org/wp-content/uploads/2010/12/AJMC_10marOConnor_217to224.pdf

“Health plans using a state IIS as a single point of data entry may realize cost savings and have improved assurance of immunization coverage.”

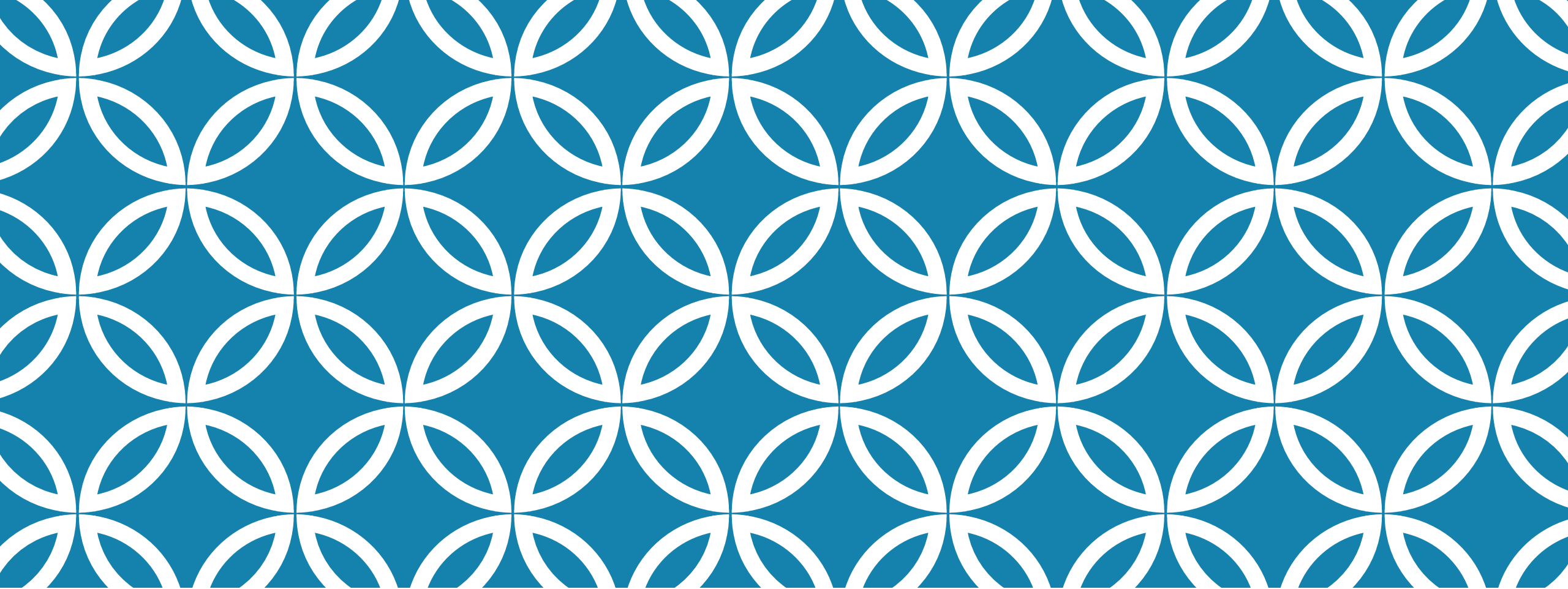
QUESTIONS/COMMENTS?

**PLEASE SAVE TILL THE END, AND/OR FOLLOW UP WITH
ME AT:**

MARY BETH KURILO

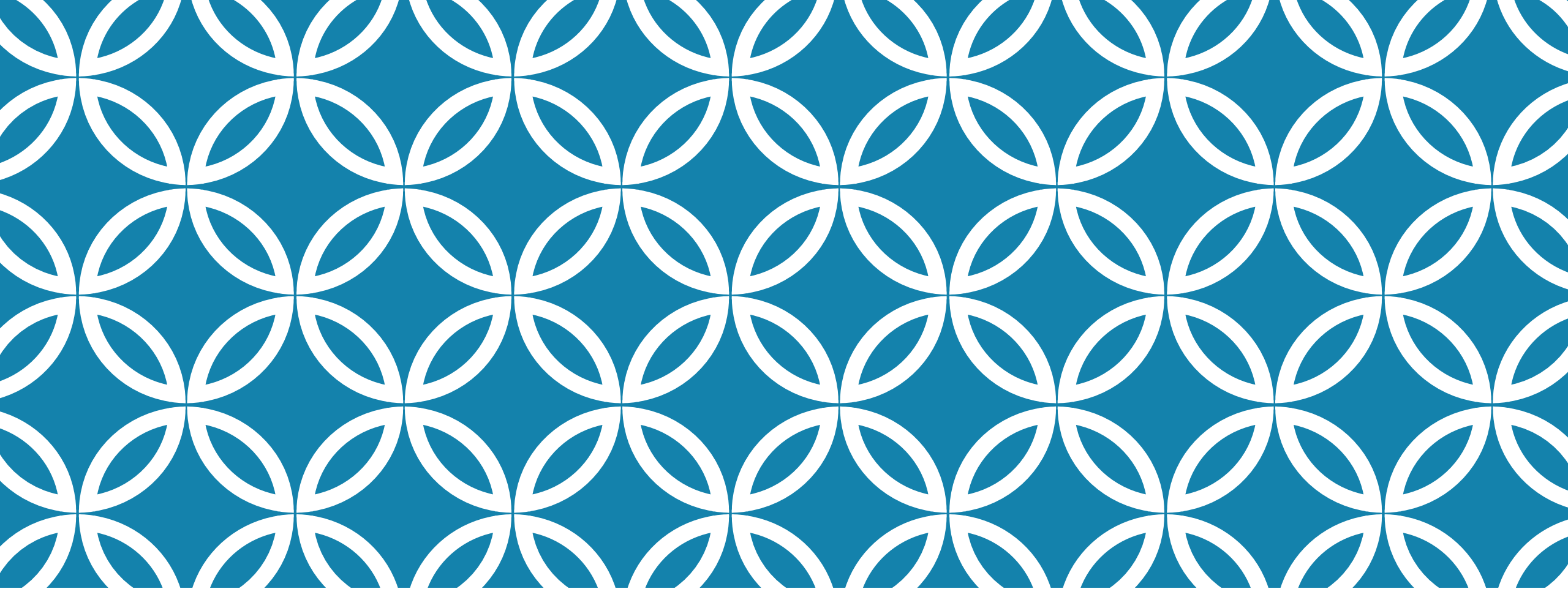
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QUESTIONS, COMMENTS, DISCUSSION?





THANKS SO MUCH!

