Making Immunization Data Available for Use at the Local Level

Empowering Local Health Through a Public/Private/University Partnership to Map Data from the Washington State Immunization Information System (IIS).

Presented at the 11th National Conference on Immunization and Health Coalitions
May 22nd, 2014 by: Chris Halsell, Todd Faubion and Isaiah Berg
Agenda

Part 1
Q: How can local health departments gain access to timely, accurate, useable – and local level immunization data?

A: Map local level immunization rates using data from the WA State Immunization Information System (WAIIS)

Part 2
Q: How do we do this with limited resources?

A: Public - Private (non-profit) - University Partnership
School Immunization Status Reports: School-Level

The National Immunization Survey (NIS): State-Level

Provider Improvement (AFIX/CoCASA): Individual Provider - Level

Current Immunization Data Is Limited
WAIIS: Underutilized Local-Level Data

- 1,710 healthcare providers sharing records
- 4,154,832 vaccination records
From Idea to Practice
Collaborating to Make IIS Data Available for Local Use

DOH
Data Owner

UW
Data Expert

Within Reach
Data Advocate

Local Health Information User
Washington State Children With Missing Antigens for: DTaP/DT

Missing Antigen For DTaP/DT

- < 25%
- 25-34.9%
- 35-49.9%
- >=50%

Statewide Missing Antigen rate for DTaP/DT is 32%

For Children 19-35 Months as of 10/21/2012. Missing Antigen for DTaP/DT,


Map By: Isaiah Berg
Children Considered 'One Dose Away' From Being Completely Immunized In Snohomish County

There are a total of 8520 patients in Snohomish County and an estimated live birth population of 9001 for this series cohort.

WAIS records represent a 94.7% coverage rate.

Snohomish County has a 58.5% Completion Rate

Data Source: Washington State Department of Health Immunization Information System Database (WAIS)

User Defined Pocket of Need Report. For Children 24-35 Months old as of 12/31/2012.

Series 4313314 Includes: 4 DTaP/DT/Td, 3 HEP-B 3 DOSE, 3 Hib, 1 MMR, 4 PNEUMO(PCV), 3 POLIO, 1 VARICELLA Map By Devin Hackett & Isaiah Berg
Spokane County

Mapping Immunization Series Completeness Rate at the Zip Code Level
Children Considered 'One Dose Away' From Being Completely Immunized In Spokane County

Spokane County

Mapping “One Dose Away” at the Zip Code Level

There are a total of 5896 patients in Spokane County and an estimated live birth Population of 8050 for this Series Cohort. WAIS records represent a 97.4% coverage rate.

Spokane County Has a 39% Completion Rate
Measure of Dispersion In Patient Record Completeness across Spokane County Zipcodes.

There are a total of 6896 patients in Spokane County. When compared to the estimated live birth Population of 6050 the County wide population completeness rate is 97.4%.

Expected Zipcode Population was estimated by averaging the county wide birth count across the birth years of the patients.

Zipcodes with very low populations have a much higher variance in record completeness.

Data Source: Washington State Department of Health Immunization Information System database (WAIIS)
User Defined Pocket of Need Report, For Children 24-35 Months old as of 12/31/2012. Series 4313314. Includes: 4 DTaP/DTP/Td, 3 HEP-B, 3 DOSE, 3 Hib, 1 MMR, 4 PNEUMO(PCV), 3 Polio, 1 VARICELLA. Map By Isaiah Berg
Lessons Learned

• **Students**: Energetic, talented and opportunity to apply classroom knowledge to real-world, but limited by short-term projects, difficult to find the right people with the right skills.

• **Non-Profits**: Bridge between academia and government, student support/advisor role, and policy broker/advocate, but limited funding.

• **Governments**: Access to data, authority, but limited staff resources and daily work load limits time for innovation.
Where do we go from here?

- An opportunity to make Health data more accessible and usable in Washington State.
- Support the State “Agenda for Change” with IIS data
- Partnering With the UW and Local Health Jurisdictions
- But First: engaging LHJs so our work is useful for them...
Future of IIS Mapping

- Linking data sets and stakeholders

A case study in merging Census socio-demographic statistics to South Seattle School Enrollment Boundaries.

Map 1

- Orca K-8 School
- Dearborn Park Elementary School
- St. Edwards School
- Aki Kurose Middle School
- Graham Hill Elementary School
- Wing Luke Elementary School
- Van Asselt Elementary School
- Seattle Urban Academy
- South Lake High School
- Dunlap Elementary School
- South Shore K-8 School
- Rainier Beach High School

Map 2

Census Tract Boundaries

School enrollment boundaries (PDF from Seattle School District)

- Web-based interactive maps auto updated from the IIS
Questions?

Contact:

Isaiah Berg
MPA Candidate 15’
UW Evans School of Public Affairs
Berg2@uw.edu
206-375-7533

Todd Faubion
Immunization Program Manager
WithinReach
toddf@withinreachwa.org
206-830-5169

Chris Halsell
Immunization Assessment Coordinator
WA State Department of Heath
Chris.halsell@doh.wa.gov
360-236-3527