

Progress in Developing Adult Immunization Composite Measures



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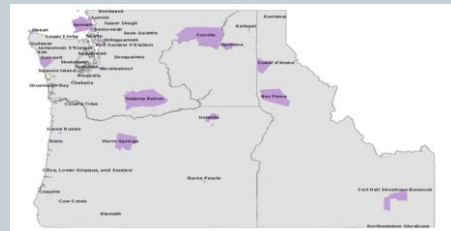
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Northwest Tribal Epidemiology Center

- Established in 1996, housed within the Northwest Portland Area Indian Health Board
- Collaborates with 43 member tribes to provide health-related research, surveillance, training, and technical assistance to improve the quality of life for Northwest AI/AN
- All activities supported by tribal resolutions, and reviewed by the Portland Area IHS Institutional Review Board



NW Tribal Epidemiology Center Adult Immunization Composite Measure Project Team



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Beyond Influenza and Pneumococcal vaccine

- The adult immunization schedule has grown more complex with the recent introduction of several new vaccines
- 2012 National Adult Influenza and Immunization Summit recommended a study to assess the feasibility of implementing adult immunization composite measures to include all recommended adult vaccines
- The IHS and VA worked together to develop Phase I of the Adult Immunization Composite Measure project
- The current project, “Phase II”, was designed to evaluate the measure under real-world conditions

Why a Composite Measure?

- Provides a broad perspective on the system of vaccination at a facility
 - Rather than a campaign to increase coverage with one vaccine, encourages a systematic approach for all vaccines
- Multiple measures make it challenging to implement broad-based immunization quality improvement activities
- “Composite measures can enhance measurement to extend beyond tracking performance on separate measures and can provide a potentially deeper view of the reliability of the care system”



Institute of Medicine, Performance Measurement Accelerator 5

Vaccines Included

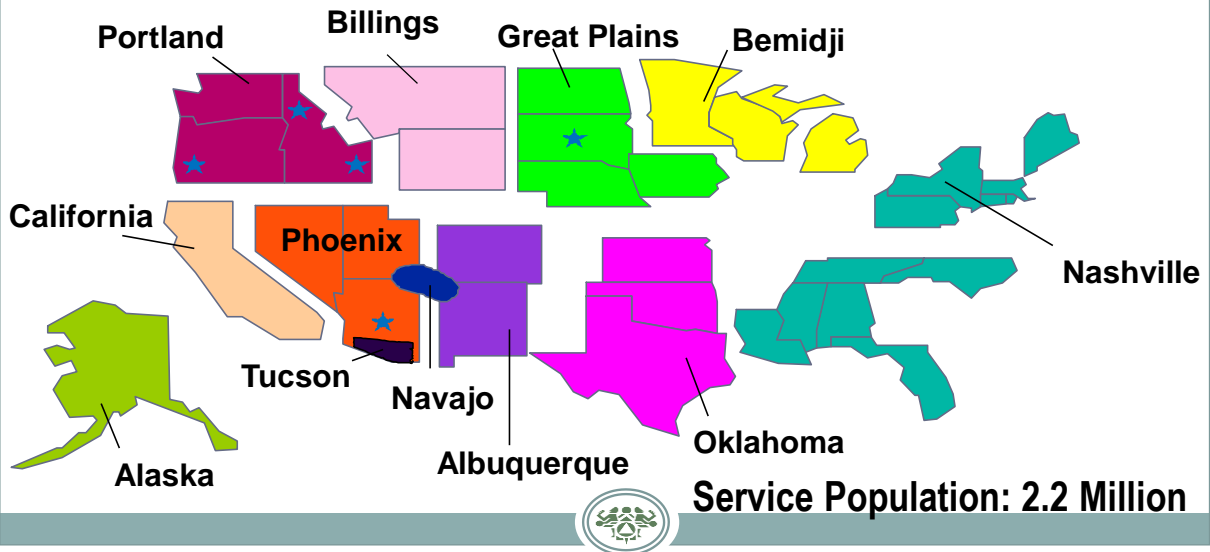
Age Group	Vaccines Included	Optional
19 – 59 years	Tdap ever; Tdap <u>or</u> Td within 10 years (Tdap/Td)	Influenza
60 – 64	Tdap/Td; Zoster	Influenza
≥ 65	Tdap/Td; Zoster; Pneumococcal polysaccharide-23 (PPSV-23) <u>or</u> pneumococcal conjugate (PCV-13)	Influenza

Guiding Principals:

1. Focus on routine, age-based vaccine recommendations
2. Keep it simple



Indian Health Service



Electronic Health Records In IHS, Tribal and Urban Indian Health System

- Resource and Patient Management System (RPMS)
 - Derived from same original system as Veteran's Affairs "VISTA"
 - EHR communicates with RPMS
 - No interconnectivity between sites
 - Patient Medical Record Number is unique to each site
 - Advanced Population Health Management tools
- Non-RPMS (Commercial Off The Shelf [COTS])
 - NextGen, Epic, Cerner, Centricity



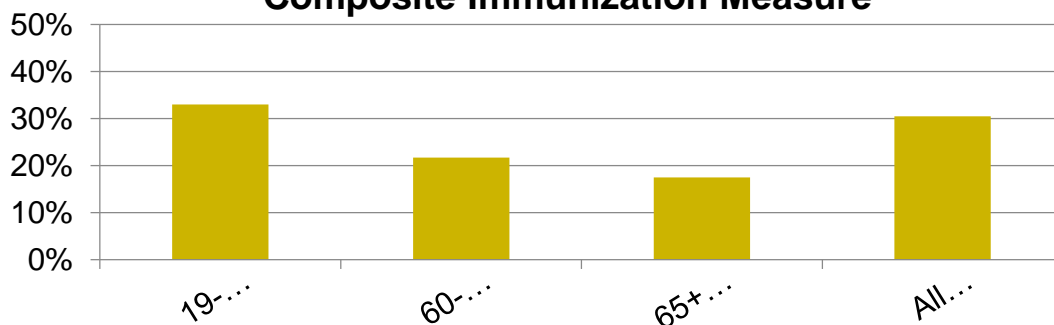
Applicability of Composite Measures

- **IHS**
 - Government Performance and Results Act (GPRA)
- **HRSA/FQHC**
 - Uniform Data System (UDS)
- **CMS**
 - Meaningful Use
 - Medicare Access and CHIP Reauthorization Act (MACRA)
- **Private Insurance/Other**
 - Healthcare Effectiveness Data and Information Set (HEDIS)



Phase I Results

Composite Immunization Measure



Phase II Objectives

- Assess the feasibility of implementing Adult Immunization Composite Measurement across IHS under different conditions
 - Ambulatory Care settings
 - Tribal settings using non-IHS Electronic Health Record systems
 - Hospital setting
- Evaluate the utility of the Adult Immunization Composite Measure for Quality Improvement



Phase II Deliverables

- Compile and review baseline data
- Introduce short-term quality improvement activities
- Monitor adult immunization coverage by reviewing immunization data on a monthly basis
- Evaluate measure through site visits and staff interviews
- Convene a final stakeholder's meeting
- Provide feedback in a final report describing the pilot projects' findings

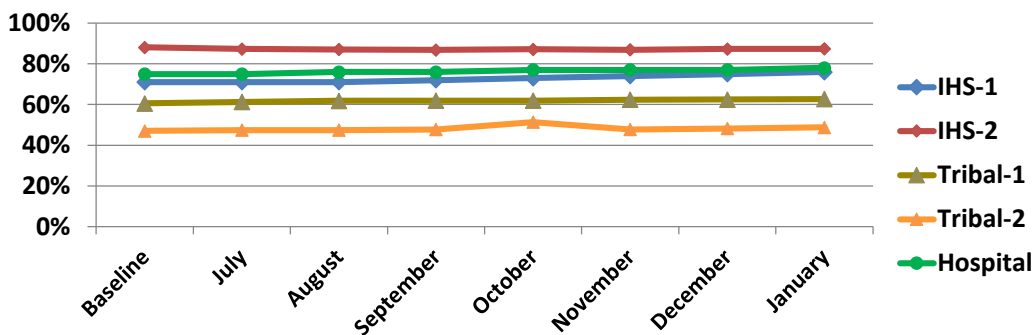


Phase II Results

- Recruited 5 sites from 3 IHS Areas to participate:
 - 2 IHS Ambulatory Clinics
 - 2 Tribal Ambulatory Clinics using *Next Gen* EHR
 - 1 IHS Hospital
- Conducted monthly project webinars
- Reviewed data collected from sites monthly
- Visited site to assess current status of project, and conduct staff interviews
- Developed draft HEDIS measure proposal at stakeholder's meeting

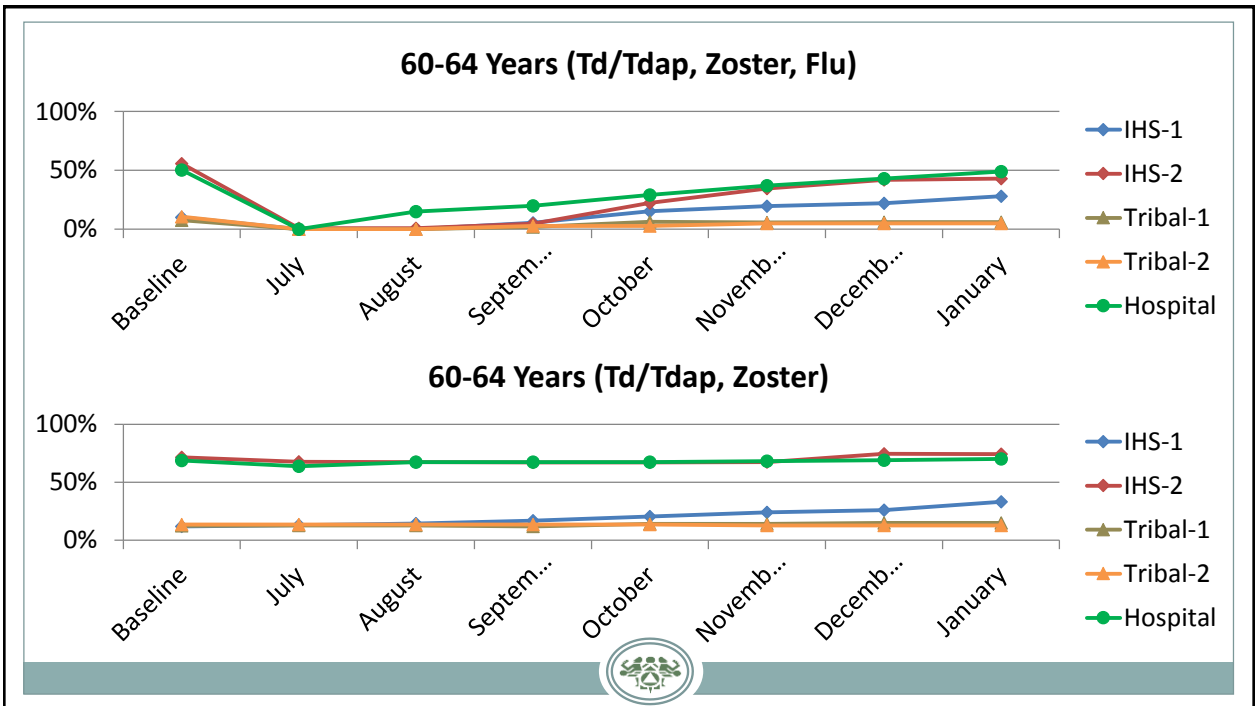
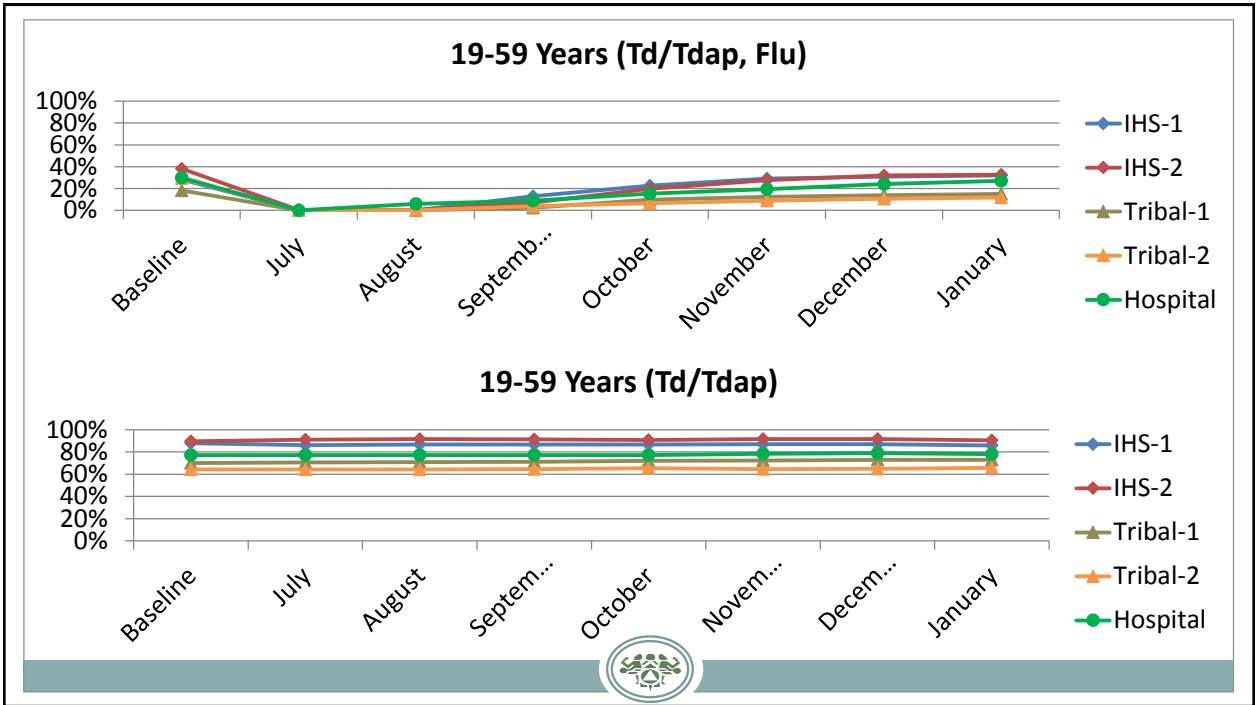


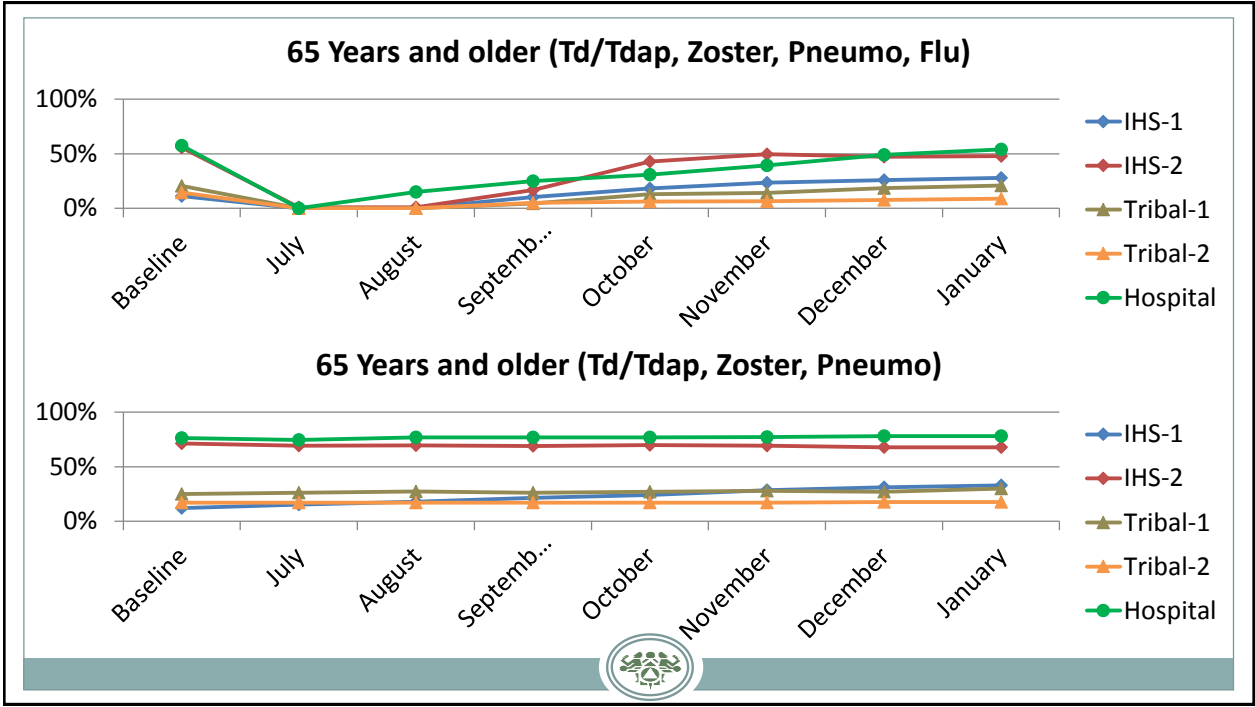
All Age-Recommended Vaccines Received, Ages 19 and over*



* Does not include influenza







Example of Specific Antigen Improvement

60-64	Baseline	July	Aug	Sept	Oct	Nov	Dec	Jan
Td/Tdap, Zoster, Flu	10%	0%	0%	6%	15%	20%	22%	28%
Td/Tdap, Zoster	12%	13%	14%	17%	20%	24%	26%	33%
Td/Tdap	86%	89%	89%	90%	90%	91%	91%	88%
Zoster	12.3%	14%	15%	17%	21%	24%	26%	35%
Flu	58%	0%	0%	24%	46%	52%	53%	62%

65+	Baseline	July	Aug	Sept	Oct	Nov	Dec	Jan
Td/Tdap, Zoster, Pneumo, Flu	11%	0%	0%	10%	18%	24%	26%	28%
Td/Tdap, Zoster, Pneumo	12%	15%	18%	21%	24%	29%	31%	33%
Td/Tdap	87%	85%	85%	86%	87%	87%	88%	88%
Zoster	13%	17%	19%	23%	26%	30%	34%	35%
Pneumo	86%	83%	84%	85%	85%	86%	86%	86%
Flu	68%	1%	1%	27%	50%	59%	61%	62%

Site Feedback

- The regular, monthly monitoring helped teams focus on improving immunizations systematically
- Teams worked to optimize EHR reminders, identified individuals to learn how to run report
- Teams also defined roles for team members with regard to encouraging adult immunizations:
 - Nurses and Medical Assistants were primarily responsible for reviewing EHR reminders, initiating discussions with patients
 - Providers act as “back-up”- they counsel patients who are hesitant, provide staff education and generally let the nurses and MAs operate with a high level of autonomy



Challenges

- Only able to recruit 1 hospital given time constraints
- Zoster vaccine proved to be the rate-limiting antigen, especially for smaller sites
 - Cost
 - Storage and handling
- Data collection from non-IHS EHR sites proved difficult
 - Easier if used additional software package



Next Steps

- Complete final project report
- Make recommendation to IHS to replace current GPRA measure (PPSV-23 for adults 65 and older and Influenza for adults 18 and older) with the Adult Composite Measure ✓
- Advocate for additional financial support for zoster vaccine (NPAIHB)
- Continue to enhance data collection from non-IHS EHR
 - NPAIHB staff training with Next Gen
 - Review other data mining and reporting software



Acknowledgments

HHS/NVPO

NPAIHB

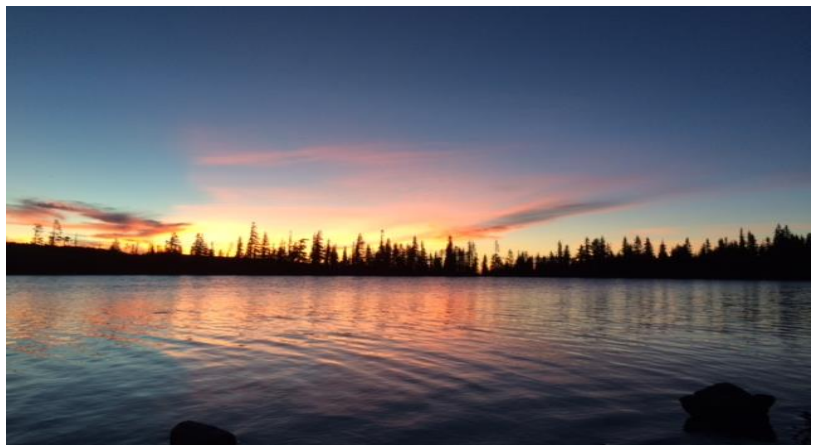
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Our IHS and Tribal Site Partners!



Thank You!