Practical Examples of IIS Population-based Coverage Assessments

ASSESSMENT STEERING COMMITTEE WEBINAR AUGUST 15, 2017

Agenda

- Summary of Analytic Guide
- Brief overview of Addendum
- Presentations of coverage assessments described in the Addendum:
 - Vikki Papadouka, NYC
 - Sudha Setty, MN
 - Joanna Eavey, WA

ANALYTIC GUIDE

For Assessing Vaccination Coverage Using An IIS

Practical considerations and decision points in designing a population-based coverage assessment.





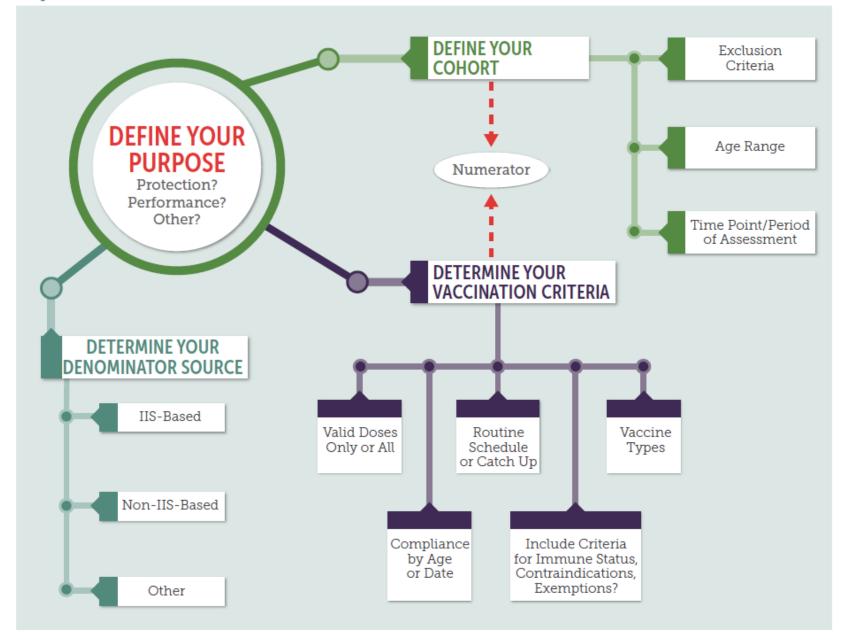




Elements of Assessment

- 1 Cohort determination
- 2 Vaccination criteria
- 3 Denominator source

Key Decision Points



PRACTICAL EXAMPLES OF IIS POPULATION-BASED COVERAGE ASSESSMENTS

An Addendum to the Analytic Guide for Assessing Vaccination Coverage Using an IIS

March 2017



Purpose of the Addendum

- Describes additional real-life examples of coverage assessments using IIS data
- Target audience: IIS and immunization program staff

In-Depth Examples of IIS Coverage Assessments

This Addendum includes five additional examples of population-based coverage assessments from select IIS programs. The following table lists the examples in the order they are presented in this Addendum. Examples are organized in order from largest to smallest scale populations of interest, beginning with broad assessments of all young children and/or adolescents in a state/jurisdiction and finishing with more specific assessments of certain populations (e.g. Somali children, pregnant women).

	Assessment Question	Purpose (and Vaccination Criteria)	Cohort: Assessment Age Range	Denominator Source
New York City	What are the quarterly vaccination coverage rates for the 4:3:1:3:3:1:4 vaccine series for children 19 through 35 months old in New York City? What are the vaccination coverage rates for 1 and 3 doses of HPV for adolescents 13 through 17 years old in New York City?	Protection from vaccine-preventable diseases among children 19 through 35 months and adolescents 13 through 17 years (Valid doses only; immunity included in numerator)	Method 1: Point in Time Assessment	Non-IIS Method 1: Census and Census- derived Data
Colorado	What are the vaccination coverage rates for most immunizations by county in Colorado for children 19 through 35 months old and adolescents 13 through 17 years old?	Protection from vaccine-preventable diseases among children 19 through 35 months and adolescents 13 through 17 years (Valid doses only; history of disease included in numerator)	Method 3: Period of Time Assessment – Allowing Aging In and Out	IIS Method 2: Individual Has Record in IIS with Immunizations
Oregon	What is the Tdap, Meningoccocal, MMR (1 and 2 doses), influenza and HPV (1 and 3 doses) vaccination coverage among adolescents 13 through 17 years old in Oregon?	Vaccination practices for adolescents 13 through 17 years (Valid and invalid doses [invalid included with application of minimum age requirements and weighting applied]; immunity, contraindications and exemptions not included in analysis)	Method 1: Point in Time Assessment	IIS Method 3: Other Adjustments to IIS Data
Minnesota	What is the vaccination coverage for all childhood vaccines for Somali children compared to non-Somali children by 24 months old born from 2004 through 2013 in Minnesota?	Vaccination practices and compliance with ACIP recommendations for Somali and non- Somali children (Valid doses only; immunity, contraindications and exemptions not included in analysis)	Method 1: Point in Time Assessment	IIS Method 1: Individual Has Record in IIS With or Without Immunizations
Washington	What percentage of women who deliver infants in Washington state receive Tdap and influenza vaccines during pregnancy and Tdap vaccine at 27 through 36 weeks gestation as recommended?	Vaccination practices and compliance with ACIP recommendations for pregnant women (Valid doses only; immunity, contraindications and exemptions not included in analysis)	Method 2: Period of Time Assessment – Not Allowing Aging In or Out	IIS Method 1: Individual Has Record in IIS With or Without Immunizations

New York City



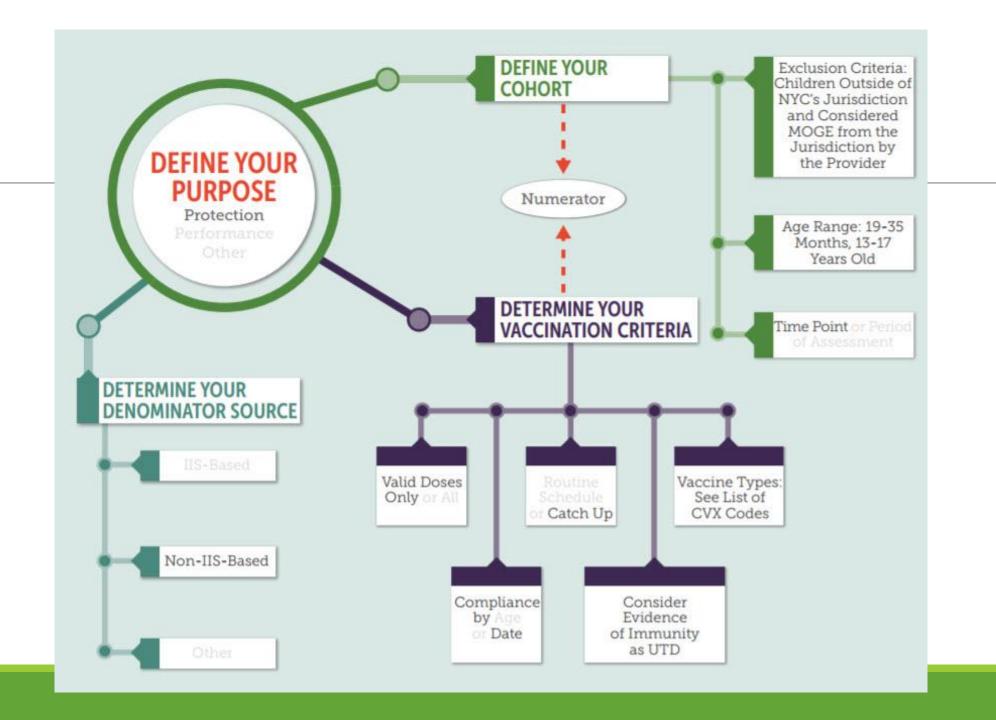
Vikki Papadouka, PhD, MPH
Director of Research and Evaluation

New York City: Assessment Question

• What are the quarterly vaccination coverage rates for the 4:3:1:3:3:1:4 vaccine series for children 19 through 35 months old in New York City? What are the vaccination coverage rates for 1 and 3 doses of HPV for adolescents 13 through 17 years old in New York City?

Methods, Background, Use & Impact

- Methods
- Background
- Use and Impact



Key Decisions Explained

Purpose

Protection

Cohort

- Excludes deceased, addresses outside of NYC
- Point in time assessment

Vaccination Criteria

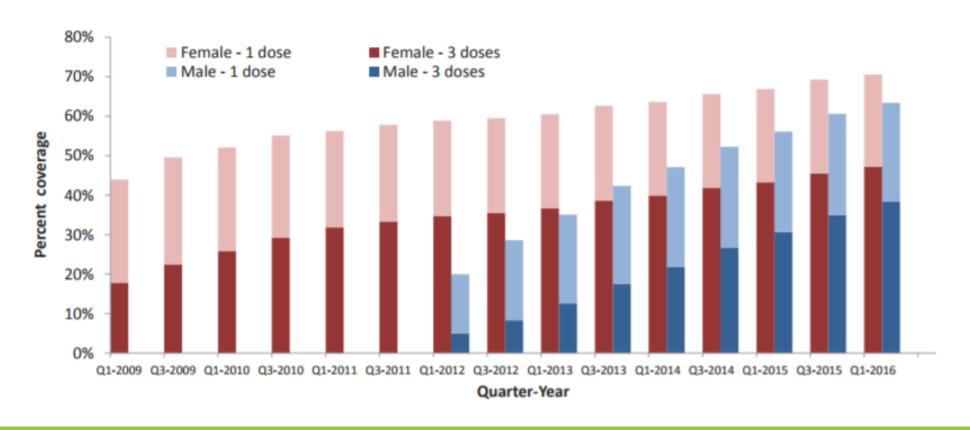
- Vaccines of interest
- Valid doses
- Routine and catch-up schedules
- Compliance by date

Denominator

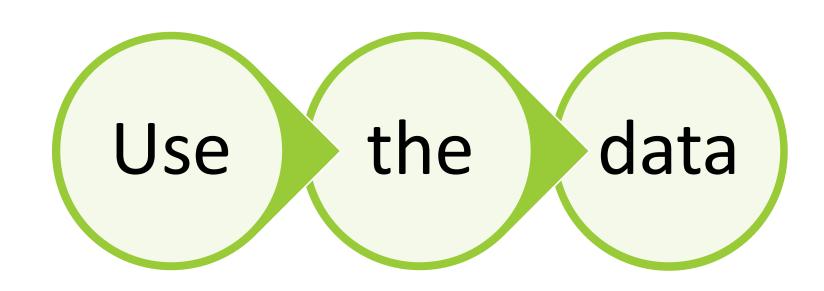
Census data

Methods & Results

Percent coverage for 1 and 3 doses of HPV vaccine among 13-17 year olds



Implementation Considerations & Advice



Next Steps?



Minnesota



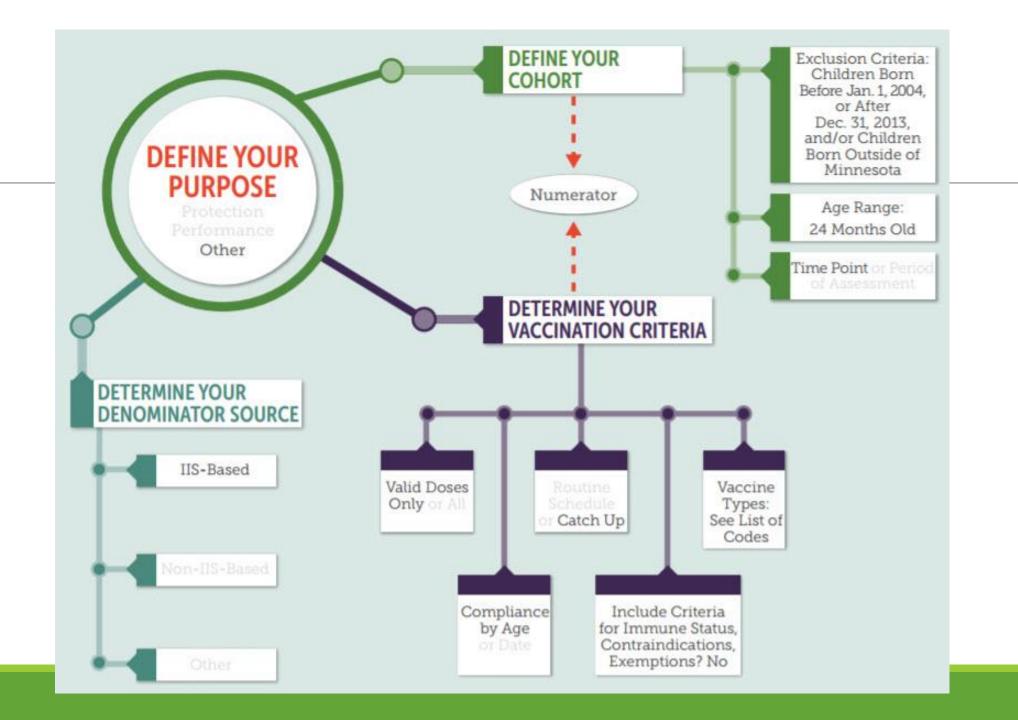
Sudha Setty, MPH AFIX/QI Coordinator

Minnesota: Assessment Question

• What is the vaccination coverage for all childhood vaccines for Somali children compared to non-Somali children by 24 months old born from 2004 through 2013 in Minnesota?

Methods, Background, Use & Imapct

- Methods
- Background
- Use and Impact



Key Decisions Explained

Purpose

 Vaccine practices and compliance with ACIP

Cohort

- Excludes children born outside of MN, no longer residing in MN or deceased
- Point in time assessment

Vaccination Criteria

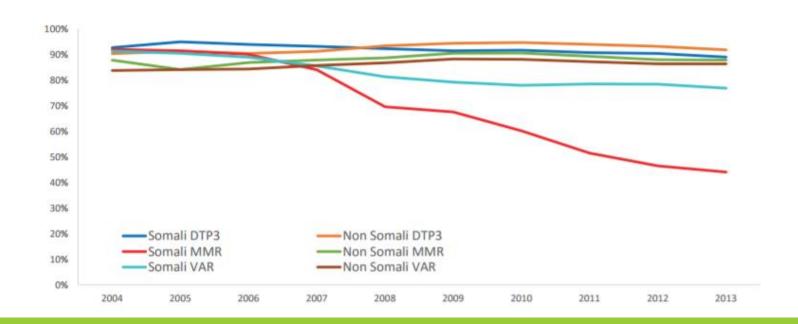
- Vaccines of interest
- Valid doses
- Routine and catch-up schedules
- Compliance by age

Denominator

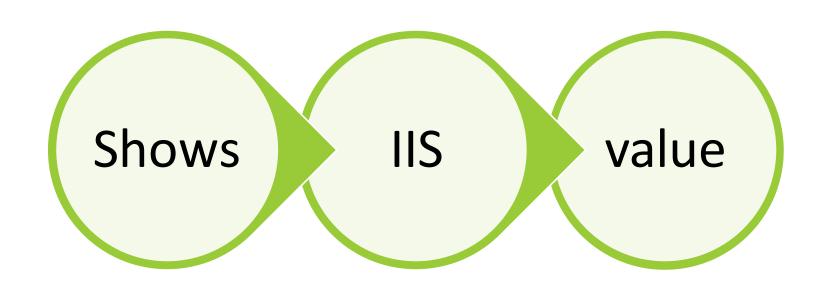
IIS records
 with or
 without
 immunizations

Methods & Results

Comparison of Immunization Rates by 24 Months for Children of Somali and Non-Somali Descent, by Birth Year



Implementation Considerations & Advice



Next Steps?



Washington State



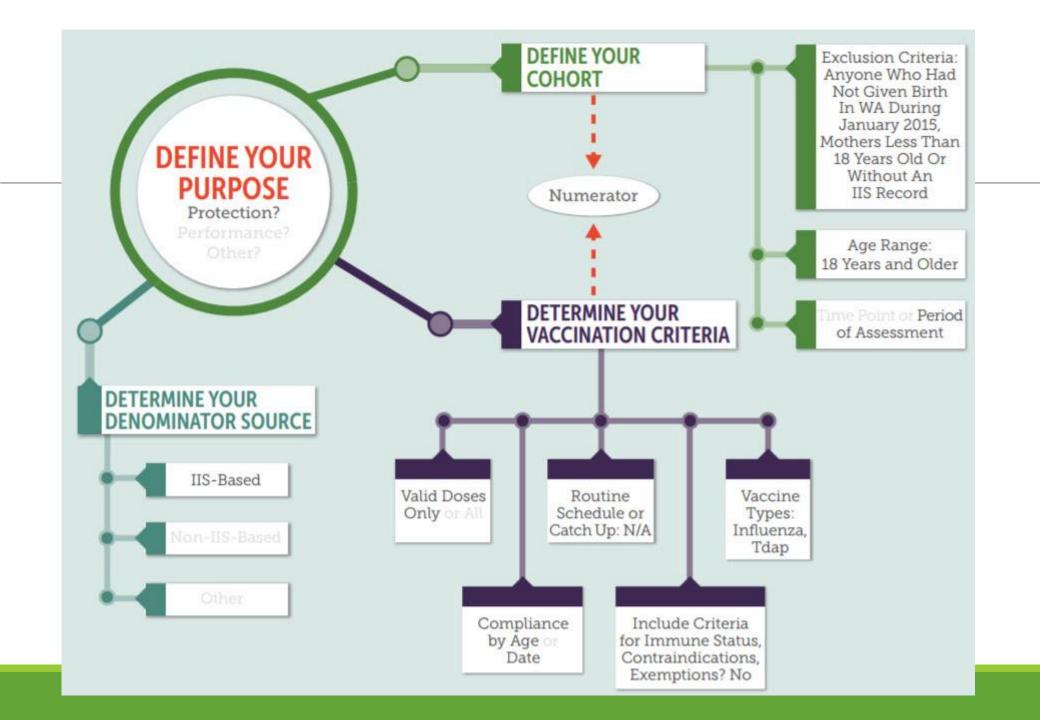
Joanna Eavey, MSPH Assessment Supervisor

Washington State: Assessment Question

• What percentage of women who deliver infants in Washington state receive influenza vaccine during pregnancy and Tdap vaccine at 27 through 36 weeks gestation as recommended?

Methods, Background, Use & Impact

- Methods
- Background
- Use and Impact



Key Decisions Explained

Purpose

- Protection during pregnancy
- Uptake of new ACOG recommendations

Cohort

- Excludes anyone less than 18 years old, without an IIS record or who had not given birth in WA during January 2015
- Period of time assessment

Vaccination Criteria

- Vaccines of interest
- Valid doses
- Rates of Tdap and influenza uptake at any point during pregnancy

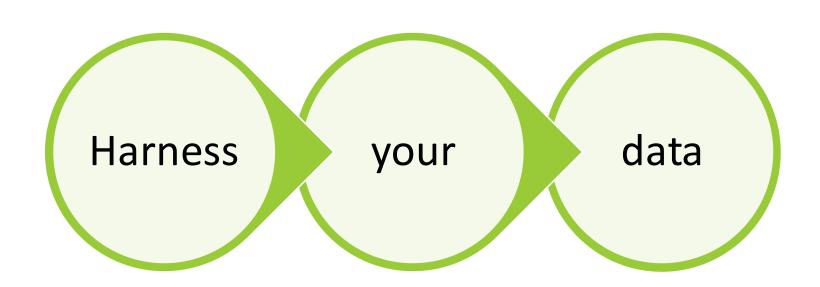
Denominator

IIS records with or without immunizations

Methods & Results

Vaccine	Total vaccination records (valid and before 2/1/2015)	# records per matched mother	% matched mothers vaccinated during pregnancy	% matched mothers vaccinated at 27-36 weeks
Tdap	3,285	0-4	39.1% (N=1,451)	31.4% (N=1,164)
Influenza	4,158	0-14	32.3% (N=1,209)	N/A

Implementation Considerations & Advice



Next Steps?



Question & Answer

We want to hear from you! All lines will be unmuted.

Please join the discussion or use the chat window.

Thank you!

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