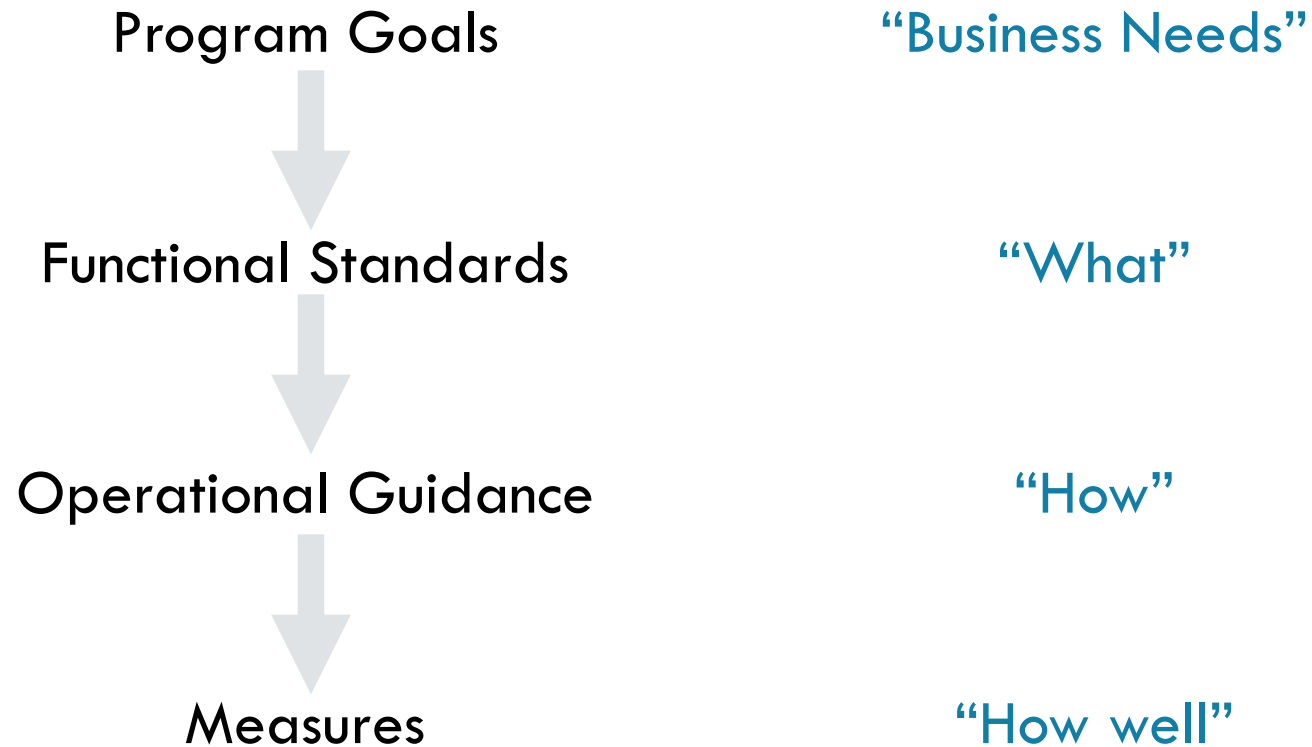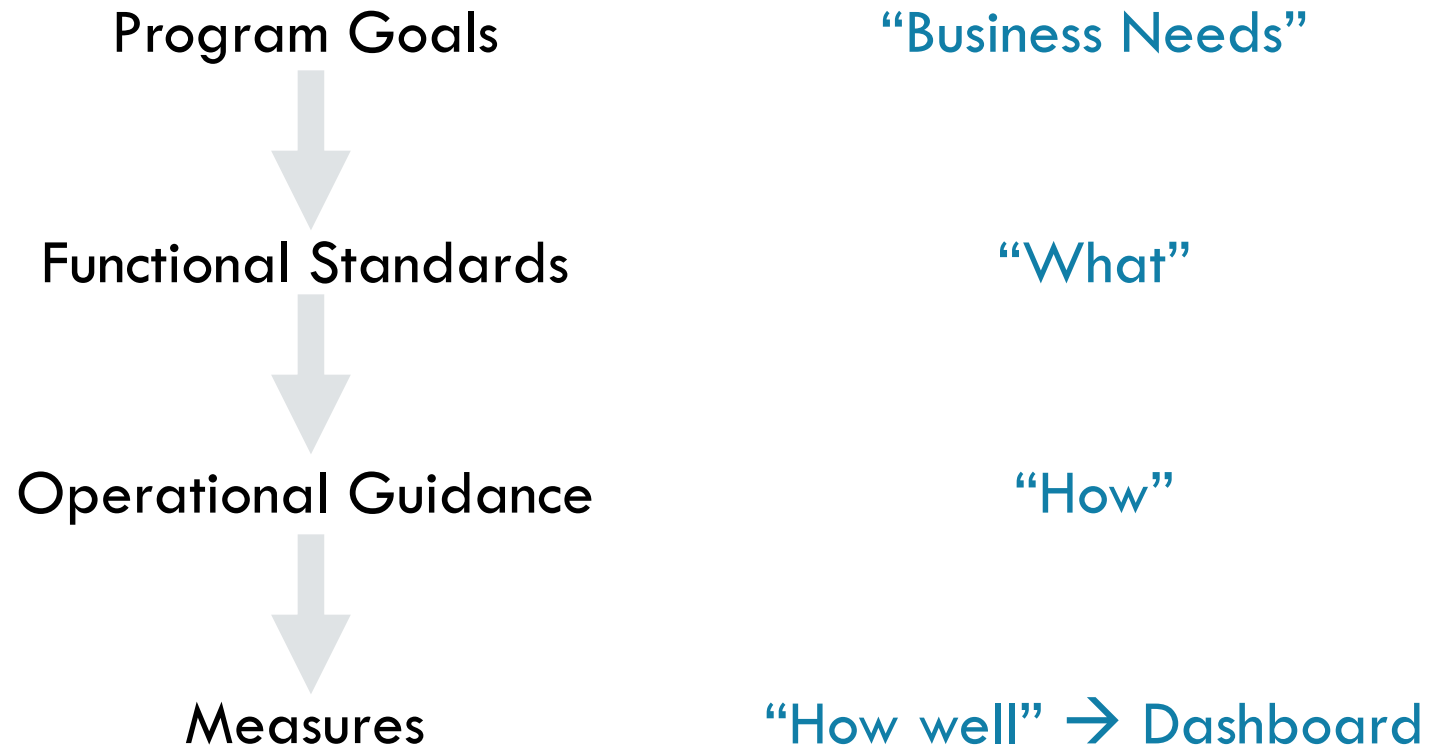# A DASHBOARD FOR TRACKING PROGRESS TOWARD ACHIEVING THE IIS FUNCTIONAL STANDARDS

Janet Fath, PhD

Kafayat Adeniyi, MPH

Loren Rodgers, PhD
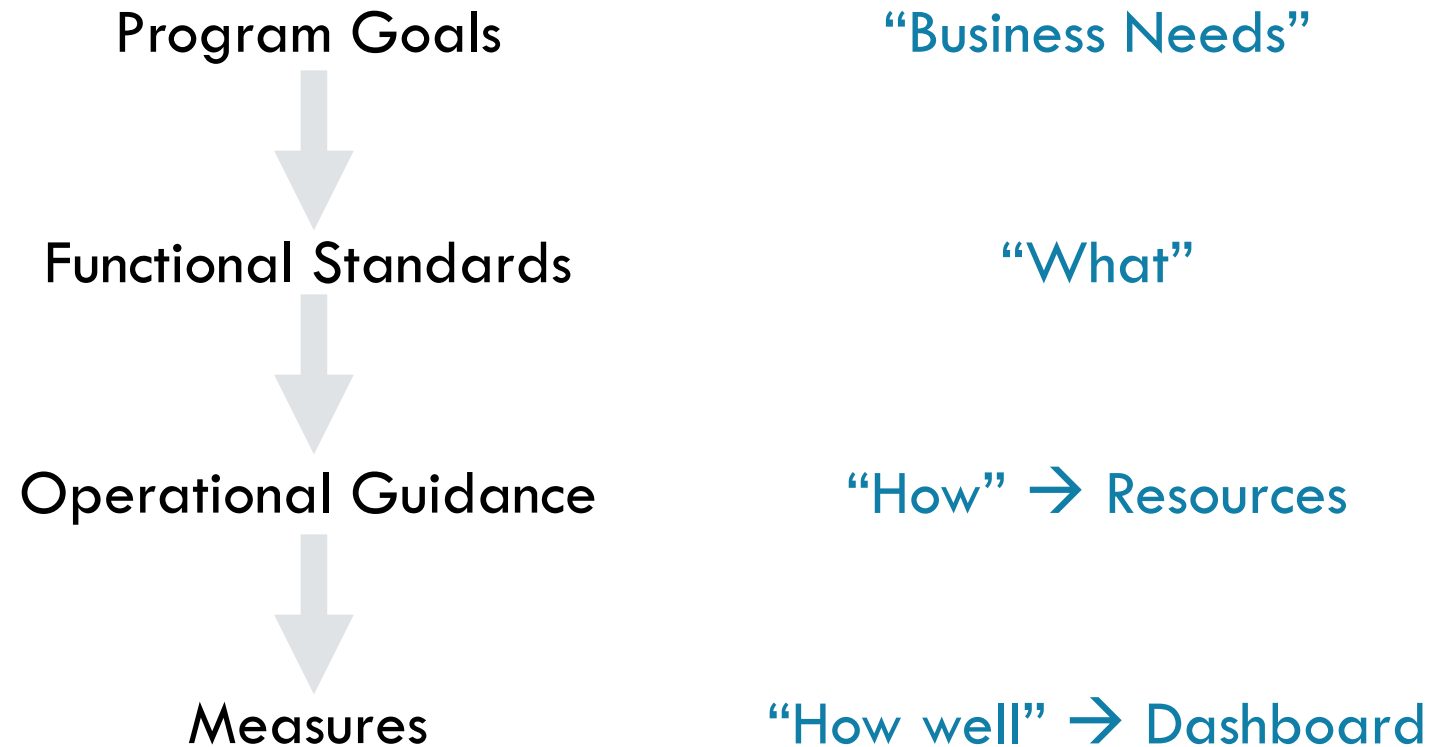
BACKGROUND:
IIS FUNCTIONAL STANDARDS

Program Goals   "Business Needs"

Functional Standards   "What"

Operational Guidance   "How"

Measures   "How well"

BACKGROUND: IIS FUNCTIONAL STANDARDS

Program Goals   "Business Needs"

Functional Standards   "What"

Operational Guidance   "How"

Measures   "How well" → Dashboard

BACKGROUND: IIS FUNCTIONAL STANDARDS

Program Goals   "Business Needs"

Functional Standards   "What"

Operational Guidance   "How" → Resources
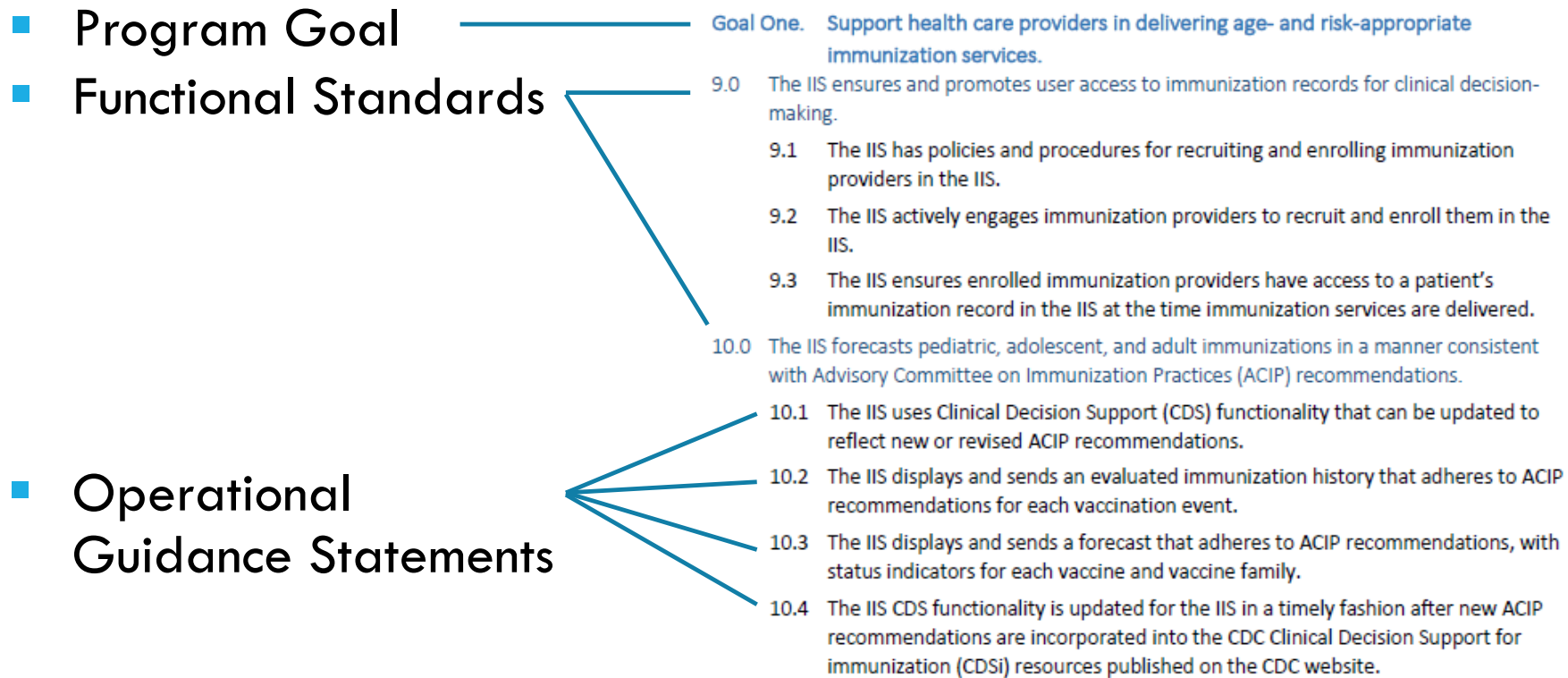
Measures   "How well" → Dashboard

BACKGROUND: PROGRAM GOALS

Four Program Goals

1. Support health care providers in delivering age- and risk-appropriate immunization services.

2. Support the control and management of vaccine-preventable disease outbreaks.

3. Support and inform stakeholder efforts to improve immunization rates.

4. Support health care providers in meeting the requirements of the Vaccines for Children (VFC) program and state and local vaccine programs.

Essential Infrastructure Standards

SAMPLE GOAL, STANDARDS, AND OPERATIONAL GUIDANCE STATEMENTS

- Program Goal

- Functional Standards

- Operational Guidance Statements

- Measures

Goal One. Support health care providers in delivering age- and risk-appropriate immunization services.

9.0 The IIS ensures and promotes user access to immunization records for clinical decision-making.

9.1 The IIS has policies and procedures for recruiting and enrolling immunization providers in the IIS.

9.2 The IIS actively engages immunization providers to recruit and enroll them in the IIS.

9.3 The IIS ensures enrolled immunization providers have access to a patient's immunization record in the IIS at the time immunization services are delivered.

10.0 The IIS forecasts pediatric, adolescent, and adult immunizations in a manner consistent with Advisory Committee on Immunization Practices (ACIP) recommendations.

10.1 The IIS uses Clinical Decision Support (CDS) functionality that can be updated to reflect new or revised ACIP recommendations.

10.2 The IIS displays and sends an evaluated immunization history that adheres to ACIP recommendations for each vaccination event.

10.3 The IIS displays and sends a forecast that adheres to ACIP recommendations, with status indicators for each vaccine and vaccine family.

10.4 The IIS CDS functionality is updated for the IIS in a timely fashion after new ACIP recommendations are incorporated into the CDC Clinical Decision Support for immunization (CDSi) resources published on the CDC website.

Most OGS have at least one measure

BACKGROUND
IISAR

- Annual survey that assesses immunization program performance in developing, maintaining, and enhancing Immunization Information Systems activities for a given calendar year

- Reporting requirement for the 64 immunization programs that receive funding under section 317b of the Public Health Service Act

- Self-reported, self-validated survey administered by CDC and answered by immunization program awardees

- CDC's primary source for measuring progress toward achieving the functional standards

- IISAR Data Query Tool

BACKGROUND
IISAR QUERY TOOL

- References Functional Standards and OGS

- Essentially a copy of each individual awardee IISAR responses

Child Participation in IIS (aged 4 months through 5 years)

Logic Guidance:

- For children born from January 1, 2011 through August 31, 2016.

Enrollment:

- **Include:**
  - Children enrolled in the IIS, regardless of having only travel vaccines, only non-vaccine products, or no vaccines in the vaccine record.

- **Exclude:**
  - Children with addresses outside of your state or geopolitical area. Geopolitical area is defined as the area that contains the

Participation:

- **Include:**
- All doses (valid and invalid) administered **before** January 1, 2017, including those **recorded** in the IIS after December 31, 2016.

- **Exclude:**
  - Children with addresses outside of your state or geopolitical area. Geopolitical area is defined as the area that contains the population of children residing in the geopolitical location covered by the IIS.

29. Number of children aged 4 months through 5 years in the geopolitical area (2016 Census data)   `225320`

30. Child enrollment: Number of children aged 4 months through 5 years (born from January 1, 2011 through Aug 31, 2016) in both in your geopolitical area AND in your IIS   `238518`

   a. Proportion of children aged 4 months through 5 years in both your geopolitical area **AND** in your IIS (Q.30/Q.29).   `106%`

31. Child participation: Number of children in question 30 (children born from January 1, 2011 through Aug 31, 2016 that are both in your geopolitical area AND in your IIS) that have 2 or more immunizations recorded in your IIS (Healthy People 2020 Objective)   `225027`

   a. Proportion of children aged 4 months through 5 years in your geopolitical area and IIS that have 2 or more immunizations recorded in your IIS (Q.31/Q.29)   `100%`

AWARDEE NEEDS

- Access to IISAR responses

- Way to determine functional standard targets met or unmet

- Way to determine progress for groups of related functional standards, similar to groups communicated through business plan guidance

- Comparisons with other awardees' performance levels

- Way to determine opportunities and formulate plans for improvement

Immunization Information Systems (IIS) Dashboard
{Test Awardee} Individual Awardee Progress Report

Query Parameters

Selected FS/OGS Group:	Coverage Estimates
Targets Displayed:	All Targets
Timeframe:	2017

Legend

⊗ **Targets not achieved**

★ **Targets achieved**

N/A Exempt

For resources to learn about and meet the IIS Functional Standards, refer to the IIS Functional Standards Resource Guide.

To change report parameters, click the "Change Query Parameters" button. Refer to the IIS Dashboard User Manual for detailed instructions.

Functional Standards / Measures	Year: 2017	2017 Target Achieved	2017 Target	% Awardees Meeting Target in 2017
1.0 The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.				
1.1.1 Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 60 days of birth.	96.1%	★	85%	65%
1.1.2 Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 45 days of birth.	95.8%	★	85%	42%
1.1.3 Percentage of children born and residing in the IIS's jurisdiction in the last year that had a record established in the IIS within 30 days of birth.	95.2%	⊗	100%	85%
1.1.4 Percentage of children that were born in the calendar year that reside in the IIS's jurisdiction that have a demographic record in the IIS.	100.2%	★	85%	65%
1.2.1 The IIS identifies records created from vital records.	Yes	★	Yes	96%
1.3.1 Difference between IIS coverage estimate for children aged 19-35 months who received the 7-vaccine series and the respective NIS coverage estimate.	Exempt	N/A	N/A	85%
1.3.2 Difference between IIS coverage estimate for adolescents aged 13-17 years who received Td/Tdap and the respective NIS Teen coverage estimate.	Exempt	N/A	N/A	65%
1.3.3 Difference between IIS coverage estimate for adults aged 18 years and over who received an influenza vaccination and the respective BRFSS coverage estimate:	Exempt	N/A	N/A	80%
1.3.4 Percentage of children aged 0-6 years residing in the IIS jurisdiction that are enrolled in the IIS.	100.2%	★	85%	65%
1.3.5 Percentage of children and adolescents aged 0-18 years residing in the IIS jurisdiction that are enrolled in the IIS.	96.1%	★	85%	65%
1.3.6 Percentage of children, adolescents, and adults (lifespan) residing in the IIS jurisdiction that are enrolled in the IIS.	No Data	⊗	Yes	80%

RESOURCE GUIDE

Immunization Information System (IIS) Functional Standards Version 4.0 Resource Guide

Functional Standard	Primary Resources	AIRA Repository Key Words
1.0 The IIS contains complete and timely demographic and immunization data for children, adolescents, and adults residing or immunized within its jurisdiction.	**Introductory** • Data Quality for IIS – no-cost, interactive training that requires setting up an account with PHII **Advanced/Technical** • HL7 Version 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5 • HL7 Version 2.5.1 Implementation Guide for Immunization Messaging (Release 1.5) -- Addendum • Data Quality Assurance in Immunization Information Systems: Selected Aspects • Data Quality Assurance in Immunization Information Systems: Incoming Data • Guidance for HL7 ACK Messages to Support Interoperability • AIRA Data Validation Guide – for the IIS Onboarding Process	• Data quality assurance
2.0 The IIS identifies, prevents, and resolves duplicated and fragmented patient records using an automated process.	**Introductory** • Consolidating Demographic Records and Vaccination Event Records – mini guide **Advanced/Technical** • Consolidating Demographic Records and Vaccination Event Records – full guide • Immunization Information Systems Patient-Level De-Duplication Best Practices • The Unique Records Portfolio	• Deduplication • Consolidation
3.0 The IIS identifies, prevents, and resolves duplicate vaccination events using an automated process.	**Introductory** • Consolidating Demographic Records and Vaccination Event Records – mini guide • Vaccination Level De-duplication in Immunization Information Systems – mini guide **Advanced/Technical** • Consolidating Demographic Records and Vaccination Event Records – full guide • Vaccination Level Deduplication in Immunization Information Systems – full guide	• Deduplication • Consolidation

ACCESSING THE DASHBOARD

- Immunization Program Managers and IIS Managers may access the dashboard

- SAMS credentials are required for dashboard access

- Dashboard requirements include:
  - Internet Explorer 10 and above for Windows
  - Adobe Reader 9 and higher
  - Operating Systems: .NET Framework 3.0; Windows 2000, Vista, XP, 7

NEXT STEPS
MAKING THE MOST OF THE DASHBOARD

- It is important to have accurate data

- If your IIS vendor generates the responses…
  - Do you know how your answers are generated?
  - Do you review them before entering them in the IISAR?

- Immunization Program Managers and IIS Managers should tuned for information on how to access the dashboard

THANK YOU!

Janet Fath

Kafayat Adeniyi

Loren Rodgers

Please send questions about this presentation to IISInfo@cdc.gov.