AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

Select AIRA 2020 National Meeting Presentations: IIS Operations

Tuesday, September 8, 2020

3-4 PM ET

AIRA Webinar Series

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- Now through September 22, 2020
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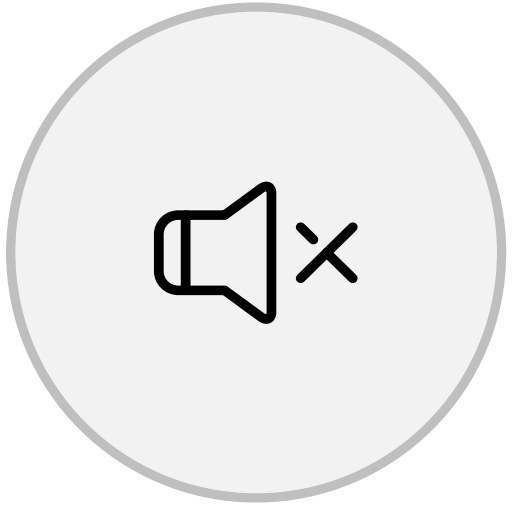
Webinar Series at a Glance

Week 1	CDC Panel Discussion: Advancing IIS Together
Week 2	The Immunization Gateway Portfolio
Week 3	Data Quality
Week 4	Data Use
Week 5	Working with End Users
Week 6	IIS Operations
Week 7	Global Perspectives
Week 8	Measurement and Improvement

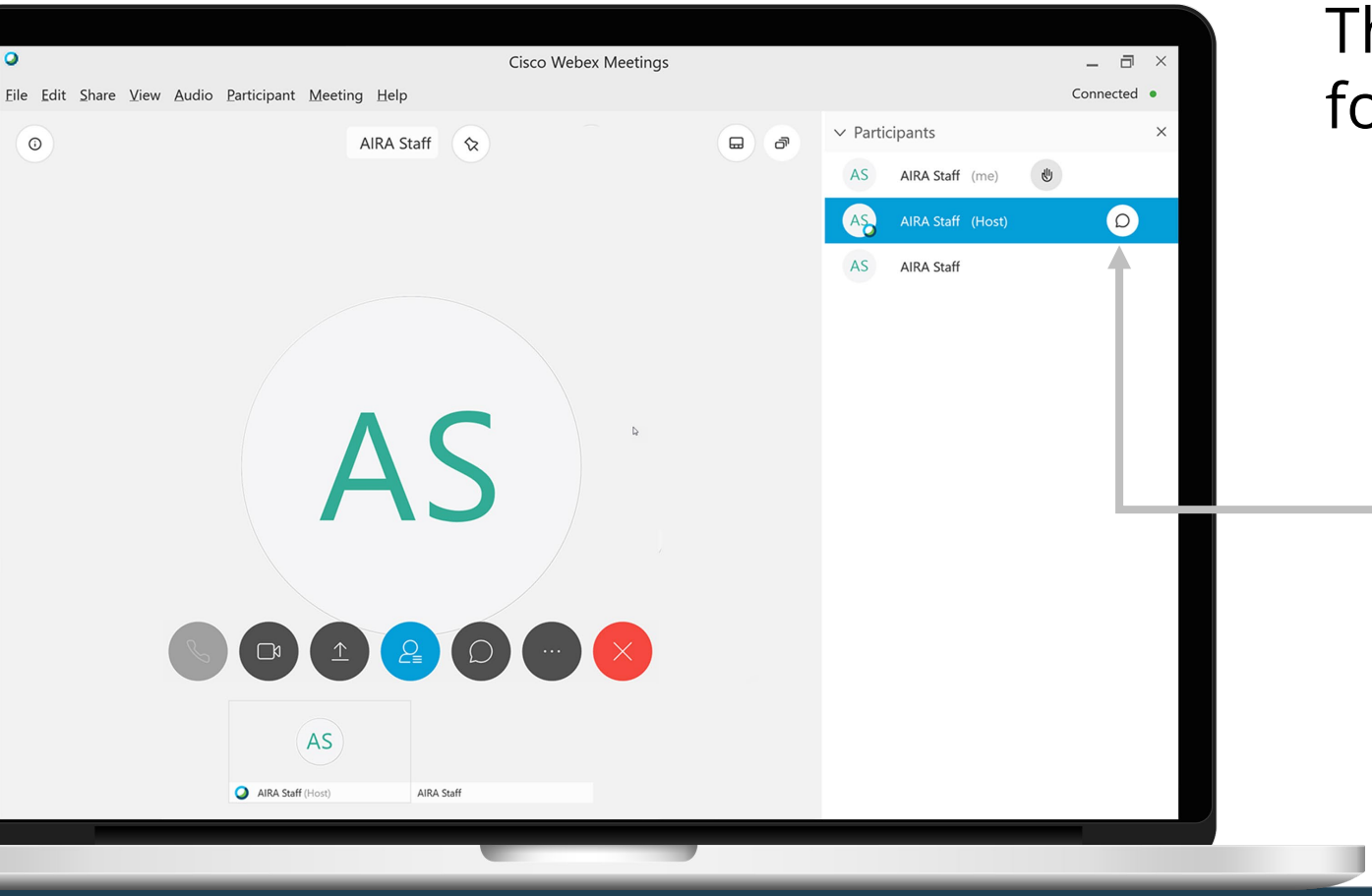
Before We Get Started



All phone lines
are muted

This meeting is being recorded
and will be posted on the
AIRA repository

Question & Answer



How do I ask a question?

There will be time allotted for Q&A following the presentation.

Send an e-mail to:
info@immregistries.org

Select the chat icon next to the host and type question into the chat box.

Today's Speakers

- **Miriam Muscoplat, MPH**, MIIC Manager, Minnesota Department of Health
- **Kelly McDonald, MPH**, Senior Business Analyst, HLN Consulting, LLC
- **Beth Cox,** Public Health Analyst, CDC
- **Erin Roche, MPH, MS, CPH,** Senior Informatics Analyst, Public Health Informatics Institute

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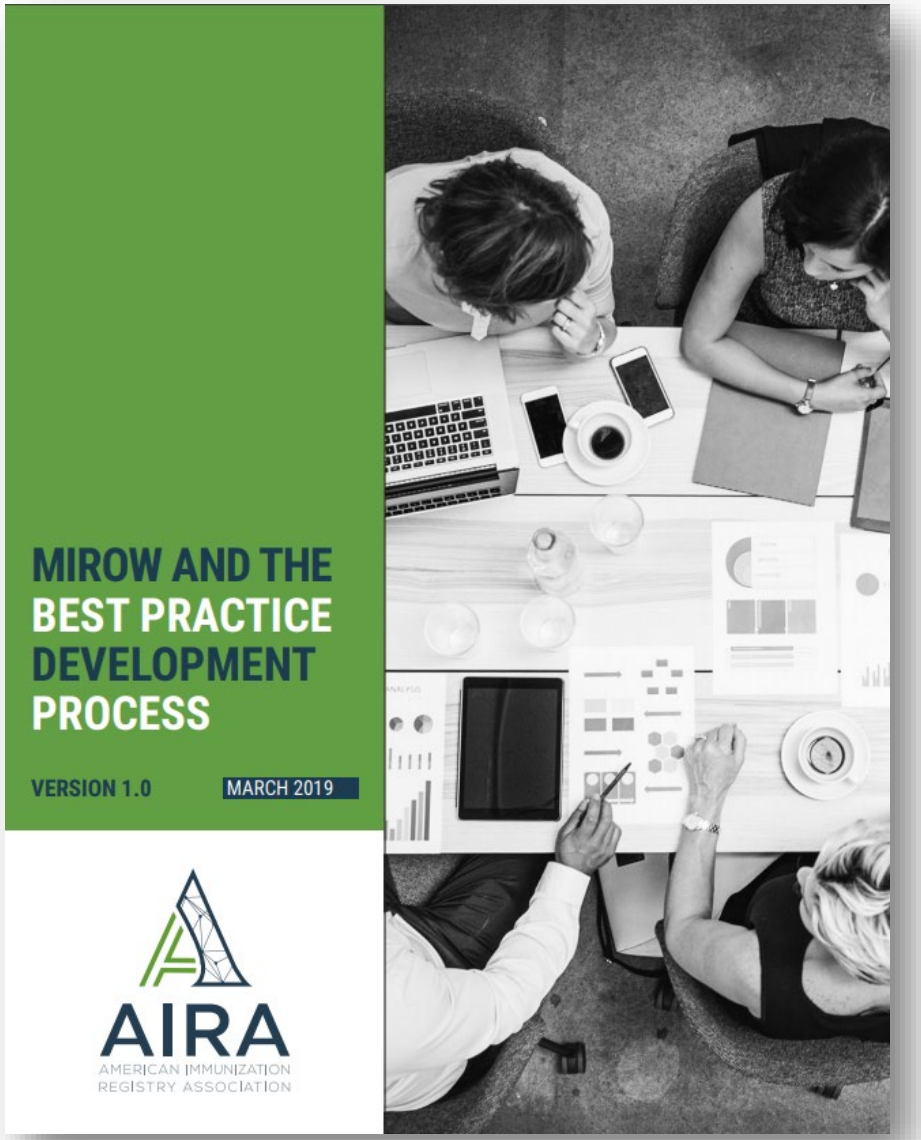
Business Continuity Planning to Support IIS During the COVID-19 Pandemic

A Modeling of Immunization Registry Operations Workgroup Presentation

September 8, 2020

MIROW 101

- Modeling of Immunization Registry Operations Workgroup (MIROW)
- MIROW goals:
  - Developing a best practice operational improvement guidebook
  - Promoting the implementation of best practices in the IIS community



MIROW Best Practices

Image: https://www.bugatti.com/chiron/

Ok, Maybe More Like

Image: https://www.carmax.com/articles/best-minivans

What You Feel Like You Have Time to Do Now…

Image: https://www.amazon.com/Little-Tikes-Cozy-Coupe-Anniversary/dp/B001NQHN7S

"A good plan today is better than a perfect plan tomorrow."

— George S. Patton

A Few Basics

Business Continuity Plan

The documented procedures that guide organizations to mitigate the impact of a disruption and to respond, recover, resume, and restore to a predefined level of operation following disruption.*

* Adapted from ISO 22313:2012(E), Societal security — Business continuity management systems — Guidance

Business Continuity Management System

“a part of an overall management system that establishes, implements, operates, monitors, reviews, maintains, and improves business continuity.”

* ISO 22313:2012(E), Societal security — Business continuity management systems — Guidance

Developing a business continuity plan and a system to manage business continuity offers several important benefits:

- Improved management of disruptions and speedy recovery
- Better understanding of the IIS program's operations and processes
- Sustained institutional knowledge about business continuity for the IIS program

What and When

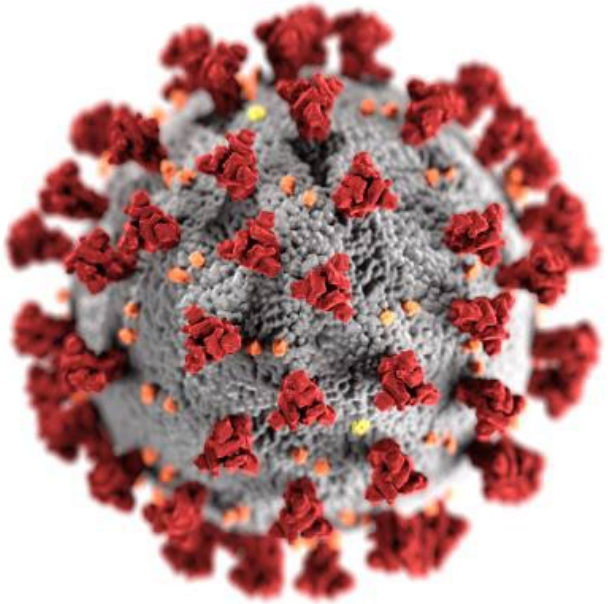
- Business function
- Essential business function
- Business impact analysis
- Time frames

Why

- Threat assessment
- Risk assessment

How

- Risk mitigation strategies
- Business continuity options



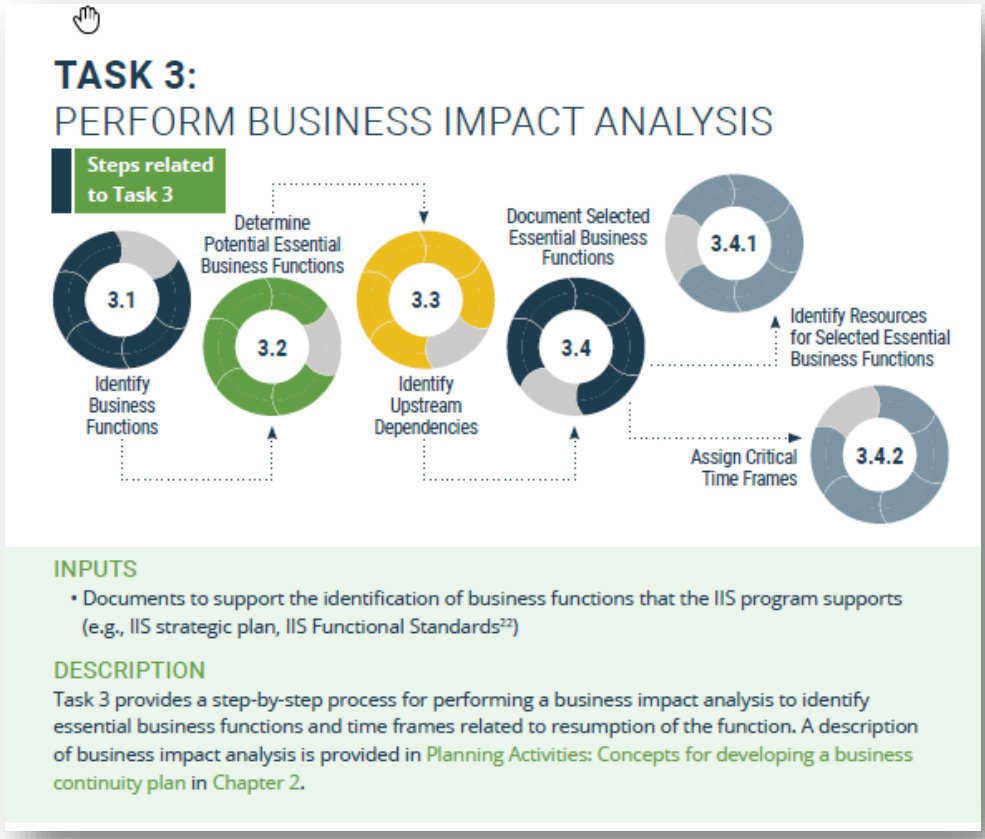
Plans are Worthless, but Planning is Everything.
- Eisenhower

Three Quick Tips

1) Learn the Basics

- Read Business Continuity Planning for Immunization Information System Programs
  - Not enough time? Read the mini-guide
  - Don't like to read? Watch the webinar
- All these resources are available in the AIRA repository

Or Let the Process Chapter Guide You



TASK 3:
PERFORM BUSINESS IMPACT ANALYSIS

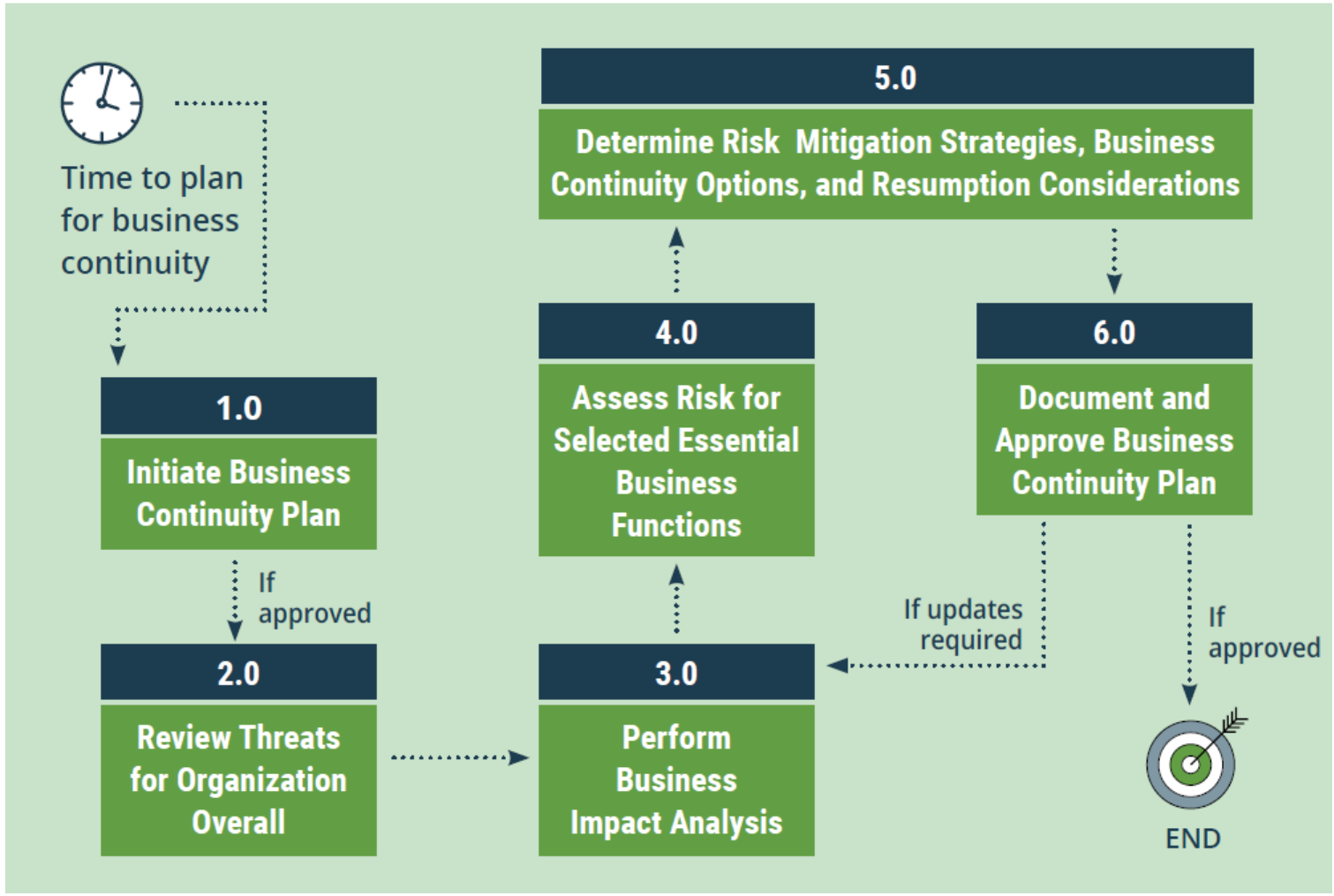
Steps related to Task 3

INPUTS

- Documents to support the identification of business functions that the IIS program supports (e.g., IIS strategic plan, IIS Functional Standards[22])

DESCRIPTION

Task 3 provides a step-by-step process for performing a business impact analysis to identify essential business functions and time frames related to resumption of the function. A description of business impact analysis is provided in Planning Activities: Concepts for developing a business continuity plan in Chapter 2.



2) Modify the Process to Fit Your Needs

This appendix contains a checklist of milestones for a project timeline and high-level activities that are part of the business continuity planning process.

Step 1.5 in Chapter 3 gives more information about how to incorporate these milestones into a business continuity project charter.

- ☐ Create a project team.
- ☐ Conduct background research on existing plans and legal, regulatory, and policy impacts.
- ☐ Draft a project charter.
- ☐ Obtain leadership approval to begin development of business continuity plan.
- ☐ Review threats for the organization.
- ☐ Identify business functions of IIS.
- ☐ Determine and document selected essential business functions.
- ☐ Assess risks for selected essential business functions.
- ☐ Determine risk mitigation strategies for resources of selected essential business functions.
- ☐ Identify continuity options for selected essential business functions.
- ☐ Weigh value factors to decide which risk mitigation strategies and business continuity options to implement.
- ☐ Identify resumption considerations.
- ☐ Document the business continuity plan.
- ☐ Obtain approval of the business continuity plan.
- ☐ Conduct training and education for staff involved in response.
- ☐ Ensure regular exercising and review of the business continuity plan.

APPENDIX H EXAMPLE OF SELECTED ESSENTIAL BUSINESS FUNCTIONS IDENTIFIED BY THE WORKGROUP

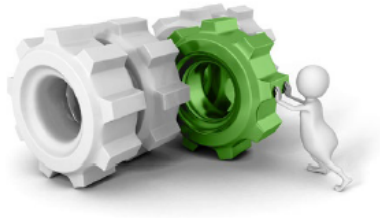
As described in Task 3 in Chapter 3 of the guide, one of the steps in development of a business continuity plan is to perform a business impact analysis.

Business impact analysis is the process of analyzing IIS program operational functions and the effect that a disruption might have upon them. The purpose of a business impact analysis is to determine the essential business functions of the IIS program and prioritize essential business functions to focus business continuity planning. The Business Continuity Workgroup (see Appendix V for list of participants) went through the process described in Task 3 in Chapter 3 to identify a list of selected essential business functions.

METHODOLOGY

The small group developed a proposed list of IIS program essential business functions based on:

- Review and analysis of IIS Functional Standards
- Feedback from the MIROW Steering Committee
- Feedback from IIS community volunteers who responded to a survey and/or a telephone interview
- Consideration of upstream dependencies (Step 3.3 in Chapter 3 and Appendix I)



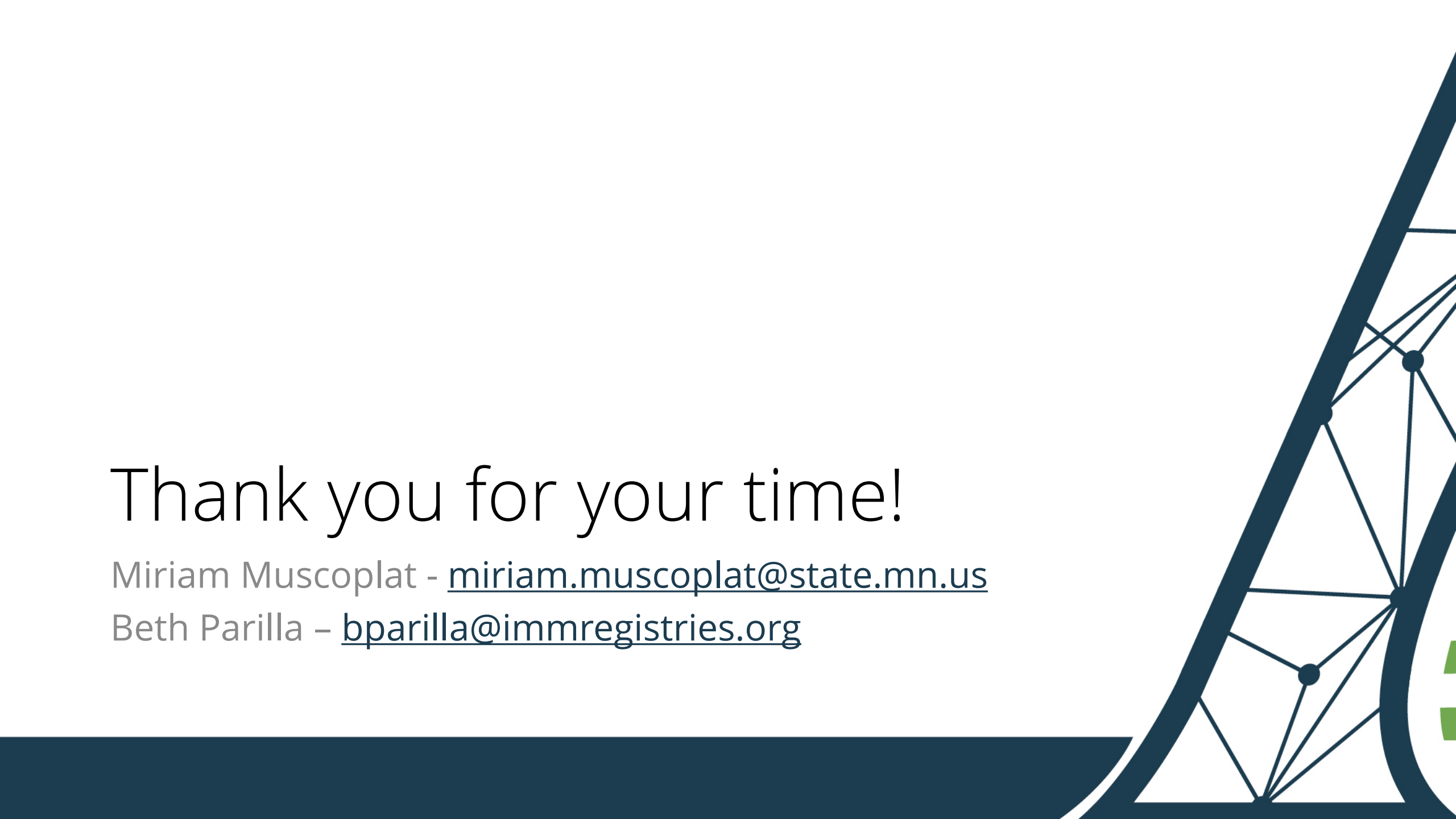
Resources by category: vaccine ordering capability

RESOURCE TYPE	SPECIFIC RESOURCE(S)
People	Vaccine coordinator and backup at provider site
	Awardee ordering staff and backup
Information and data	Provider's order
	Supporting information from provider
	Required VTrckS files (orders, inventory, provider master data)
	Shipment information
Equipment	Provider's computer
	Ordering staff's computer
Technology	IIS
	EHR
	VTrckS
Communication Systems	Internet
Building/Worksite	Provider facility
	IIS program facility
Utilities	Electricity

3) Take Advantage of the Appendices

Thank you for your time!

Miriam Muscoplat - miriam.muscoplat@state.mn.us
Beth Parilla – bparilla@immregistries.org



Standard Operating Procedures: Development & Management for IIS Programs

September 2020

What are SOPs?

- Standard Operating Procedures (SOPs) are written documents or work instructions that detail all of the steps involved in a procedure or process.
- SOPs distinctly define the roles and responsibilities of staff by proving descriptions of who does what and when, allowing for accountability and consistency throughout the workplace.

Policies vs. Procedures

Policies

- Are general in nature
- Identify rules
- Explain:
  - Why they exist
  - When the rule applies
  - Who it covers
  - How the rule is enforced
- Describes the consequences

Procedures

- Identify specific actions
- Explain when to take actions
- Describe alternatives
- Shows emergency procedures
- Give examples as needed

Why Develop SOPs?

- Systematizes processes and documents them.
- Allows staff to clearly understand their roles and responsibilities.
- Provides consistency in day-to-day operational activities.
- Allows for maintenance of accurate, relevant and current SOPs.
- Helps identify potential staffing needs or redundancies
- Simplifies employee training.

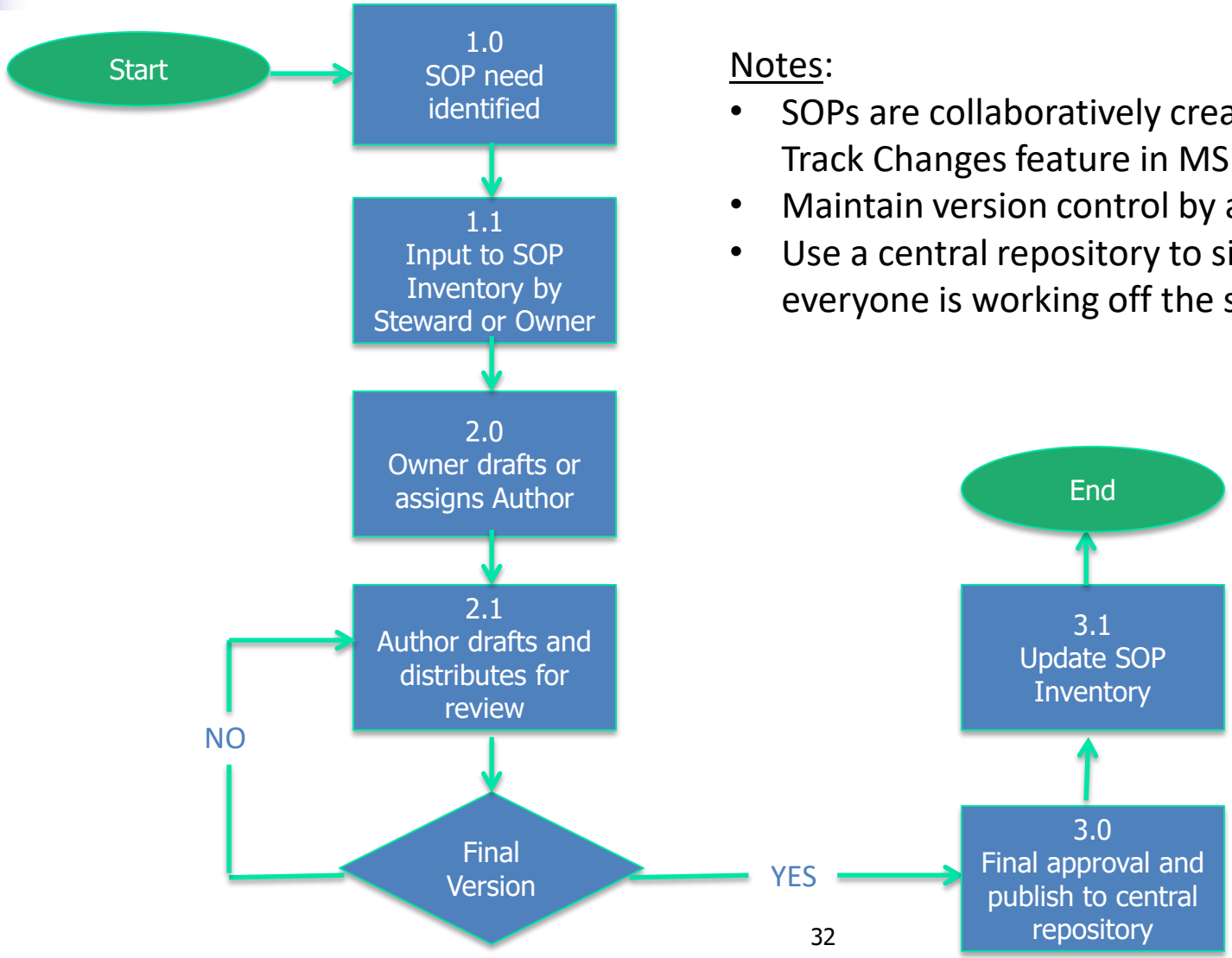
Roles & Responsibilities

Role	Responsibilities
SOP Steward (optional)	Works with Owners to ensure SOP development/revision according to established timelines Manages central repository of SOPs, including publication of completed SOPs Ensures version control of drafts and final SOPs Responsible for ongoing maintenance of SOP Inventory and central repository
Owner	Responsible for overall management of assigned SOP(s) Initiates the annual review process May be the Author or assign an Author Ensures appropriate review is complete prior to SOP publication If no Policy Steward is assigned, Owner is responsible for publishing SOPs to the central repository and updating the CT SOP Inventory
Author	Drafts the SOP Distributes as needed for review/comment and revises based upon feedback received
Reviewer(s)	Reviews and provides input to the Author
Publisher	Conducts final review and publishes to centralized repository

Role of SOP Steward

- Lead staff person who coordinates SOP process:
  - Works with Owners, as needed, to ensure SOP development/revision according to established timelines.
  - Ensures consistent methodology for the development and review of policies and procedures.
  - Maintains an index of all active, in-progress and future SOPs (CT SOP Inventory).
  - Ensures periodic (e.g., annual) SOP reviews are conducted.
  - Manages central repository
    - SOP version control
    - Appropriate archival of previous SOP versions
  - Ensures staff awareness – SOP template, formatting standards, etc.

SOP Management Process Flow



Notes:

- SOPs are collaboratively created, reviewed and revised using Track Changes feature in MS Word.
- Maintain version control by adding the date to the file name.
- Use a central repository to simplify access to SOPs and ensure everyone is working off the same copy.

SOP Development Process

Why is it needed? What is the objective?

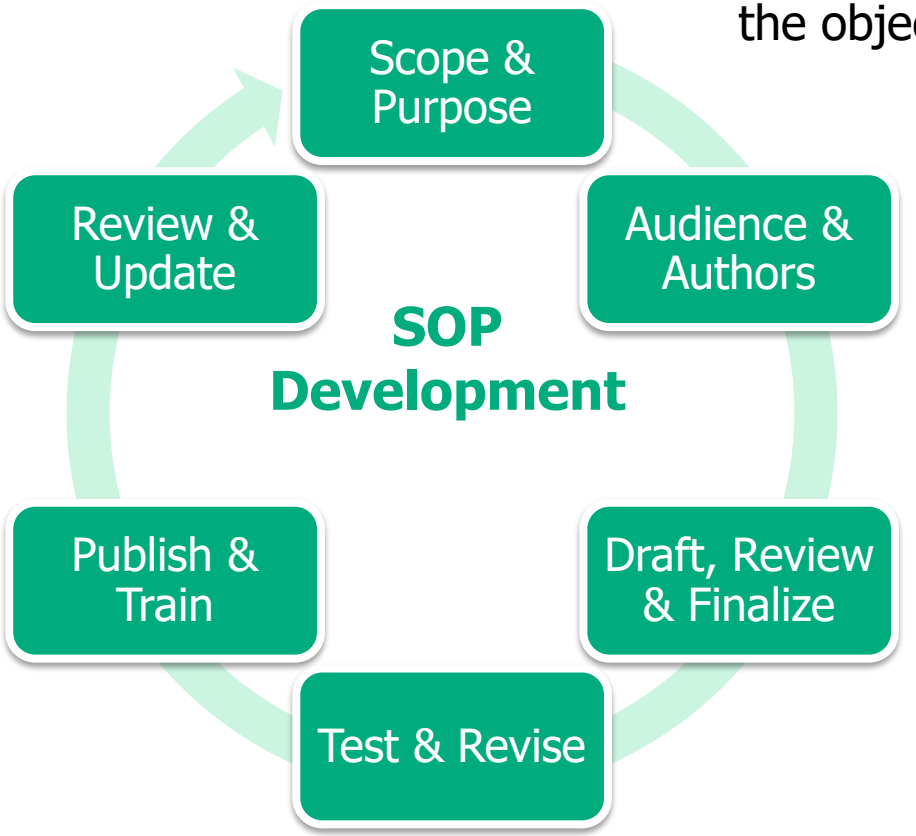
Who is it for? Who should draft?

What steps are required?

Implement. What needs to be changed?

Use centralized repository. Ensure comprehension.

Annual review: What's changed?



Document Version Control

- Use version 0.1, 0.2, 0.3, etc. until document approved
- After approval, version becomes 1.0
- Subsequent changes become version 1.1, 1.2, 1.3, etc.
- Major changes become version 2.0

SOP Process Challenges & Solutions

Challenges	Solutions
Prioritization among other pressing activities	Owner establishes timeline, including deadlines for drafts and review
Team review	Limit review to most critical staff
Version control	*Use standard nomenclature to track revisions and final version
Consistent use of template	*Review template and expectations with staff

*SOP Steward can help with this!

Contact Information

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IIS System Requirements

A resource for your procurement, planning, and development efforts

AIRA National Meeting Webinar

September 8, 2020

CDC
Centers for Disease Control and Prevention

Public Health Informatics Institute

Outline and speakers

1. Why this project: issues and opportunities	Beth Cox, MS Public Health Analyst, CDC/NCIRD/ISD/IISSB
2. Project approach and artifacts	Erin Roche, MPH, MS, CPH Senior Informatics Analyst, Public Health Informatics Institute (PHII)
3. How you can use the requirements	
4. Next steps and acknowledgements	

Why this Project:
Issues and Opportunities

CDC-sponsored project to assist programs with procurement

Objective: Develop a **baseline set of functional and non-functional system requirements**, as well as **sample IT support service expectations**, for immunization programs and IIS to use in system or module procurements.

Multiple stakeholders spend time documenting similar requirements

- The IIS Data Quality Blueprint, IIS Functional Standards, and AIRA best practice documents guide IIS operations
- Requirements further specify: "*How should the system support task/activity X*?"
- Programs spend duplicative effort answering this question in similar ways
- Analysis of program requirements revealed variation in terminology, presentation, and depth despite speaking to common needs

Requirements are challenging

- Breadth of requirements for IIS
- Resource intensive and time-consuming for staff and other stakeholders involved
- Involves elucidation, documentation, and validation processes
- Limited access to business analysts

High-quality requirements

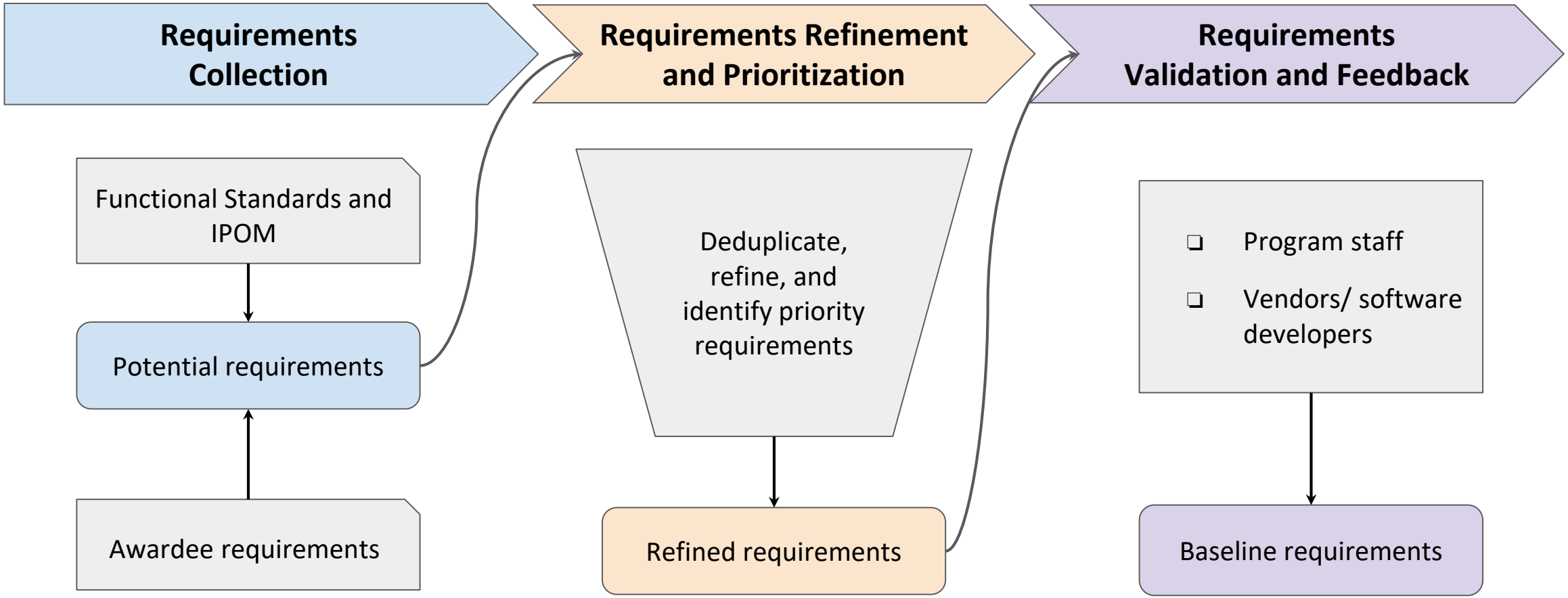
- ➔ Unambiguous
- ➔ Complete
- ➔ Singular
- ➔ Feasible
- ➔ Necessary
- ➔ Measurable

A national requirements set serves as a shared community resource

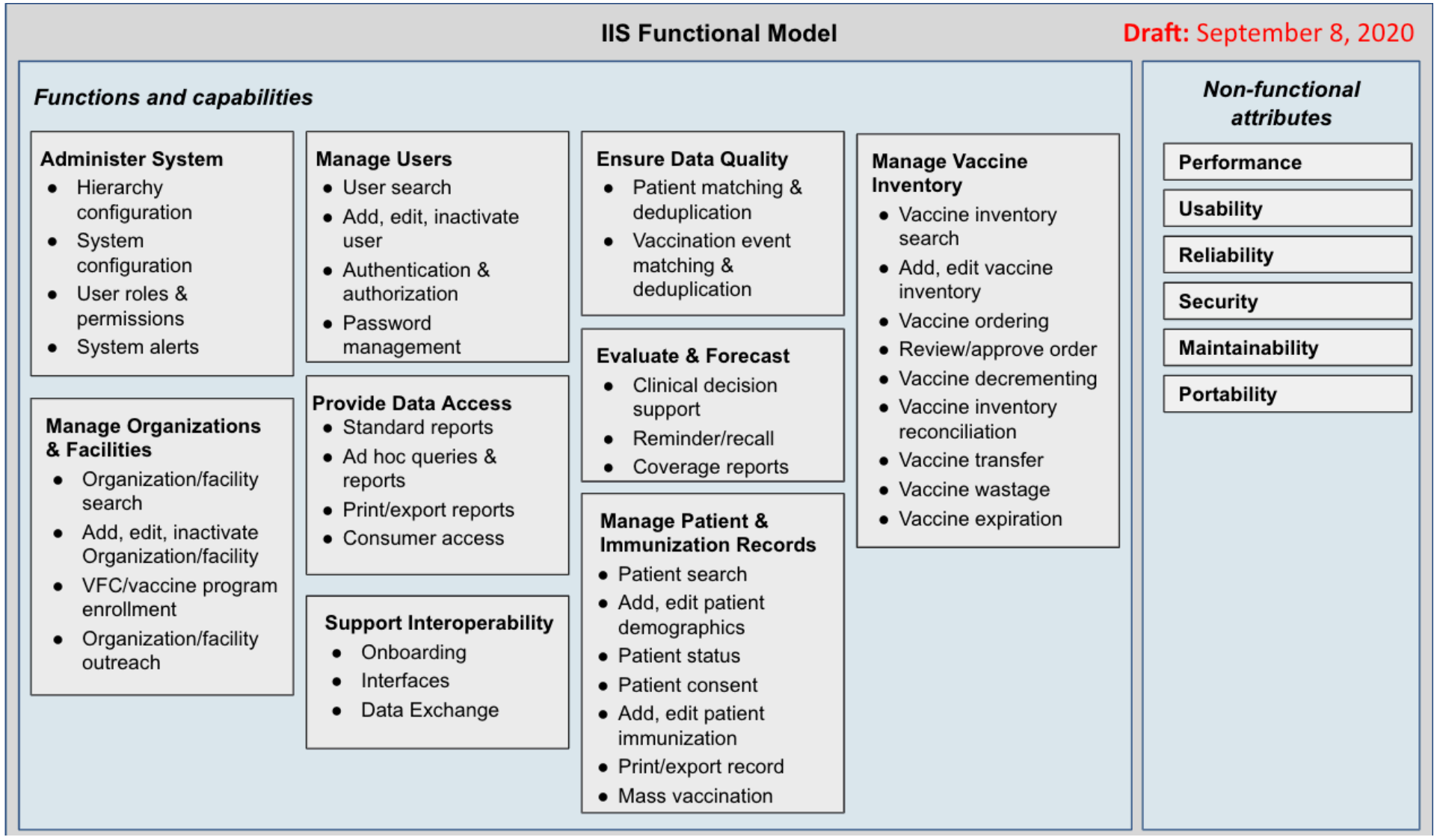
- Clarifies what IIS technology must do and how it must operate to support IIS Functional Standards and stakeholder needs now and into the future
- Provides a common language to articulate core functions and capabilities
- Facilitates discussion and awareness of current and future IIS needs
- Serves as a communication vehicle for programs and their IIS implementer

Project Approach and Artifacts:
IIS Functional Model, Requirements Workbook

Requirements were drawn from past program solicitations and validated by program representatives



Requirements are identified across nine core functions and six non-functional attributes



An RTM workbook includes requirements organized by function, capability, and non-functional attribute

Immunization Information System Baseline Requirements

DRAFT, version 0.5, last updated 8/24/20

This requirements traceability matrix (RTM) contains draft baseline functional and nonfunctional requirements for an immunization information system (IIS). The requirements clarify minimum expectations for what IIS technology must do and how it must operate to support IIS Functional Standards and programmatic and immunization stakeholder needs. The functional requirements describe intended behaviors of an IIS system to support business processes and tasks, by function and capability. The nonfunctional requirements convey technical requirements related to how a system must operate, by attribute and sub-characteristic. An embedded IIS Functional Model presents a visual depiction of the core functions, capabilities, and attributes of IIS and serves as a companion to the requirements.

This RTM is intended to be used by Immunization Programs as a starting point for the procurement of an IIS platform, module, or enhancement. The RTM should be used throughout the system development life cycle (SDLC) to ensure requirements are met in a final product or system. Immunization programs and IIS may also use the IIS Functional Model and the requirements within this RTM to help assess and identify gaps in current IIS functions, capabilities, and technical quality and provide a roadmap for future development within or across jurisdictions.

Contents

This RTM was developed by the Public Health Informatics Institute, in partnership with AIRA and CDC and with financial support from CDC under Cooperative Agreement number 6-NU38OT000316.

Requirements are singular, prioritized, and include defined terminology

Function: Manage Users — DRAFT, version 0.5

Req. #	Capability	Requirement: The IIS must/should have…	Priority: E, O (essential, optional)
	User Search	ability for jurisdictional admin to search for user accounts by user-defined criteria	E
	User Search	ability for jurisdictional admin to view all user accounts	E
	User Search	ability for organization admin to search all user accounts associated with their organization	E
	User Search	ability for organization admin to view all user accounts associated with their organization	E
	User Search	ability to sort users by user defined-criteria	O
	Add, Edit, Inactivate User	ability for admin to manage user accounts	E
	Add, Edit, Inactivate User	ability for admin to add new users	E
	Add, Edit, Inactivate User	ability for admin to modify user accounts	E
	Add, Edit, Inactivate User	ability for admin to inactivate user accounts	E
	Add, Edit, Inactivate User	ability for jurisdictional admin to inactivate multiple accounts in one transaction	O
	Add, Edit, Inactivate User	ability for organization admin to inactivate user accounts associated with their organization	E
	Add, Edit, Inactivate User	ability to store reason for inactivation of user account	E
	Add, Edit, Inactivate User	ability for jurisdictional admin to reactivate an inactivated account	E
	Add, Edit, Inactivate User	ability to electronically notify a user that their account is locked (inaccessible) as per jurisdictional security policy	O
	Add, Edit, Inactivate User	ability to electronically notify a user that their account is inactive	O
	Add, Edit, Inactivate User	capture clinician activity status (out of state, loss of certification, change of practice status, other)	O
	Add, Edit, Inactivate User	ability for jurisdictional admin to assign a role to authorized users	E
	Add, Edit, Inactivate User	ability for organization admin to assign a role to authorized users within their organization	E
	Authentication & Authorization	ability to authenticate user	E
	Authentication & Authorization	ability to access the system through an authorized username and password	E

Admin System | Manage Orgs | Manage Users | Interop | Data Quality | Eval Forecast | Manage Pt Iz Reco

How You Can Use the Artifacts and Requirements

Use these requirements in procurement solicitations

- The RTM provides essential IIS requirements to include in a solicitation, whether for a platform or a module adoption
- As needed, add requirements to support *jurisdictional laws and program policies*

Benefits

- ➔ Higher return on technology investments
- ➔ Decreased frustration and stress for all involved
- ➔ Reduced misunderstanding in communication
- ➔ Ensure priority needs are met

Use the IIS Functional Model and RTM/requirements in program planning and operations

- Assist in the identification of priority enhancements, within a program or across a vendor consortium
- Support and inform system testing
- Assist in the orientation of new staff and other stakeholders to IIS technology

Next Steps

Engaging vendors for their review and feedback is the next step in the project

- Goal is to ensure that vendor representatives clearly understand the requirements
- A shared understanding is critical to meaningful solicitation response

Materials are expected spring 2021; reach out if you have a more immediate need

- Beth Cox, CDC/NCIRD/ISD/IISSB
  mcox@cdc.gov
- Erin Roche, Public Health Informatics Institute (PHII)
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Acknowledgements

PHII Project Team

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- Erin Roche, Project Lead
- Sara Sanford, Project Manager
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- Marcey Propp, SME
- Noam Arzt, SME
- Amy Metroka, SME

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- LaTreace Harris, Evaluation Team Lead
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- Kristine Rosancrans

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- Nathalie Hartert

South Carolina

- Wendell Gulledge
- Gary Worrell

Washington, D.C.

- Donna Davidson
- Ousman Jobe

Questions?

- Join us on Mentimeter! www.menti.com
- Use the code: 44 41 72 3
- Submit your questions
- Scroll and vote (👍) for the questions you want answered
- Or you can still click the chat icon (💬) to submit a question in WebEx

Week 7: Global Perspectives

Tuesday, September 15, 2020, 3 – 4 p.m. ET

Data Analytics to Demonstrate the Added Value of EIRs in 3 Countries

- Emily Carnahan, MPH, PATH

Digital Immunization Registry in Pakistan: Insights from Big Data Analysis

- Subhash Chandir, MPH, PhD, MD, IRD Global

Coverage and Timely Vaccination Against DTP in Chile: An Analysis Using EIR

- Ignacio Castro, University of Chile, School of Public Health