NATIONAL QUALITY FORUM

Interoperability Web Meeting #3: *Key Informant Interviews*

Wednesday, February 1, 2017

Agenda

- Scope of Work of Project (ONC)
- Key Informant Interviews
  - *Overview*
  - *Selected Candidates*
  - *Major Themes and Relevant Findings*
- Questions
- Next Steps
- Public Comment

The Office of the National Coordinator for Health Information Technology

Advancing the measurement of interoperability and its impacts on care processes and outcomes

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February 1, 2017

Agenda

- Why are we developing this measurement framework?
- What are we hoping to achieve and what is its value?
- How will we develop the measurement framework?
- How will the results of this project be used?
- Input from the Committee Members and the public

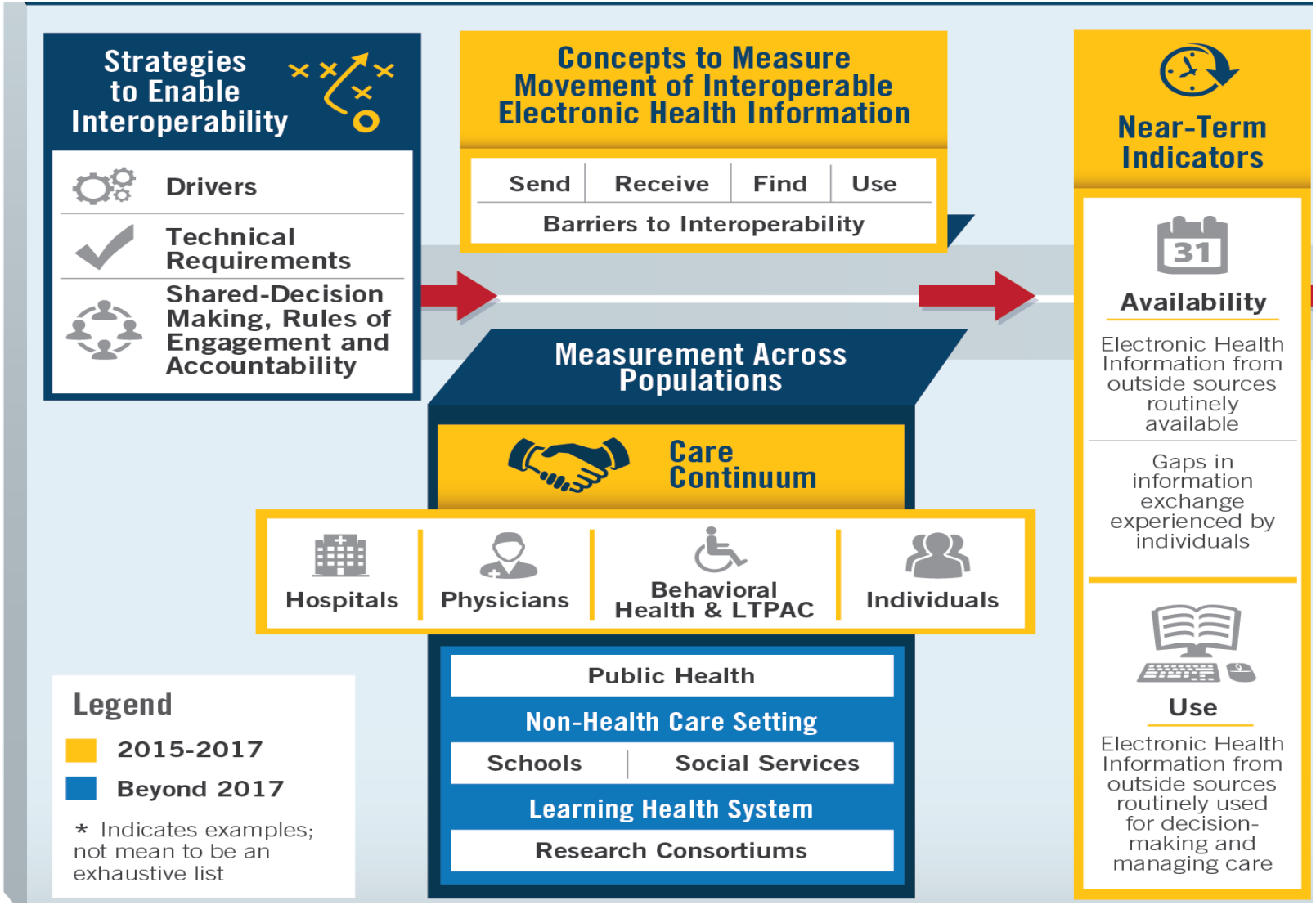
Why are we developing this measurement framework?

Policy Context underlying advancing interoperability measurement

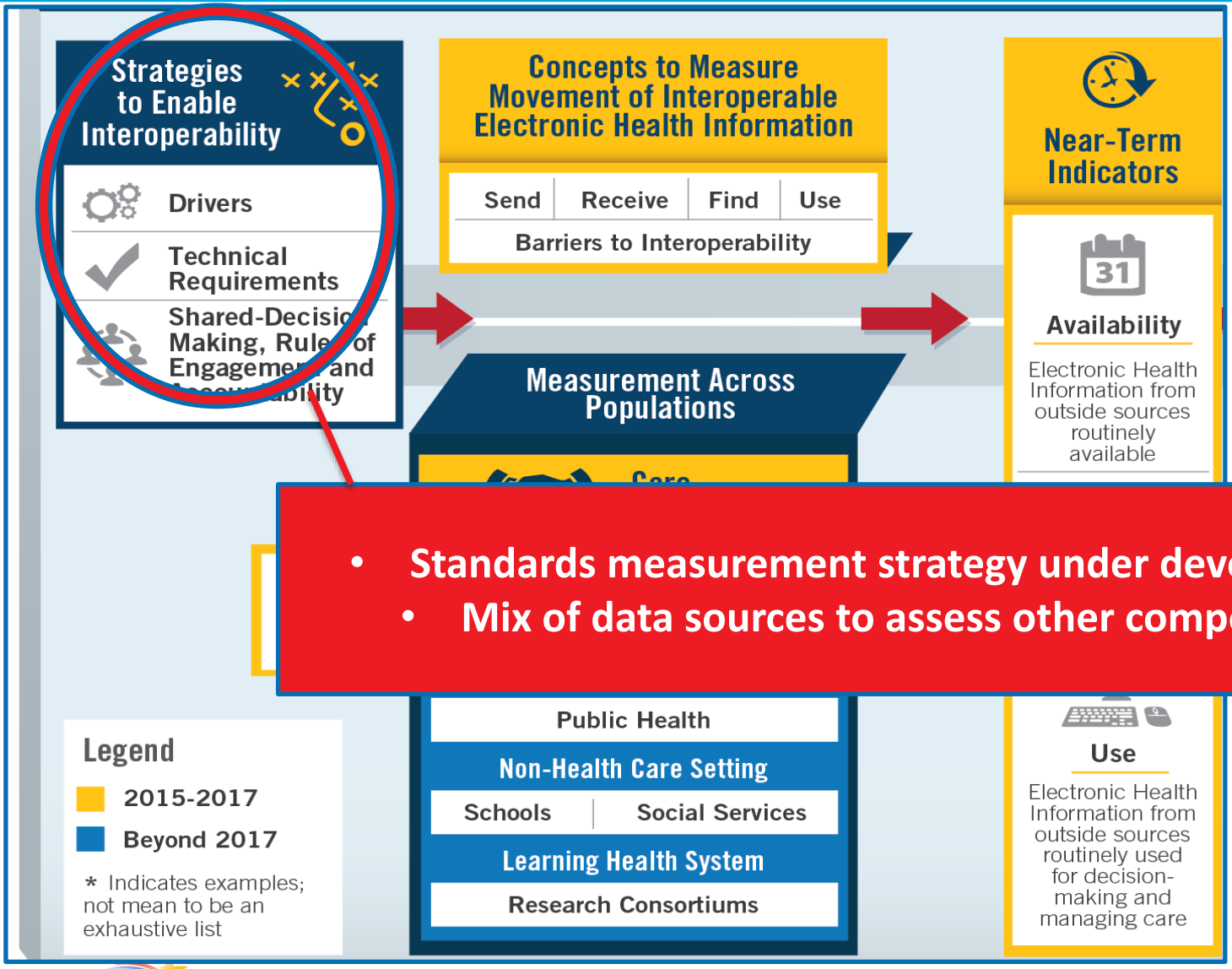
- **Interoperability Roadmap**
- **Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)**
  - National objective to achieve "widespread" interoperability by 2018
  - ONC issued an RFI requesting input on measures that align with the Roadmap to assess progress towards meeting that goal.
  - Stakeholders called for developing measures that were:
    - System-generated and patient-centered measures not burdensome to providers
    - Inclusive of providers along the care continuum and beyond
    - Assess the impacts of interoperability
- **ONC's Health IT Policy Committee**

Interoperability Roadmap identifies key priorities for measurement

Key Priorities for Measurement in the Near-Term

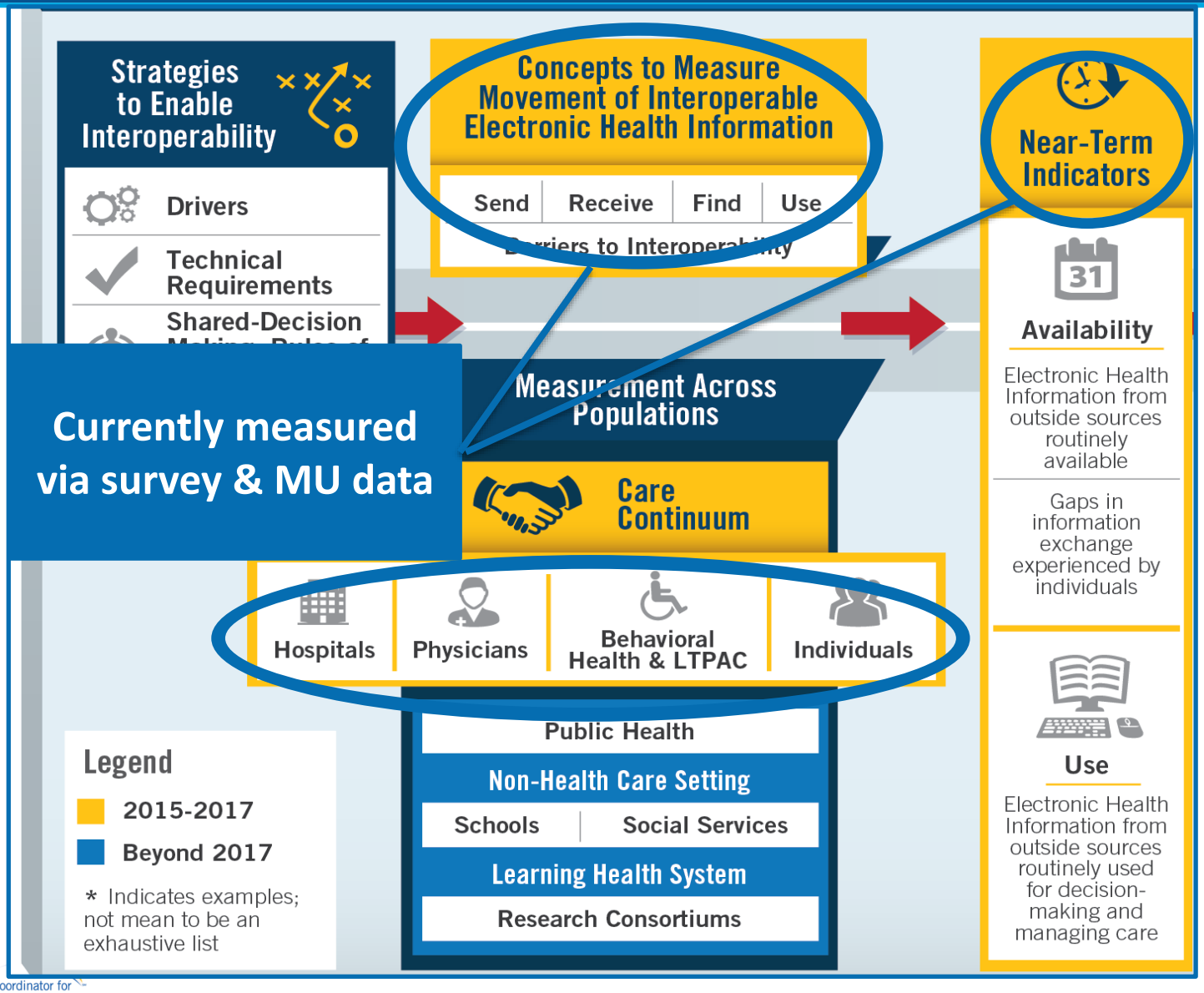


ONC's Current Measurement Approach

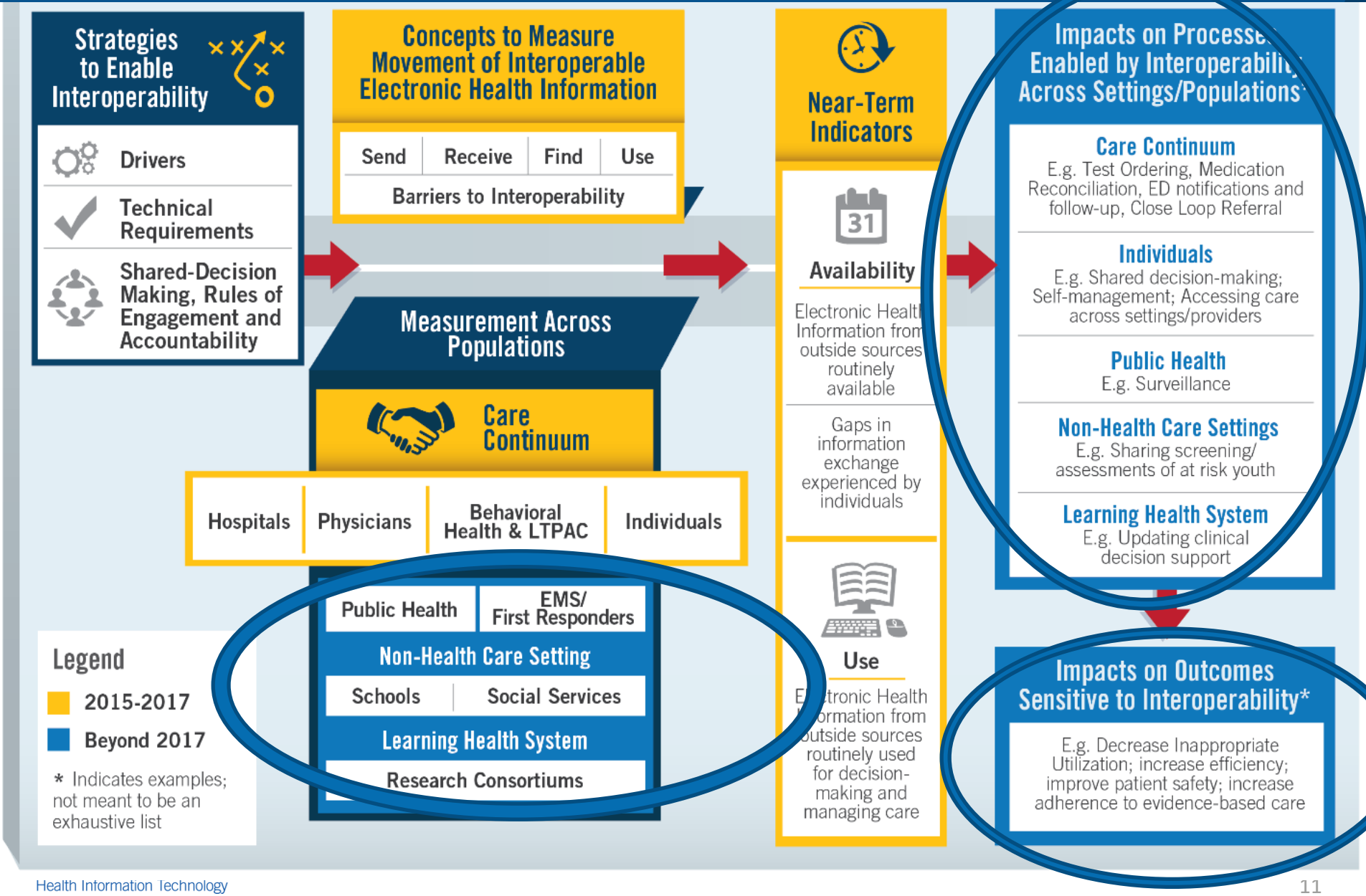


- **Standards measurement strategy under development**
- **Mix of data sources to assess other components**

ONC's Current Measurement Approach



Long-term Measurement needs

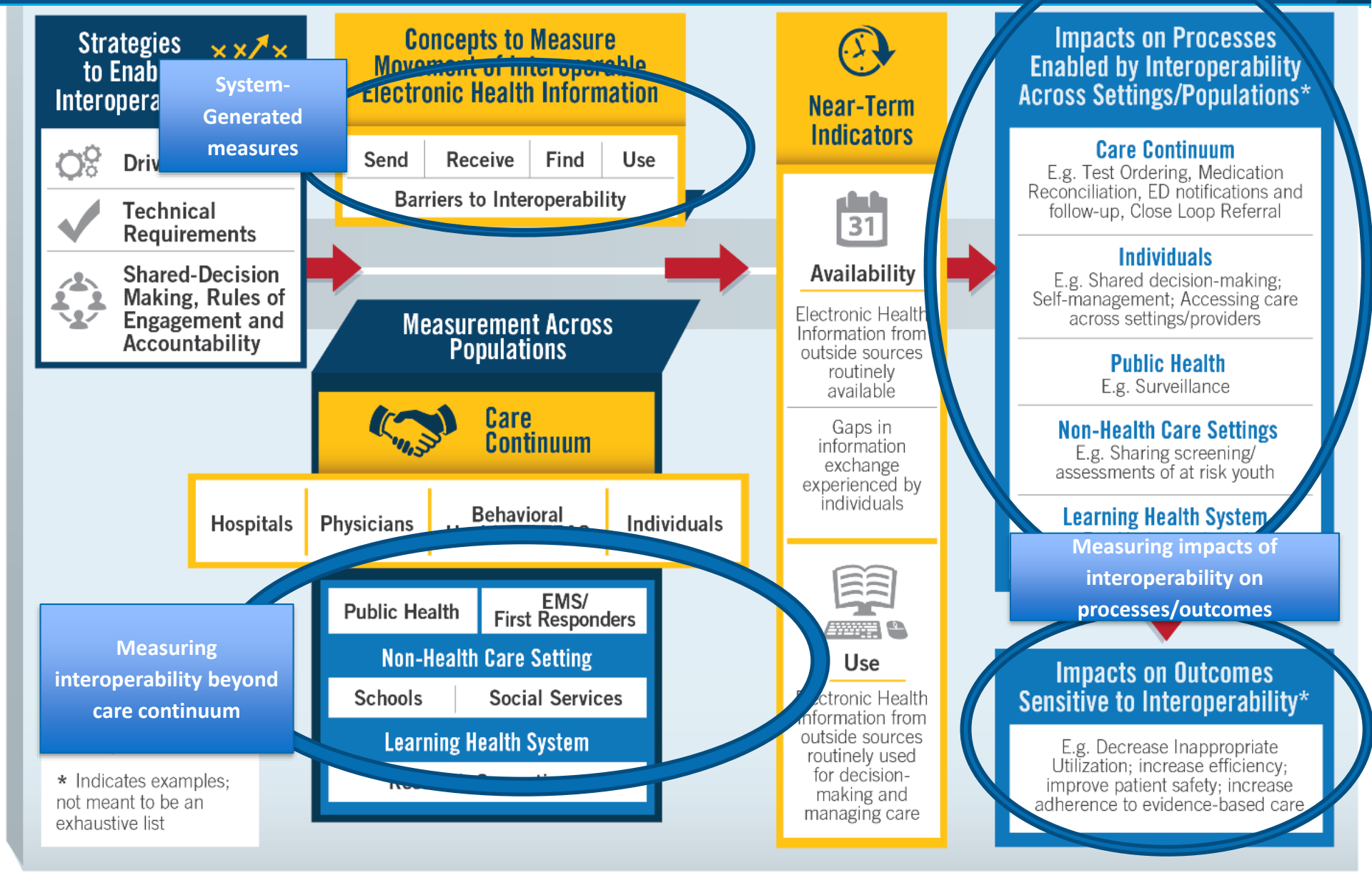


Gaps & Limitations in Current Measurement

- Current measurement of interoperability limited
  - » Self-reported survey data is difficult to validate and may overestimate rates
  - » Survey measures we currently use are relatively simple and do not reflect the full breadth of interoperability
- Current approach does not address the long-term goals
  - » Expand settings and populations
  - » Impacts of interoperability on processes that are enabled by interoperability and outcomes that are sensitive to interoperability
- Addressing these gaps and limitations is challenging
  - » NQF process offers the ability to confer with experts and gather stakeholder input through a transparent process

What are we hoping to achieve and what is its value?

Measurement Areas to be Addressed by NQF



Goals : Develop and help operationalize measurement framework

- Address limitations in current measurement of interoperability and meet the long-term needs by identifying:
  - Domains of interoperability that can be system-generated
  - Domains of interoperability to measure across populations and settings
  - Care processes or use cases enabled by interoperability
  - Interoperability-sensitive health outcomes
  - Existing measures that relate to the items above
- Specify the technical and infrastructure requirements to operationalize the framework.

What is the value of developing such a framework?

The measure concepts outlined in the framework should help us identify:

(1) Suitable existing measures and data sources;

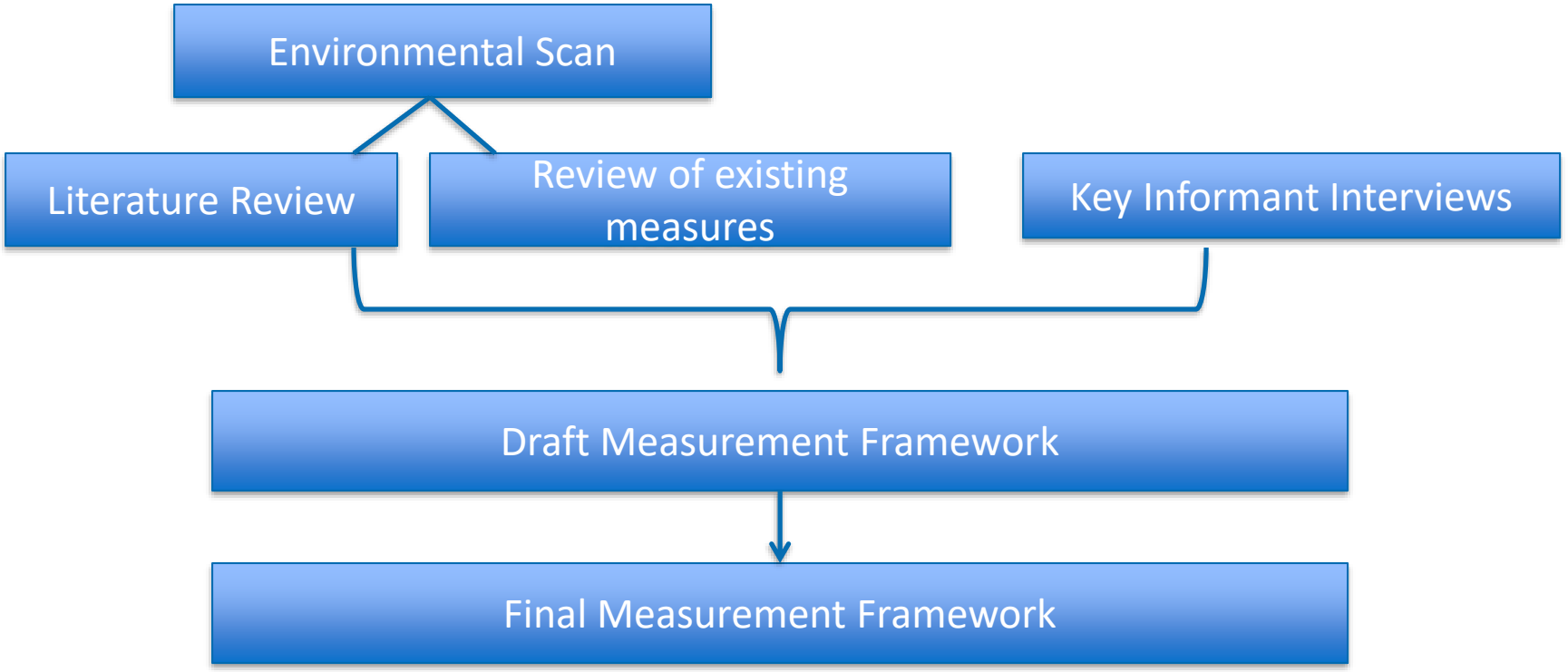
(2) Measures and measure concepts that could potentially be used but would require modifications; and

(3) Gaps where new measures need to be developed and/or additional data sources that need to be created.

Important to develop a measurement framework that is both grounded in the latest evidence AND informed by real world experience so we can operationalize the framework.

How will the measurement framework be developed?

Key Steps to Develop the Measurement Framework



Goals of Environmental Scan Report

Using the latest evidence:

- Identify key domains of interoperability (e.g. send, find, receive and integrate, and subsequent use) that can be system-generated/reported.
  - » Measures should be focused on use and not capabilities
  - » Technical requirements for developing such measures
- Identify key domains of interoperability to measure across populations and settings
- Identify Interoperability enabled processes or use cases and interoperability sensitive outcomes.
- Identify existing measures that related to the items above

Goals of Interviews

The interviews should supplement the environmental scan:

- Address similar goals as the environmental scan but from the interviewees' perspectives;
- Obtain critical insights and identify de novo measures in use but not published; and
- Identify key technical requirements and current realities to take into consideration in implementing the framework.

Measurement Framework

- Represents a synthesis of the environmental scan and interviews that addresses the goals that have been previously described
- Inventory of existing measures
  - » Alignment with Federal measurement and regulatory reporting requirements
- How to operationalize the measurement framework
  - » Identify viable data sources, data collection mechanisms
  - » Identify HIT infrastructure, standards and other technical elements required to implement measures.

How will the results of this project be used?

- The measurement framework will advance measurement of interoperability and the measurement of interoperability's impact on care processes and health-related outcomes.
- Ultimately, ONC plans to leverage this work to:
  - Identify and use more refined measures to assess progress related to interoperability;
  - Develop measures and identify data sources needed to measure the impacts of interoperability; and
  - Leverage existing measures to begin measuring the early impacts of interoperability.

Input from the Committee Members and the Public

- Thank you for participating—your input is critical!
- Please review the products keeping the goals and scope of this project in mind
- If you have suggestions related to interoperability measurement more broadly, or this project specifically please contact me.
  - » Vaishali Patel PhD MPH, vaishali.patel@hhs.gov

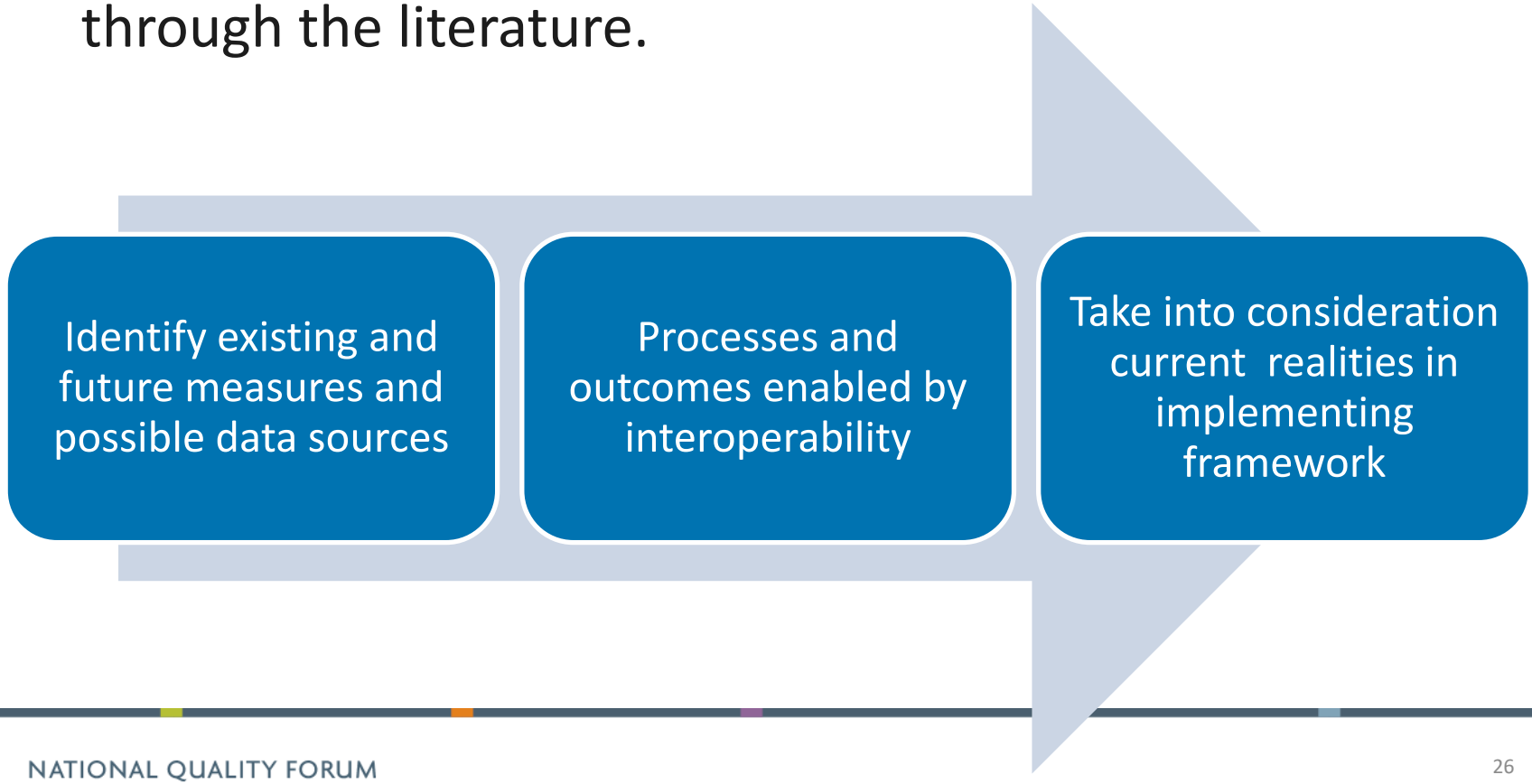
Key Informant Interviews Overview

Project Objectives

- Supplement the environmental scan (e.g. to identify existing measures and possible data sources, processes and outcomes enabled by interoperability)
- From interviewees perspective, identify key domains of interoperability (e.g. send, find, receive and integrate, and subsequent use) that can be system-generated/reported, key processes enabled by interoperability and potential outcomes sensitive to interoperability.
- This could help identify novel metrics that are being developed or in use. System-generated measures would not focus on capabilities but actual activity (e.g. send, receive, find, integrate). Thus, this would include probing on the application of data sources such as log-audit data; NQF-endorsed measures and measures from other sources, including claims data, review of measures from Federal Partners, health IT developers, HIOs and other entities that enable exchange.
- Assess and take into consideration current realities in implementing the framework (e.g. technical infrastructure) required for both system generated measures of interoperability as well as processes and outcomes enabled by interoperability

Key Informant Interview Overview

- To supplement the information and data found within the literature review, we conducted a series of key informant interviews to obtain information and details on interoperability measurement we could not obtain through the literature.



Key Informants Selection

- NQF collaborated with the Committee to develop selection criteria for potential interviewees which included:
  - *Familiarity with and experience in developing data exchange networks*
  - *Knowledge of interoperability needs of and among different users (e.g. providers, patients and family caregivers, EHRs, etc.)*
  - *Knowledge of technologies that support interoperability (e.g. encounter notification systems; master patient indexes)*
  - *Knowledge of processes and outcomes sensitive to interoperability*
  - *Use of system-generated data sources to generate measures of interoperability*
- Based on feedback from the Committee, NQF identified a list of candidates and contacted them to arrange a one-hour phone interview in early to mid January.

Key Informants

Payer	• Jeff Schiff, *Minnesota Medicaid Agency*
Health Information Exchanges	• David Kendrick, *MyHealthAccess*
Integrated Delivery Systems	• Ryan Smith, *Banner Health Systems* • Sid Thornton, *Intermountain Health Care*
HIE Vendor	• Brett Poirier, *Medicity*
EHR/HIE Vendor	• John Voith, *Athenahealth*
Informatics Organization	• Doug Fridsma, *American Medical Informatics Association (AMIA)*
Patient Advocacy	• Robert Cothren, *National Association from Trusted Exchange (NATE)*

Key Informants

- Topic #1: Measures of Interoperability Beyond the Health Care Continuum (1)
  - *Payer (1)*
- Topic #2: Interoperability Enabled Processes/Interoperability Sensitive Outcomes (3)
  - *Health Information Exchanges (1)*
  - *Integrated Delivery Systems (2)*
- Topic #3: System-Generated/Reported Data Sources for Interoperability Measures (1)
  - *HIE Vendor (1)*
- Topic #4: Existing Measures of Interoperability/Interoperability Sensitive Outcomes (3)
  - *EHR/HIE Vendor (1)*
  - *Informatics Organization (1)*
  - *Patient Advocacy (1)*

Interview Question Categories

Background (Work and Experience)

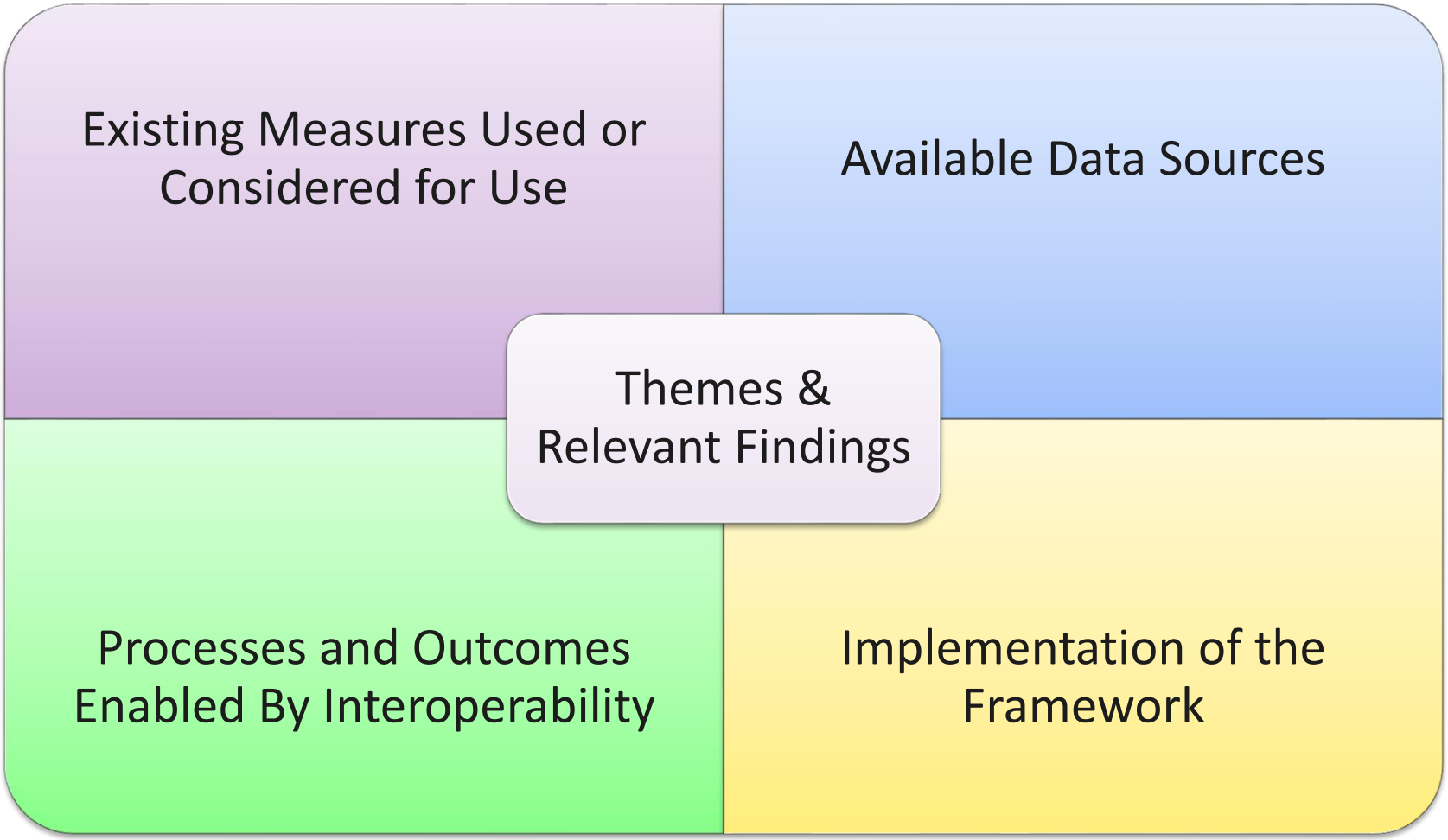
Experience Developing, Using, and Maintaining Interoperable Systems

Best Practice and Implementation in Interoperability

Conceptualization of Interoperability

Recommendations for the Framework

Themes and Relevant Findings Abstracted from Interviews



Major Themes and Relevant Findings in the Key Informant Interviews

Existing Measures Currently in Use

Core Domain of Interoperability	Care/Clinical Process Enabled by Interoperability	Outcome Sensitive to Interoperability
Electronically identifying birth outcomes from external sources	Neonatal Care	Identifying outcomes such as opiate-exposed babies to develop appropriate treatment protocols
Access to pharmacy claims data	Medication reconciliation	Ensuring patients are filling and complying with medication orders
Access to integrated clinical and non-clinical data streams	Identification of social determinants of health	Identifying rate of child protection for individuals whose parents have a history of chemical dependency
Electronically send and receive summary of care referral	Closed loop referral	Identification of eye exams given in a state to determine future treatment.

Measures Under Consideration for Use

Core Domain of Interoperability	Care/Clinical Process Enabled by Interoperability	Outcome Sensitive to Interoperability
Electronically sending and receiving information across providers	Care coordination and care transitions	Long-term care services and supports
Electronically querying data from integrated sources	Care Coordination	Identifying the providers patients with chronic disease are seeing for treatment.
Incorporating social risk factors	Chronic Disease Management	Incorporating social risk factors which is most predictive of clinical outcome and cost
Expand the focus of ambulatory sensitive conditions	Chronic Disease Management	Examining the relationships between two conditions, such as mental health and cardiovascular disease

Measures Under Consideration for Use (con't)

Core Domain of Interoperability	Care/Clinical Process Enabled by Interoperability	Outcome Sensitive to Interoperability
Electronically send and receive summaries of care	Closed Loop Referral	Reduction in hospital stays, reduction in readmissions, reduction in emergency department visits.

System-Generated Data Sources for Interoperability Measures

- Patient Centered Data Home- wherever the patient lives and irrespective of what vendors or type of data is in play, all of their health care data comes to rest in their local patient center data home
- A provider portal in which providers have access to a monthly claim stream on the patients who are attributed to their ACO.
  - *Provides data to determine if patients who are attributed to them are actually seeing them primarily or going to other ERs or whether or not they have the appropriate medication, etc.*
- One outbound admission/discharge/transfer (ADT) interface from an ACO registration system with standard data that is received from all participating physicians.
- A program is currently being launched for consumers to request electronic medical records from providers, whether they're delivered electronically or otherwise.

Processes and Outcomes Enabled by Interoperability

- Improvement in patient engagement as there is a greater ability to access comprehensive data.
- Greater efficiencies in care and cost because of reducing items such as duplicate or redundant tests and procedures.
- Identifying cost trends and utilization of services for patients with multiple chronic conditions.
- Identification of patients who are high utilizers of health services.
- There is significant value to measures reported at a population, community or a whole patient level
- Reduction in morbidity, chronic disease, and emergency department visits

Realities in Implementing the Framework

- Common data sets/standard of collaborative data
- Agreement on a prioritized set of use cases to improve quality
- Don't reinvent structures for data integrity, but look at other market sectors who solved this already
  - Collaboration between organizations
- Since interoperability will evolve over time, the framework needs to be fluid, transparent and responsive to changes in requirements and data needs.
- Reduce the value of measures reported from an EHR and a practice.
- Demonstrate what is not currently working with interoperability and how the framework can correct those problems.
- Tracking patient satisfaction in measures.

Potential Barriers to Interoperability Measurement

- Data/information not available (i.e. was outpatient follow-up done)
- Lack of incentives to build interoperable systems
- Unclear policy and legal governance
- Lack of vocabulary and terminology standards
- Multiple data streams with limited ways to integrate them
- Lack of data transport and receiving data/accessibility by others (i.e. DIRECT)
- Lack of sharing of basic levels of data (i.e. registries)
- Patient identification (100% credibility that right patient record has been accessed)
- Data collection (i.e. physicians not entering data into systems right way)

Recommendations for the Framework

- Developing Measures to Assess and Address Gaps In Interoperability
  - Identify core domains of interoperability and align outcomes and/or process measures for them
  - Identify measure gaps and create measures that people will then built systems toward
  - Develop measures that includes community-reconciled data prior to visit (i.e., use cases such as all of the pregnancies in a community, all neonates, end-of-life, etc.)
  - Base future process measures on completeness of record and timeliness of its availability.
  - Create test environment to validate interoperability-sensitive measures and the data sources the information comes from.
  - Prioritize measures that will have most impact on clinical quality, patient experience, and reduced costs.

Recommendations for the Framework (cont.)

- Sustainability of the Framework
  - Input from professional organizations and patient advocacy organizations
    - » People can trust what's going on and that their data is being used appropriately (governance)
  - Stakeholder buy-in to the framework
    - » Need enough data and evidence (evidence on better outcomes and reduced costs)
    - » Needs to be a national standard developed by government or government requiring it (i.e. MACRA, Meaningful Use)
  - Should focus less on access and data, and more on utility and performance.

Questions/Comment?

Next Steps

Next Steps for Interoperability Project

- NQF member and public comment on Draft Environmental Scan Report
  - *January 31-February 13, 2017*
- Committee Web Meeting #4: Review Comments and Initiate Next Set of Activities
  - *February 28, 2017 1-3 PM ET*
- In-Person Meeting
  - *March 21-22, 2017 at National Quality Forum, Washington DC*

Public Comment

Project Contact Info

- Email: interoperability@qualityforum.org
- NQF Phone: 202-783-1300
- Project page:

http://www.qualityforum.org/ProjectDescription.aspx?projectID=83283

- Share Point:

http://share.qualityforum.org/Projects/Interoperability/SitePages/Home.aspx27

Thank you.