The Helios FHIR Accelerator for Public Health: Vision and Progress

April 26, 2022
Craig Newman

HELIOS

HELIOS OVERVIEW

Helping public health to align with and benefit from widespread standardization and transformation that are happening around digital health data.

01 Multi-Sector Alliance

Diverse teams—across public health, healthcare, philanthropic organizations, and the private sector—work together to tackle longstanding challenges and explore new opportunities to advance interoperability.

02 Official HL7 FHIR Accelerator

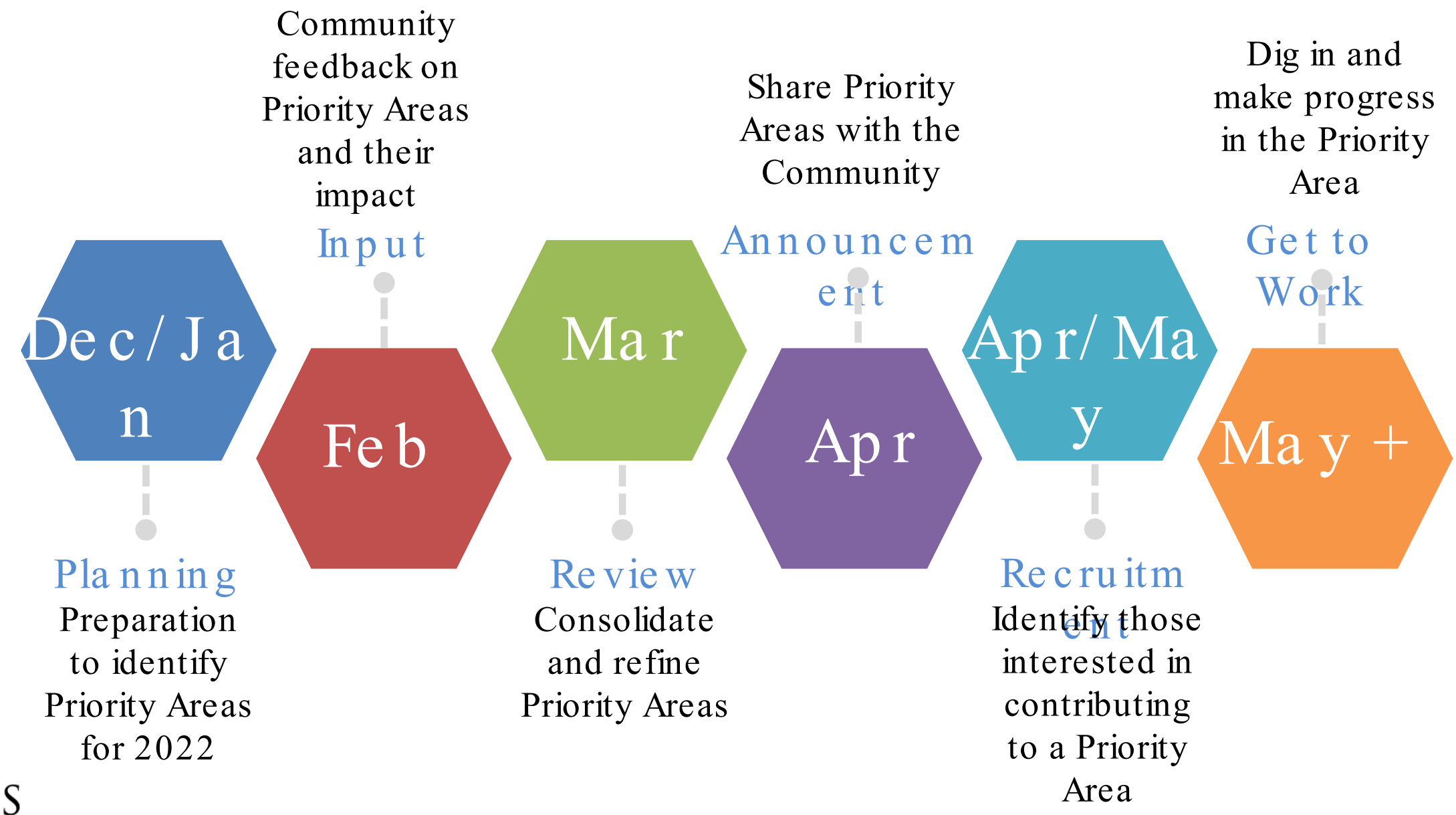
Align with and address known gaps in the FHIR standard to help promote more flexible and effective data exchanges with healthcare, the public, and other sectors beyond public health.

03 Focused on Impact

Prioritize a small set of use cases that complement what exists today and make it easier for public health officials to act swiftly, share insights effectively, and have a greater impact in their communities.

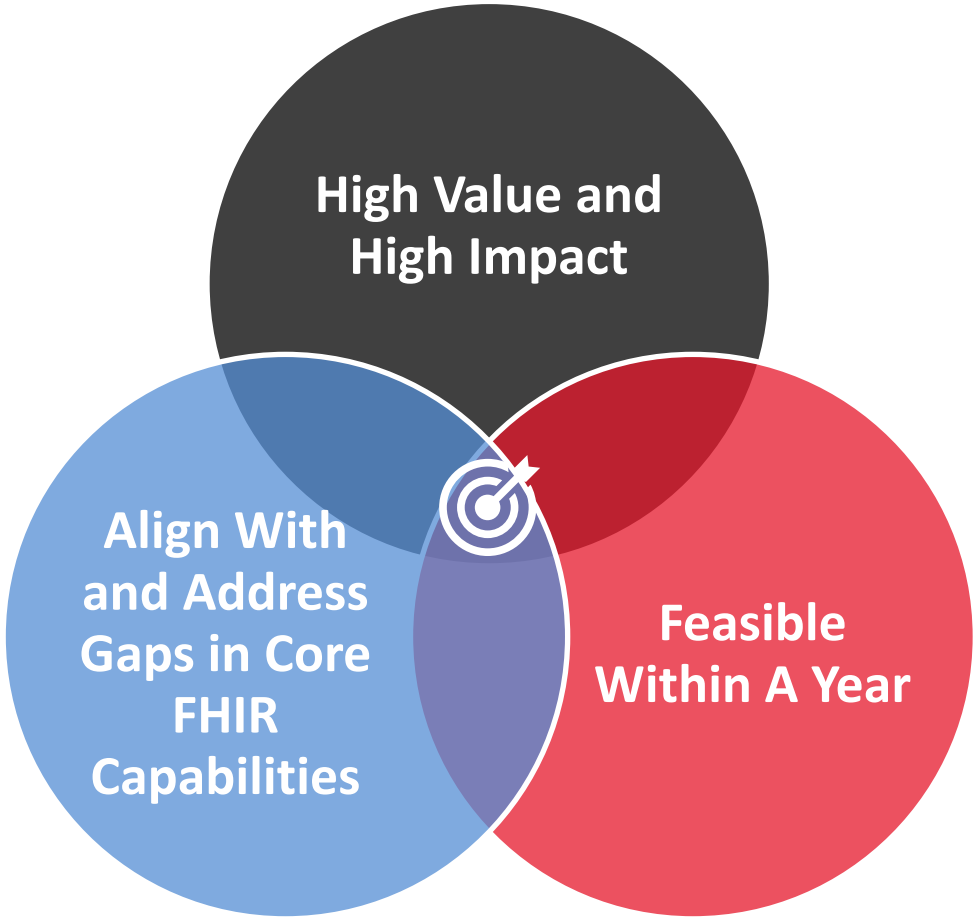
HELIOS

Progress to Date



HELIOS

Criteria to Help Prioritize, Scope, and Select Use Cases



Desirability: Serves an immediate and pressing public health need.

Feasibility: Initial scope can be accomplished within a year.

Compatibility: Prioritize and address deviations in public health implementations of FHIR.

HELIOS

Priority Areas for 2022

Make Data in Public Health Systems Accessible in Bulk

Align and Optimize Public Health Data Sharing

Deliver Aggregate Information to Public Health

HELIOS

Make Data in Public Health Systems Accessible in Bulk

Summary

How might we make data stored in public health information systems, such as IIS, more accessible to authorized "B2B" users beyond public health (e.g., State Medicaid programs, healthcare partners, private insurers, etc.)?

HELIOS

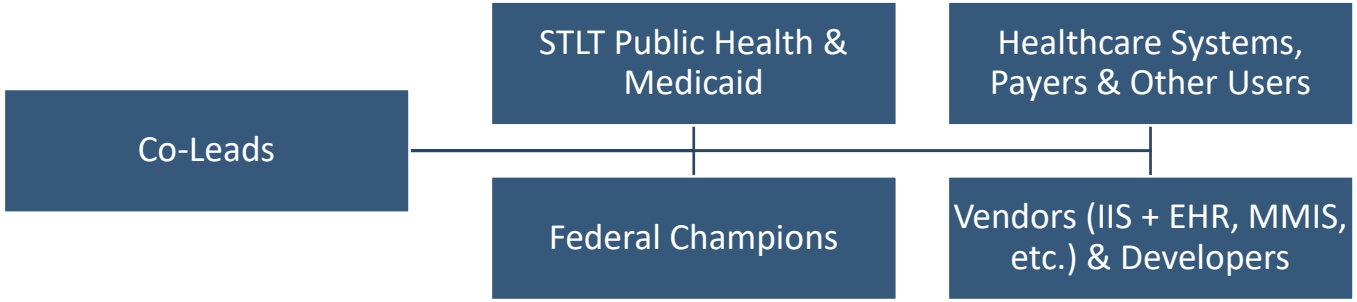
Public Health Goals That Could Be Achieved

- Ensure authorized "B2B" users of IIS data can access information (in bulk) on immunizations to help address gaps in care (or prevent redundancies) while lowering burden on state public health agencies.
- Help health providers and payers to proactively support their patient populations.
- Lower burden on state public health agencies and on data requestors.

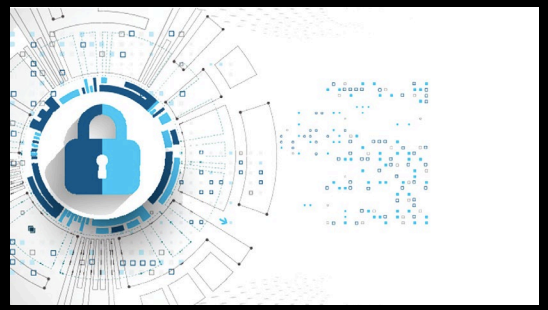
How Helios Members Will Engage

- Create a uniform process for querying immunization data in IIS, leveraging BulkFHIR
- Develop implementation guidance and open-source code samples
- Engage "early adopters" as pilots to "work out the kinks" and develop a "readymade" standard, so that the rest of the community can come on as they're able

Initial Project Team Composition



Align and Optimize Public Health Data Sharing



Summary

How might public health access and exchange patient-level data more efficiently and effectively using FHIR to deliver the greatest net benefit overall?

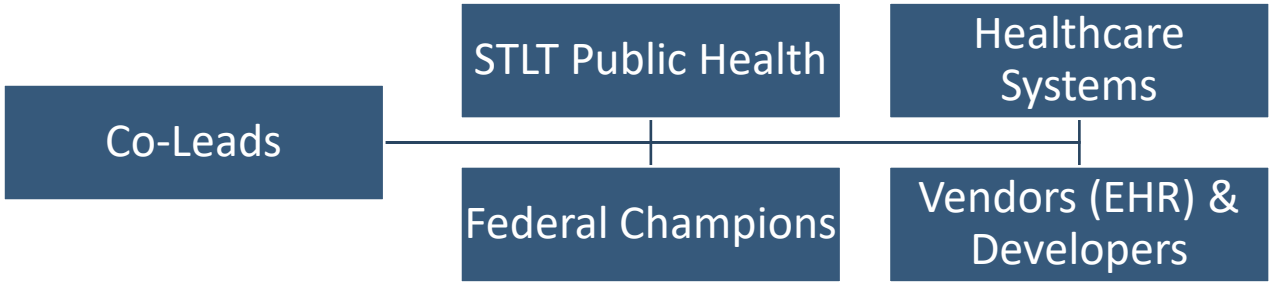
Public Health Goals That Could Be Achieved

- Lay the groundwork to help provide more complete and up to date data to public health that would not be available easily under existing data channels
- Provide access (via push or pull as appropriate) to specific information needed to take public health action (for example, information needed to help understand the severity of illness and examine risk factors for severe disease across a population) as authorized and agreed upon

How Helios Members Will Engage

- Identify common requirements and assess various FHIR-based paradigms for accessing and exchanging patient-level data in EHRs.
- Identify building blocks and opportunities for collaboration and accelerated development with industry.
- Demonstrate ways through which FHIR can help support public health action and improve the quality and consistency of public health data shared nationwide while saving time, money, and effort
- Inform a strategic roadmap to help align and advance public health adoption of FHIR moving forward.

Initial Project Team Composition



HELIOS

Deliver Aggregate Information to Public Health

Summary

What can we do to lessen the strain on health care and public health during times when both systems are most taxed (and configure the solution in a way so that it can also be used during "normal" operations)?

HELIOS

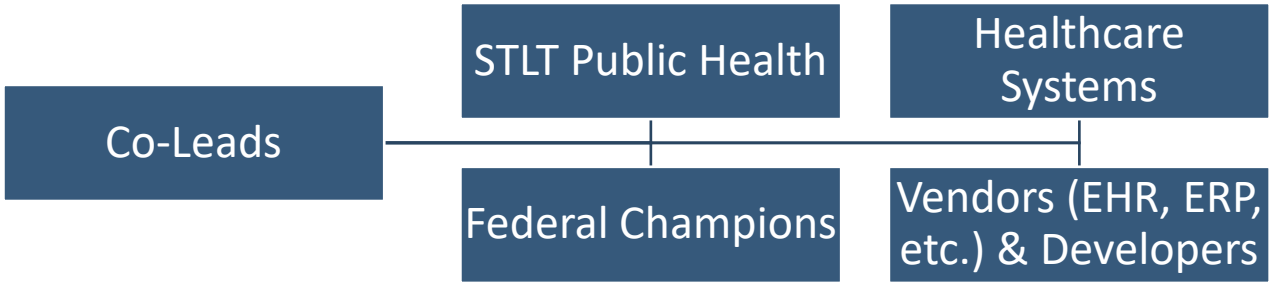
Public Health Goals That Could Be Achieved

- Provide mission-critical aggregate information (e.g., bed count, supply inventory) to public health during pandemics, natural disasters, and other preparedness events
- Use the same "building blocks" for aggregating information to help improve ongoing situational awareness and surveillance of non-reportable diseases, chronic conditions, birth defects, environmental health, and injuries during "normal" operations

How Helios Members will Engage

- Focus on one or two measures and demonstrate ways FHIR can help deliver mission-critical capacity information to public health partners on the front lines both during emergencies and routine operations.
- Align measures and terminology to the conventions that others are adopting via FHIR as a "north star" to help reduce (and mitigate the burden of) jurisdictional variation
- Identify opportunities to replace Excel spreadsheets and other manual forms of data capture with FHIR building blocks that can be used to address a wide range of public health preparedness and data aggregation needs

Initial Project Team Composition



Project Teams and Operating Committee

- Project Teams
  - One Project Team per Priority Area
  - Responsible for fulfilling the Priority Area objectives and deliverables
  - Made up of members with the skill sets necessary to carry out the work (including technical application of FHIR, workflows, data content, etc. related to the specific Priority Area)
- Operating Committee
  - Responsible for the ongoing activities being performed by the Accelerator and acts as a forum for discussion of issues and reaching understanding
  - Made up of member organizations who are actively contributing resources to Project Teams

HELIOS

Priority Area Next Steps

- The Project Team champions are working to discuss, refine and approve the goals and deliverables for their Priority Area
  - Scope
  - Schedule
  - Building Blocks
- The Operating Committee helps ensure that goals and deliverables are scoped appropriately and are aligned across Priority Areas

HELIOS

Contributing to the Priority Areas

- No membership fee for the first round of project work
  - In-kind resource support for developing and piloting Priority Areas
- All interested groups are encouraged to participate in one or more of the areas
  - Make Data in Public Health Systems Accessible in Bulk
  - Align and Optimize Public Health Data Sharing
  - Deliver Aggregate Information to Public Health
- To join a Project Team, contact us at helios@hl7.org
- Please help us to spread the word!

HELIOS