eHEALTH INITIATIVE

Real Solutions, Better Health

eHI Blueprint: Building Consensus for Common Action

IMPROVING POPULATION HEALTH

Agenda

- **Introduction to Improving Population Health**
  - Our Shared Vision
  - What is Population Health?
  - Vision for Improving Population Health
  - Principles for Improving Population Health
  - Overview of Strategies & Actions
  - Discussion/Questions and Answers
    - J. Marc Overhage, MD, PhD, Indiana Health Information Exchange and Martin LaVenture, PhD, MPH, Director, Center for Health Informatics, Minnesota Department of Public Health

- **From Consensus to Common Action: What You Can Do**
  - Discussion
    - J. Marc Overhage, MD, PhD, Indiana Health Information Exchange and Martin LaVenture, PhD, MPH, Director, Center for Health Informatics, Minnesota Department of Public Health

Agenda (cont.)

- **Example Practices in Improving Population Health**
  - Roland Gamache, PhD, Indiana's Public Health Emergency Surveillance System (PHESS) a program of the Indiana State Department of Health
  - Robert C. Calway, Vice President, Clinical and Center Operations, Joslin Clinic

- **Wrap Up – Next Steps**
  - J. Marc Overhage, MD, PhD, Indiana Health Information Exchange and Martin LaVenture, PhD, MPH, Director, Center for Health Informatics, Minnesota Department of Public Health

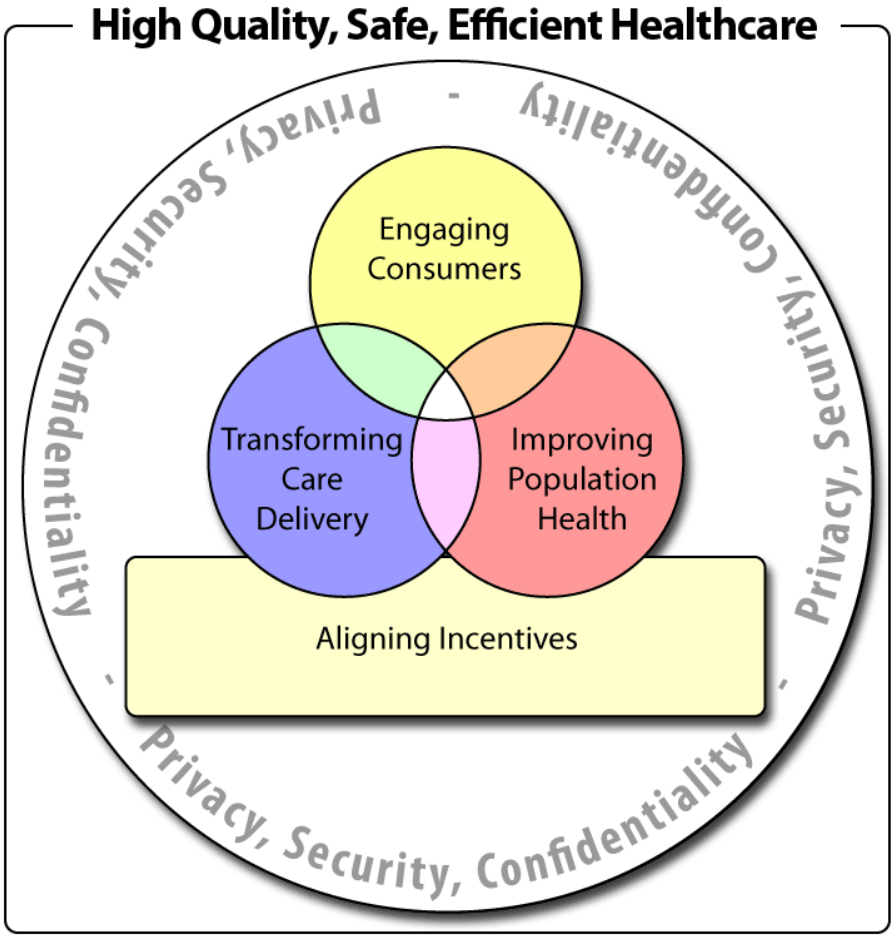
Our Shared Vision

We envision a high-performing healthcare system, where all those engaged in the care of the patient are linked together in secure and interoperable environments, and where the decentralized flow of clinical health information directly enables the most comprehensive, patient-centered, safe, efficient, effective, timely and equitable delivery of care where and when it is needed most – at the point of care. [1]

In our vision, financial and other incentives are aligned to directly support and accelerate all of the key elements of transformation -- engaging consumers, transforming care delivery at the point of care, and improving population health -- in a secure, private, and trusted environment.

[1] Institute of Medicine. Committee for Quality in Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press; 2001.

Our Shared Vision



What is Population Health?

- **Broadly: "What we as a society do collectively to assure the conditions in which people can be healthy."[1]**
- **The Blueprint focuses on one aspect of improving population health directly linked to health IT and information exchange:**
  - leveraging electronic clinical data to support improving health at the population level.
- **Public health interventions, disease management, quality improvement, provider performance measurement, epidemiologic surveillance, research, and more.**

[1] Institute of Medicine, "The Future of the Public's Health in the 21st Century." 1988.

Our Shared Vision

Vision for Improving Population Health:

- Electronic healthcare data and secure health information exchange are utilized to facilitate the flow of reliable health information among population health and clinical care systems to improve the health status of populations as a whole. Information is utilized to enhance healthcare experiences for individuals, eliminate health disparities, expand knowledge about effective improvements in care delivery and access, support public health surveillance, and assist researchers in developing evidence-based advances in areas such as diagnostic testing, illness and injury treatment, and disease prevention.

Principles:

1. The Use of Electronic Clinical Data is Beneficial and Necessary to Improve Population Health
2. Everyone Who Use Clinical Data for Population Health Purposes Should Abide by a Common Set of Principles and Policies
3. Those Who Use Clinical Data for Population Health Purposes Should be Transparent About Their Principles, Policies and Practices

Principles: (cont.)

4. Healthcare Organizations Should Support the Use of a Common Set of Data Derived Directly From Care Delivery Processes for Multiple Purposes
5. Financial or Other Incentives Will be Required to Accelerate the Use of Clinical Data for Population Health Purposes

Strategies and Selected Actions

- **Strategies and Actions fall into 4 Categories:**

  1. **Policies for Data Use**
  2. **Building Supports for Widespread Implementation**
  3. **Building the Evidence for Widespread Implementation**
  4. **Creating Forums for Sharing and Learning**

Strategies and Selected Actions

Policies for Data Use

1) Clearly characterize, explain and raise awareness of the current laws, rules and regulations governing the use of clinical data for population health purposes.

Selected Action:

- 1.1 Leveraging the work of many organizations, … an NGO, in partnership with all healthcare stakeholders, should develop a clear and concise catalog of current federal and state laws, rules, and regulations governing the use of electronic clinical data for non-care delivery purposes, including, for example, awareness of a patient's right to opt out of HIE. The catalog, to the extent possible, should be converted into a summary guide, with references, that non-lawyers can understand, to assist healthcare stakeholders in effectively complying with such laws, rules and regulations. (2007-2008)

Strategies and Selected Actions

2) Gain multi-stakeholder consensus on and widely disseminate a common set of principles and policies for use of clinical data for population health purposes.

Selected Action:

- 2.1 Leveraging the work of many organizations, including but not limited to AHIC, AMIA, AQA, Connecting for Health, eHI, NCVHS, WEDI, and others, an NGO should launch an open, transparent process involving every stakeholder of healthcare, from both the public and private sectors, which creates a set of common principles and policies for the use of electronic clinical data derived from the care delivery process for population health purposes.

Strategies and Selected Actions

3) Develop and widely disseminate tools, resources and guides to support healthcare organizations' use of the common set of principles and policies

Selected Action:

- 3.1 NGOs, provider organizations, public health, researchers, pharmaceutical organizations and other organizations with expertise in using clinical data for population health should develop tools, resources, and guides to support the implementation of the principles and policies for use of clinical data for population health by those organizations engaged in the use of clinical data for population health purposes, including but not limited to standard data use agreements, disclosure statements, public policies, etc. (2008-2010)

Strategies and Selected Actions

4) Define and prioritize a set of common data elements that are needed for multiple priority population health uses.

Selected Action:

- 4.1 … an NGO or a federal agency should convene groups who represent the various interests of population health improvement (performance measurement, quality improvement, public health, research, etc.) and develop a "crosswalk" of the data elements needed for priority processes within each population health domain. Common data elements across population health domains (e.g. laboratory test results) should be identified and compiled to assisting with priority-setting for systems implementation, workflow changes, standards needed, and alternative business models for a "one source: multiple use" approach. (2008-2010)

Strategies and Selected Actions

5) Document and widely disseminate the benefits and risks of using clinical data for population health purposes, using language that "data sources" such as consumers, clinicians, hospitals and other providers, and laboratories as well as "data users" such as employers, health plans, researchers, and public health agencies, understand.

Selected Action:

- 5.1 Recognizing that many consumers and healthcare organizations do not fully understand the potential benefits of the use of clinical data for population health purposes, a federal agency, research organization, NGO or group of NGOs should document, with references to the evidence, the benefits and risks of using clinical data for population health purposes, in language that is easily understandable by the public. (2008)

Strategies and Selected Actions

6) Define the "users" of data elements for population health uses with sufficient granularity to lay the foundation for changes that will dramatically increase the demand for such data for population health purposes.

Selected Action:

- 6.1 An NGO or group of NGOs should conduct research and engage the necessary organizations to define, for each common data element, the sources and the users of such data, the specific purposes for use, the costs of current data collection processes, and the gaps in their current methods of data collection. (2008)

Strategies and Selected Actions

7) Define where the common data elements currently reside with sufficient granularity to lay the foundation for driving changes that will dramatically increase the availability of such data for population health purposes.

Selected Action:

- 7.1 An entity, which may be a research organization or an NGO, or some other organization with expertise, should conduct research and engage the necessary organizations to define, for each common data element, where it originates (e.g. the general source of the data), its storage method (electronic or not electronic), and a break-down of the different types of sources and their locations (e.g. national laboratories versus local independent laboratories versus hospital laboratories, versus laboratory tests performed in physician offices). (2008)

Strategies and Selected Actions

Building Supports for Widespread Implementation

8) Define the systems, filtering rules, workflow changes and functionalities needed to support electronic capture of, transmission of and access to the common data elements.

Selected Action:

- 8.1 For each of the common data elements identified in #4, and utilizing the data collected in #6 and #7, an NGO should identify the systems needed and workflow and process barriers to electronic data capture and data availability, as well as data access and develop strategies to overcome those barriers. (2009)

Strategies and Selected Actions

9) Develop a set of alternative business models that will support the costs of making the data available and access to such data from population health data users.

Selected Actions:

- 9.1 For each of the common data elements, the uses and users of such elements, an NGO should assess, quantify and effectively articulate the value of the data, targeting each population health segment of users (e.g. performance measurement, quality improvement, public health, research, etc.). (2008)

- 9.2. For each population health segment of users or "customers" an NGO or group of NGOs should … develop a set of detailed business models alternatives to support data capture, data availability and data access. (2008)

Strategies and Selected Actions

10) Define common standards for representing such common data elements.

Selected Action:

- 10.1 For each of the common data elements, and leveraging the work of HITSP, CCHIT, HL7 and the other SDOs, IHE, the Collaborative for Performance Measurement Integration and other groups, an NGO or other organization should "crosswalk" the common data elements to the standards that have been harmonized or agreed upon by such recognized parties, and catalog such standards in an easy to understand format. (2008)

Strategies and Selected Actions

11) Develop and widely disseminate tools, resources and guides to support healthcare organizations who serve as "data sources", addressing the common data elements, required systems, workflow and process changes, policies for data sharing, legal and regulatory considerations, and business models to support data capture, data availability, and data access.

Selected Action:

- 11.1 An organization or NGO should clearly and effectively document, in an easy to understand format, the common data elements, the value of those elements, required systems, required work-flow and process changes, policies for data sharing, legal and regulatory considerations, and business models. The resulting "guide" should contain the steps that each "actor" in the process (including those representing both data sources and data users) should take to effectively support population health purposes in an incremental, coordinated fashion. (2009)

Strategies and Selected Actions

12) Develop and implement drivers that will rapidly accelerate the capture, availability and use of the prioritized common data elements.

Selected Action:

- 12.1 An NGO, or group of NGOs, working with those who have great interest in the use of data for population health, should identify vehicles and mechanisms that would support and drive the capture, availability and use of clinical data for population health purposes. (2008)

Building the Evidence for Widespread Implementation

13) Conduct "learning laboratories" to test and evaluate the "supports" identified above, in several markets.

Selected Action:

- 13.1 An NGO or federal agency should create a set of learning laboratories that test and evaluate the use of clinical data for priority use cases identified by those involved in performance measurement and quality improvement, public health, safety surveillance, and research. Results should be published and placed in the public domain to accelerate further implementation in the field. (2008-2010)

Strategies and Selected Actions

14) Conduct research to gather evidence of natural experiments already using clinical data for a variety of use cases.

Selected Action:

- 14.1 An NGO or Federal Agency should gather learning from "natural experiments" in the field to identify what's working, what's not working, to inform both policies and practices in the field, in support of improving population heatlh through activiies like disease management, performance measurement, research and more. (2008-ongoing)

Strategies and Selected Actions

Create Forums for Data Sharing and Learning

15) Create a forum or set of forums for sharing of learning and best practices to support success in the field.

Selected Action:

- 15.1 An NGO, or group of NGOs, should create forums for sharing learning and best practices to support success in the field. (2009-ongoing)

Areas Without Consensus

- **Policies for information sharing -**
  - Consent related to data sharing for population health purposes
    - Both for identified and de-identified data
  - Level of granular control over data sharing
  - Consent processes
- **Lack of understanding of what is de-identified data? Re-identified data?**
- **Policies for who can profit from data – not explored here**

Questions and Answers

- **First Impressions?**
- **Feedback and Overall Reaction to the Improving Population Health Section**
  - Principles
  - Strategies
  - Actions
- **What do you think will work? What won't?**
- **Any gaps or non-starters?**
- **Reaction to non-consensus issues?**

Wrap-Up: Next Steps

- **How can you help turn consensus into common action?**
- **Phase II: The Blueprint is designed so that stakeholders can build elements into their work plans and agendas in the coming years**
  - This process will tell us what is actionable
  - The Blueprint is a living document – as you consider incorporating elements, please provide feedback to eHI

Example Practices

–Roland Gamache, PhD, Indiana's Public Health Emergency Surveillance System (PHESS) a program of the Indiana State Department of Health

–Robert C. Calway, Vice President, Clinical and Center Operations, Joslin Clinic

Example Practices- Discussion

- **Based on practical experience:**

1. **What are the most challenging aspects of the strategies and actions identified in the Blueprint?**
2. **What are the most important next action steps?**
3. **Are there any gaps?**