

# Indiana Health Information Exchange Beacon Community Forum

All diagrams and charts are courtesy the  
IHIE Beacon Community site:

<http://www.ihie.org/Beacon-Community/default.php>

# Takeaway Messages

- Workflow and EHR adoption are critical
- Leverage each interface and movement of data to fullest, appropriate/approved reuse of data adds value
- There is no magic bullet to interface development
- Have multiple use cases defined, with stakeholders ready, once data silos thaw
- Need to engage broad definition of communities
- Some use cases will require “repository” structures

# IHIE Beacon Scope

- Decrease Ambulatory Care Sensitive Conditions (ACSC)
- Improve diabetes control (HgA1c and LDL) monitoring
- Improve population health screening levels, immunization reporting
- Support Meaningful Use

# IHIE Beacon Tools

## ➤ HL7 Interfaces

- “Traditional HL7”, 80% data from ambulatory, 20% from hospitals

- Increasing EMR for MU – Increasing value of data to HIE

## ➤ Transported using

- Clinical Document Architecture

  - Continuity of Care Document (CCD), or Record (CCR)


- Direct, as this advances (Reference WI SOP Phase I)

- “No standard is a panacea”

# IHIE – Leverage Movement of Data



Indiana Health Information Exchange

Enriched by  Regenstrief Medical Informatics

## SERVICES OVERVIEW

*Secure Data Delivery*

**One Feed, Four Services.**



### **Indiana State Department of Health**

- PIHSS
- PHSS 2
- Immunization (future)

### **Clinical Repository**

Medical Records  
Available Community Wide

- Emergency Departments
- Inpatient
- Outpatient

### **QHF Program**

Chronic Disease Management  
Program

- Multi-payer Participation
- Reporting – PQRI, MU

### **Clinical Messaging**

Securely deliver information  
how, when and where it  
needs to be.

- Increased Efficiency
- 24/7/365 Help Desk

# Sustainability

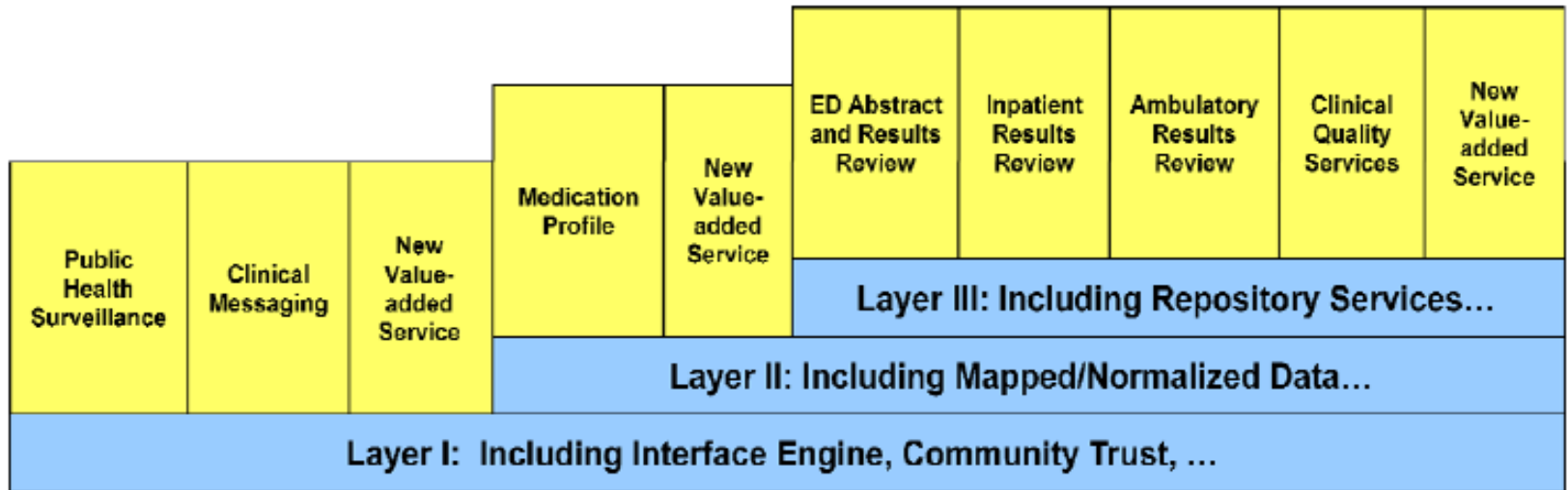
## The Peanut Butter Principle

	Problem to Solve	Solution	Byproduct Issue	Secondary Solution	Outcome
George Washington Carver (early 1900's)	Soil depleted by Cotton	Plant Peanuts to replenish lost nutrients in the soil	What to do with all the peanuts?	Make and sell products that use peanuts, e.g.: <ul style="list-style-type: none"> <li>• Peanut butter</li> <li>• Peanut oil</li> </ul>	Sustain the southern economy  (Keep growing cotton)
Health Information Exchange (2010)	Rising cost of healthcare  Need to improve healthcare quality and safety	Build HIE infrastructure (and use it to address the problems)	How does society (or a given community) pay for HIE?  i.e. financially sustain it	Offer/sell services that use (and reuse) the HIE infrastructure, e.g.: <ul style="list-style-type: none"> <li>• Electronic Results delivery</li> <li>• Clinical Quality Services</li> <li>• Medication profile</li> </ul>	<b>Make positive contributions to health and healthcare</b>

# Sustainability

## The Leveraging of High-cost, High-value Assets

HIE assets are interdependent and, once created, can be leveraged to deliver additional services.



A layer of necessary investment

Value-added services that can be built upon the HIE investment

National Beacon Objectives →	Measured Outcomes									
	Quality		Cost			Population Health			M.U.	
Indiana Beacon Objectives →	(1) Diabetes Control		(2) ACSC Admissions Improvement			(3) ↓ Imaging	(4) Increase Preventative Screening			(5) M.U.
	↓ diabetic HbA1c levels	↓ diabetic LDL levels	↓ ACSC Admissions	↓ ACSC Re-admissions	↓ ACSC-related ED visits	↓ redundant Imaging	↑ Colorectal Cancer Screening	↑ Cervical Cancer Screening	↑ Adult Immunization Data Available	↑ Achievement in Meaningful Use

Indiana Beacon Objective Sub-Projects	QHF Focus	(1A) Collect more clinical data	S	S	S	S	S	D	S	S		D
		(1B) Capture more POC data	S	S	S	S	S		S	S	D	D
		(2A) Incorporate affordability measures into QHF (utilization reporting)			D	D	D	D				
		(2B) Incorporate REL data	D	D	S	S	S		D	D		S
		(2C) Public Reporting	D	D					D	D		
		(3A) Enroll more providers	D	D	D	D	D	D	D	D		
		(3B) ↑ payor participation	D	D	D	D	D	D	D	D		
	Individual Interventions	(4A) Analytic support for care improvement	S	S	S	S	S	S	S	S		
		(4B) Medication adherence reporting	D	D	D	D	D					
		(4C) Value based benefit design	P	P	P	P	P	P	P	P		
		(4D) Real-time payor/provider notifications			D	D	S					
		(4E) Home monitoring for CHF & COPD				D	D					
		(4F) Coordination of care	D	D	D	D	D					
		(4G) ↑ PCP's achieving MU	D	D	D	D	D	D	D	D		D

D = Direct Impact    S = Supporting Impact    P = Potential Impact



# Indiana Beacon Metrics

Outcome	Measurement
Improved HgA1c levels	↑ By 10% the proportion of participants whose levels are <9%
Improved Diabetic LDL-C levels	↑ By 10% the proportion of patients who are controlled
Decrease ACSC Admissions	↓ by 3%
Decrease ACSC Re-Admissions	↓ By 10%
Decrease ACSC related ED visits	↓ By 3%
Reduce inappropriate imaging	↓ By 10%
Increase colorectal cancer screenings	↑ By 5% proportion of patients screened
Increase cervical cancer screenings	↑ By 5% proportion of patients screened
Increase availability of adult immunization data	↑ By 5%
Meaningful Use	Achieve EHR adoption & M.U. among at least 60% of PCP's