

The IC3 Beacon Data Conundrum

Kimberly Mueller, MSPH



This material was prepared by *HealthInsight* as part of our work as the Beacon Community, under Cooperative Agreement #90BC00006 from the Office of the National Coordinator, Department of Health and Human Services.

Improving care • connectivity • collaboration

Disclosures



I have no financial relationships to disclose.

Improving care • connectivity • collaboration

Objectives



- Understand the past and current environment of healthcare data (with a focus on Utah Beacon)
- Understand the potential for healthcare data and information to transform how healthcare is delivered (including your healthcare!)

Improving care • connectivity • collaboration

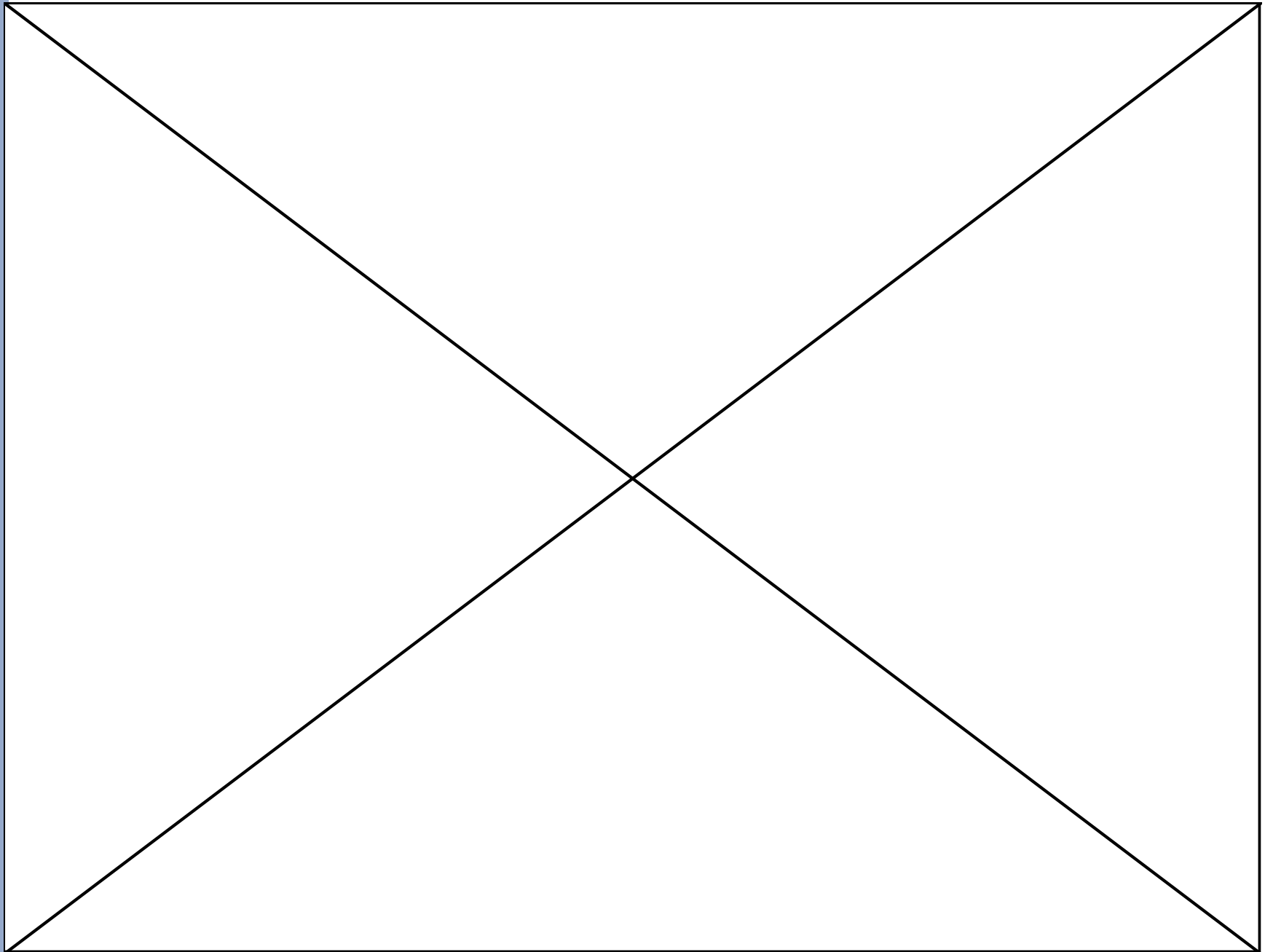
First, a poll....



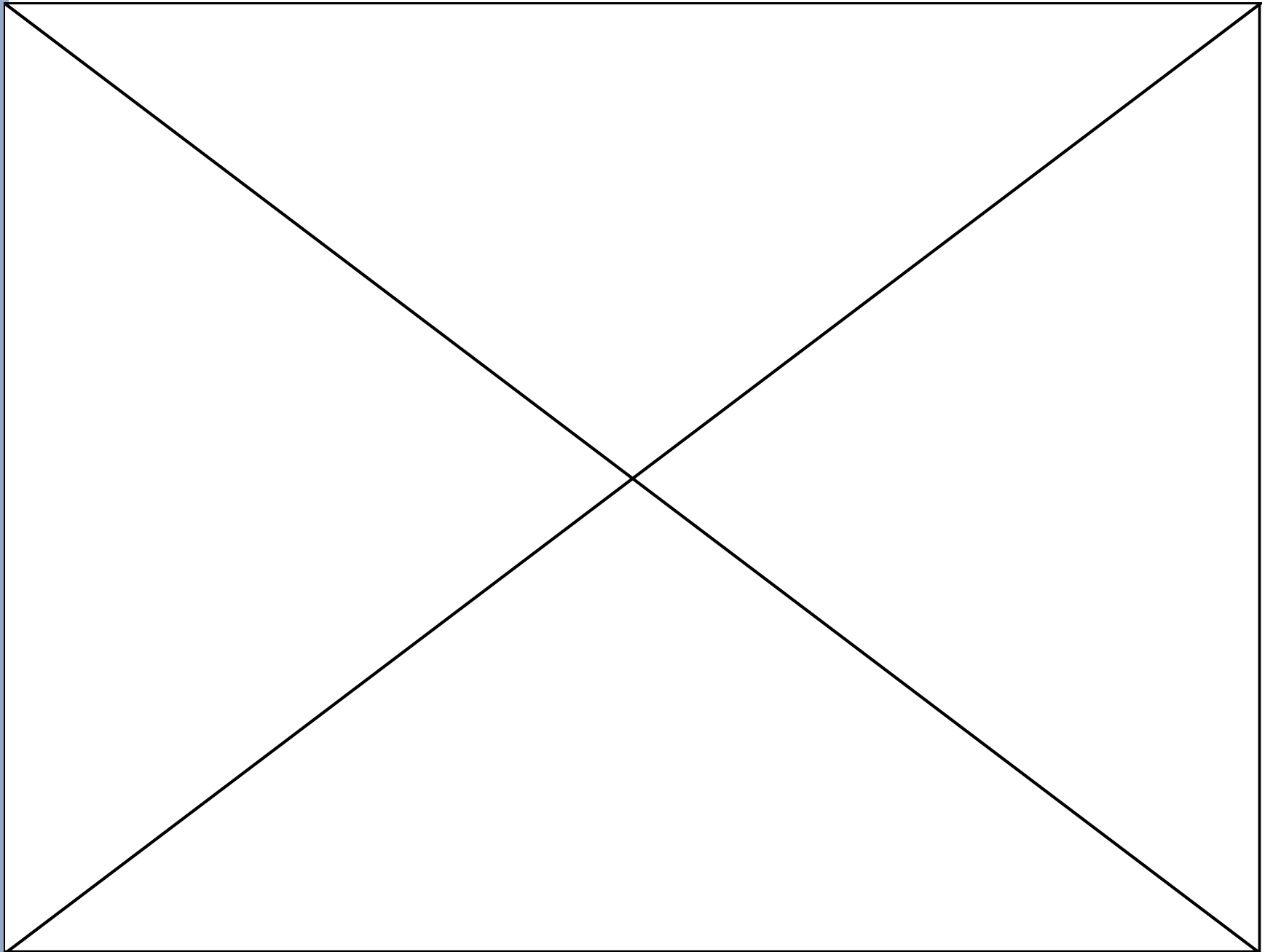
We will be using technology to gather your responses, please get your cell phones ready!

- How many of you see a doctor in an outpatient setting who has an electronic health record? (yes/no/not sure)
- How important to you is an electronic health record as part of your health management? (very/somewhat/not at all)

Improving care • connectivity • collaboration



Improving care • connectivity • collaboration



Improving care • connectivity • collaboration

What is HealthInsight?



- Medicare Quality Improvement Organization (UT, NV, NM)
- Agency for Healthcare Research and Quality Chartered Value Exchange (UT, NV)
- Robert Wood Johnson Foundation Aligning Forces for Quality (NM)
- Community Health Information Exchange (NV)
- Health Information Technology Regional Extension Center (UT, NV; NM subcontractor)
- Medicaid External Review Organization (NM)
- Utah Beacon Community Program

Improving care • connectivity • collaboration

Conundrum



- A puzzling question or problem
- How do we turn health care data into information?

Improving care • connectivity • collaboration

Data and Information



- How do other industries use information?
- Healthcare lags behind
 - Providers are data driven
 - Health IT improves care

Improving care • connectivity • collaboration

Data, data everywhere, nor any drop to drink?



- Moving from data management to data leadership

Improving care • connectivity • collaboration

Big Data



- What is the promise of Big Data (and what is Big Data anyway?)
 - Trends or patterns in massive amounts of data
 - Business intelligence
 - Health-related epidemiological surveillance

Improving care • connectivity • collaboration

Definitions



- HIE
- EHR
- PHR
- ONC
- MU
- APCD

Improving care • connectivity • collaboration

Business Intelligence



- Enthusiasm in healthcare often precedes the sufficient development of infrastructure
 - Silos
 - Interoperability
 - Privacy and security concerns

Improving care • connectivity • collaboration

Beacon, as an example



- What is Beacon (in general)?
 - Building HIT infrastructure
 - Investments in HIT
 - Innovative approaches
- What is IC3 Beacon?
 - Improving diabetes care
 - Lots of other partners and work

Improving care • connectivity • collaboration

What are our main data needs?

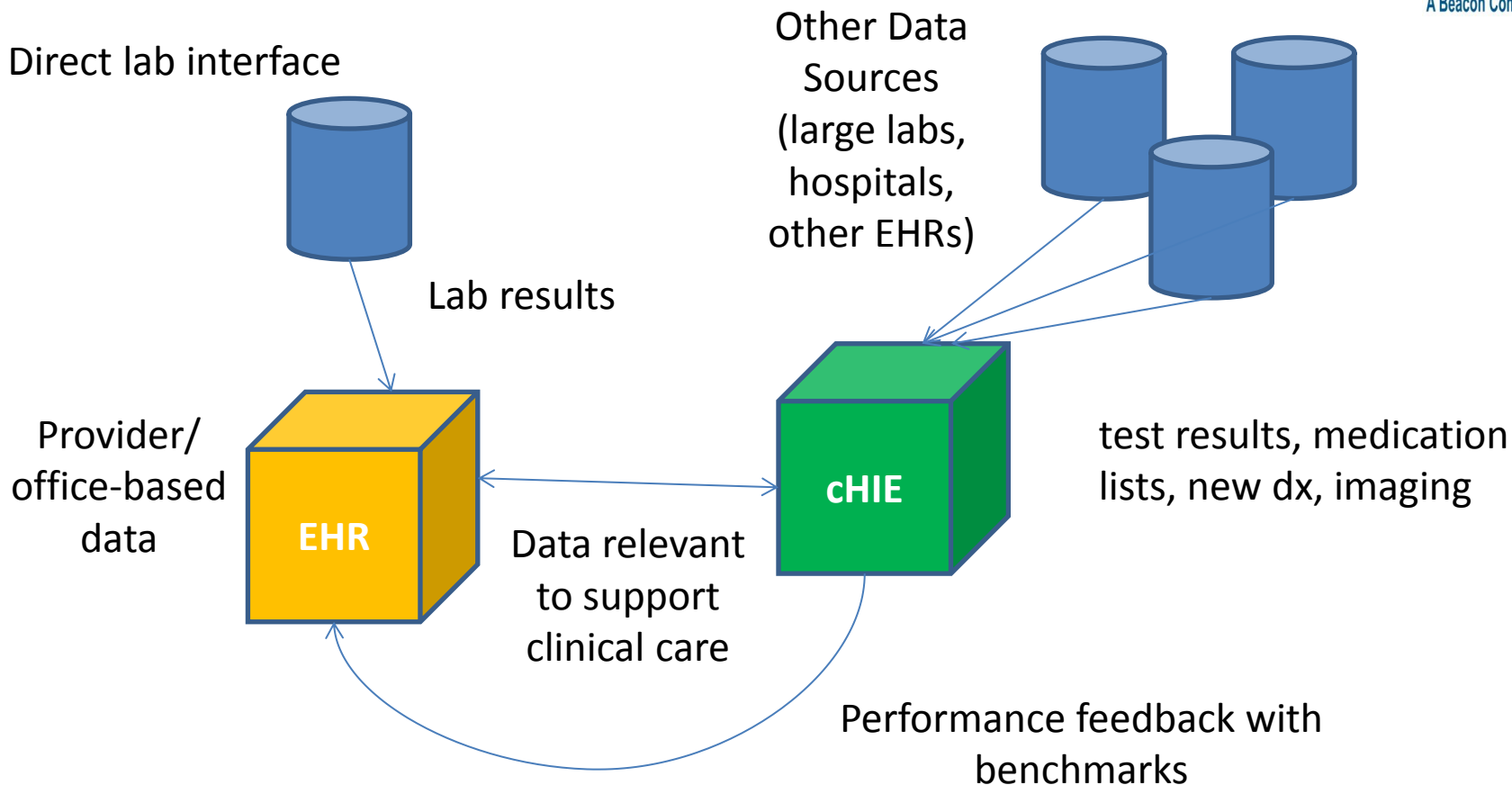


- Clinical
 - EHRs, MU
 - cHIE
- Administrative
 - APCD

How did we solve our data conundrums?

Improving care • connectivity • collaboration

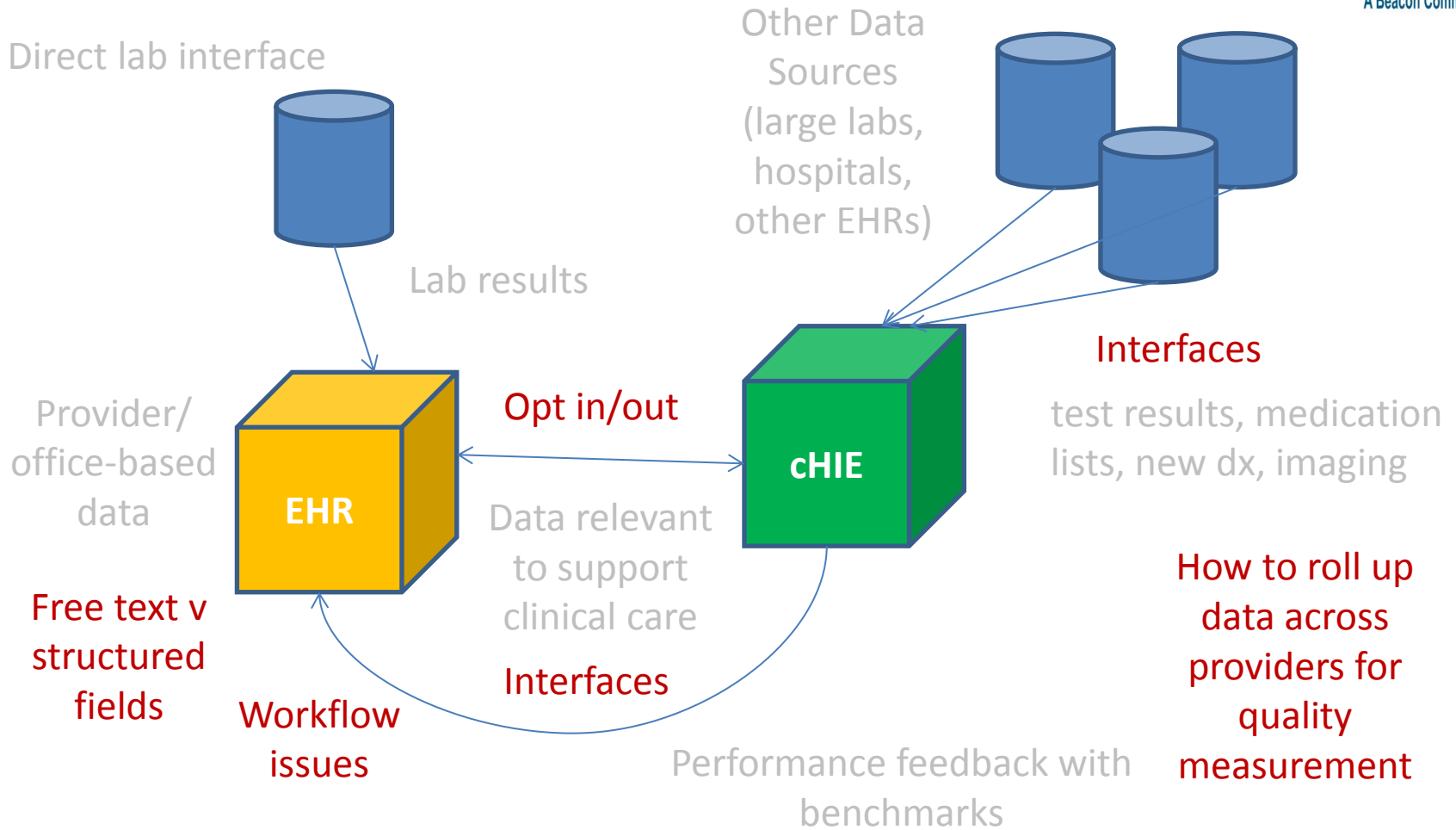
Optimal State: Health IT



A more complete record of care, with increased quality and decreased waste

Improving care • connectivity • collaboration

Challenges: Health IT



Improving care • connectivity • collaboration

Patience is a virtue



- Plan A – EHRs (er, not)
- Plan B – cHIE (er, not)
- Plan C
 - Home-grown application development, seeing an opportunity and filling the gap
 - Health system partners
- cHIE (coming soon)

Improving care • connectivity • collaboration

What did we accomplish (so far)?



- Data infrastructure is more evolved
- Actionable information for providers
- Track community progress (reach of intervention = 25,000+ individuals)

Improving care • connectivity • collaboration

Lessons Learned



- Still harvesting these!
- Mainly, the foundation must be strong for the house to survive

Improving care • connectivity • collaboration

Where do we go from here?



- Healthcare information provides opportunities
- Silos are of little benefit
 - Linkage of data sources
 - Linkage of data types
- Growing awareness of the value of integrated data
- Clinical HIT can improve outcomes

Improving care • connectivity • collaboration



What does this mean to each of us?

Patient of an information-driven provider

- Has test results, doesn't pay for duplicates
- Meds are adjusted based on results/evidence
- Avoids adverse events
- Receives recommendations on appropriate screenings
- Receives written education information
- Follows up and/or communicates with provider via secure email or similar portal

Improving care • connectivity • collaboration



What does this mean to each of us?

Patient of an alternative provider

- Pays for tests that have to be duplicated
- Condition may be out of control, if timely test results not available
- Spends time waiting in office, while staff looks for the chart
- Past history can't be sent to specialist since fax is out of order
- Spends lots of time playing phone tag with office to get test results

Improving care • connectivity • collaboration

The future...



- Actionable use of data and information
- Value proposition
- Patient/consumer support

Improving care • connectivity • collaboration



Questions?

Improving care • connectivity • collaboration

Thank you!



Kimberly Mueller
Healthcare Analyst, Team Lead
HealthInsight Utah
kmueller@healthinsight.org

Improving care • connectivity • collaboration