



Beacon Community Program

The Office of the National Coordinator for
Health Information Technology

Health IT Infrastructure and Capabilities for ACO Implementation: Key Opportunities and Challenges Learned from the Beacon Community Program

November 5, 2013

- **Primary Federal entity charged with coordinating nationwide efforts to implement and use the most advanced health information technology (health IT)**
- **Strive to improve the healthcare system through:**
 - Encouraging adoption of health IT
 - Promoting nationwide health information exchange
- **Located within the Office of the Secretary, U.S. Department of Health & Human Services (HHS)**

Health IT: Helping to Drive the 3-Part Aim



Better healthcare



Improving patients' experience of care within the Institute of Medicine's 6 domains of quality: *Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity.*

Better health



Keeping patients well so they can do what they want to do. Increasing the overall health of populations: address behavioral risk factors; focus on preventive care.

Reduced costs



Lowering the total cost of care while improving quality, resulting in reduced monthly expenditures for Medicare, Medicaid, and CHIP beneficiaries.

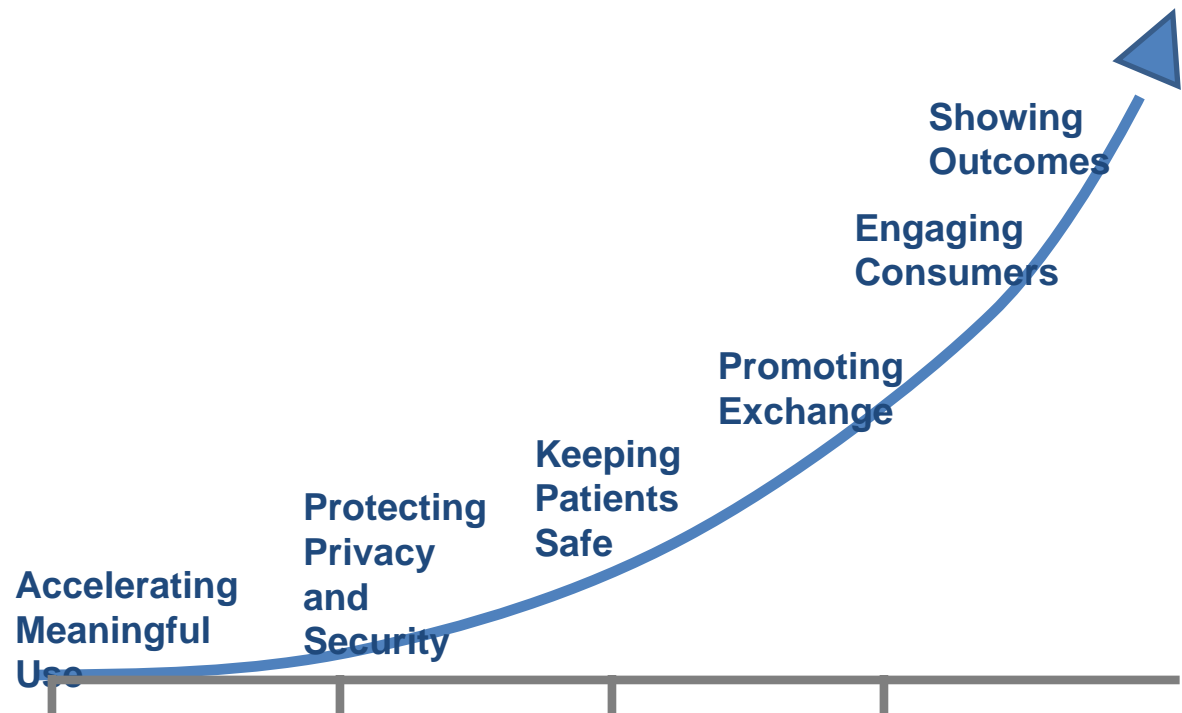


Health Information Technology

Why does America need to modernize using Health IT?

- Enable providers to securely and efficiently exchange patient health information.
- Give providers the right information, at the right time to offer their patients the right care.
- Give consumers tools to know their health information so that they can improve their health.
- Foundational to building a truly 21st century health system where we pay for the right care, not just more care.

What is America doing to modernize its Healthcare System through Health IT?




1. Helping Providers Adopt (MU, REC, Workforce)
2. Standards & Interoperability (S&I Framework, HIE)
3. Testing & Showing How the Pieces Fit Together


Through the Beacon Community Program, HITECH Comes to Life




17 diverse communities each funded ~\$12-16M over 3 years to:



Build and strengthen health IT infrastructure and exchange capabilities - *positioning each community to pursue a new level of sustainable health care quality and efficiency over the coming years.*



Improve cost, quality, and population health - *translating investments in health IT in the short run to measureable improvements in the 3-part aim.*



Test innovative approaches to performance measurement, technology integration, and care delivery - *accelerating evidence generation for new approaches.*

EHR Adoption and Meaningful Use as the Foundation

17 Diverse Communities

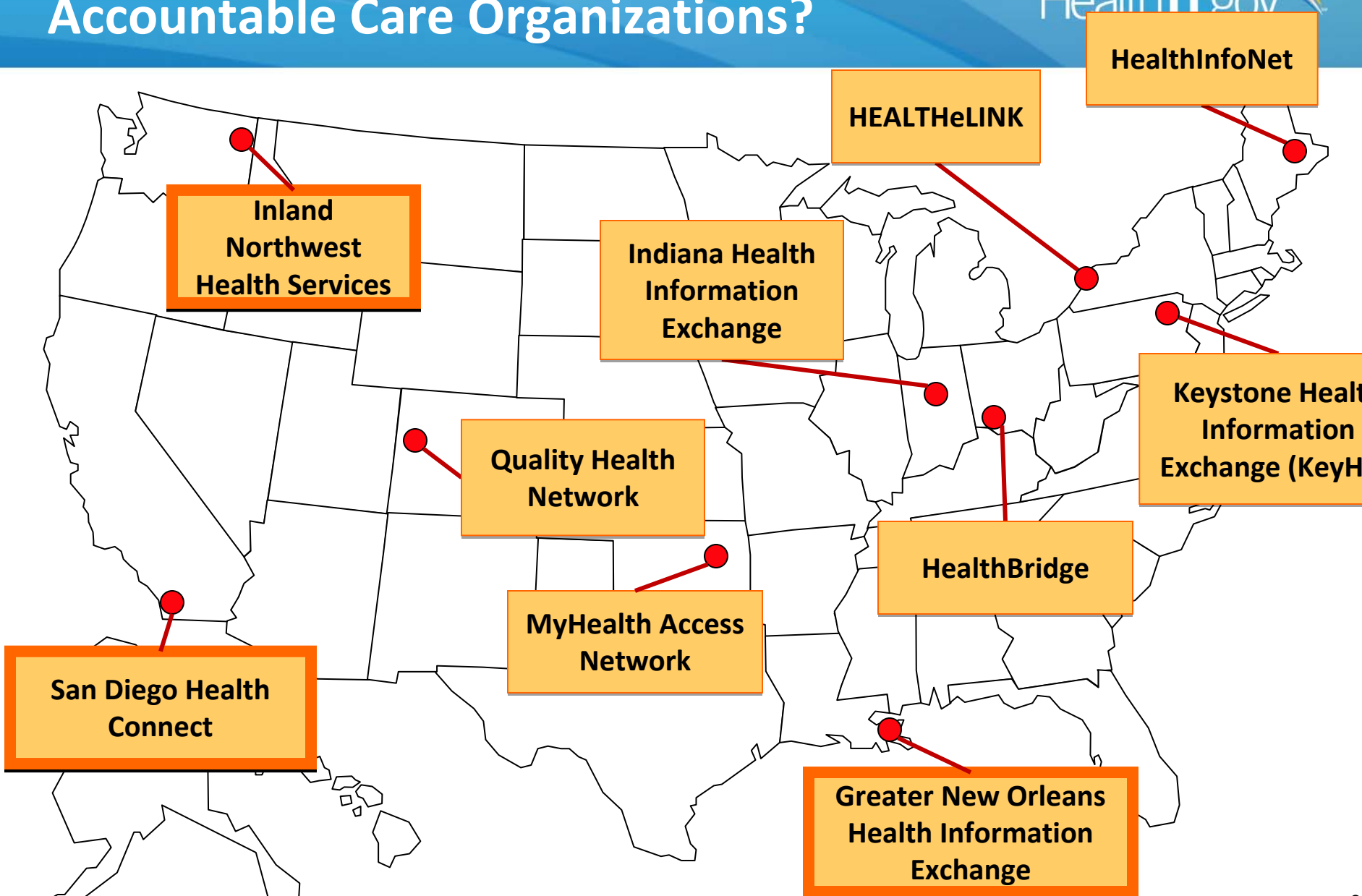


- **As of September 2012, over 8,500 providers are participating in Beacon, with over 8 million lives touched**
- **Every Beacon Community has enhanced existing information exchange capabilities or developed new exchange solutions in their markets**
- **Communities have recorded measurable improvements in key indicators of chronic disease and care quality by supporting primary care providers to identify at-risk patients, measure and monitor performance, and deliver care management services**
- **Beacon investments are now supporting a range of other federal efforts around delivery system transformation, including Pioneer ACO and MSSP participants, the Comprehensive Primary Care Initiative, State Innovation Models, and Community-Based Care Transitions Program grants**

How are HIEs supporting ACOs in Beacon markets?

- Coordinating care across medical neighborhoods including non-core partners such as LTPAC facilities
- Normalizing and aggregating clinical data across sites
- Delivering patient event notifications from hospitals to primary care providers and providing insights on patient utilization across settings
- Integrating claims and clinical data to support business intelligence and analytics applications
- Performance reporting for clinicians to support quality improvement initiatives

Where are Beacon investments in HIE supporting Accountable Care Organizations?



Today's Agenda

Topic	Presentation Details	Speaker
Part 1: Beacon Program Overview	Beacon Program overview	Alex Baker, Office of the National Coordinator for Health IT (ONC)
Part 2: Deep Dive into Beacon Programs	Crescent City Beacon Community	Anjum Khurshid, Louisiana Public Health Institute
	San Diego Beacon Community	Dan Chavez, San Diego Health Connect
	Beacon Community of the Inland Northwest	Tom Fritz, Inland Northwest Services
Part 3: Panel Discussion and Q&A		Panelists

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Crescent City Beacon Community

Anjum Khurshid, PhD, MD, MPAff
Louisiana Public Health Institute
November 5, 2013

Crescent City Beacon Community Goals

Overall Accomplishments of CCBC

Clinical
Transformation

Improve
*(16 primary care practices
caring for the under and
uninsured)*

Care Coordination

Build & Strengthen HIT
*(Optimizing EMR and
exchanging health information
supporting clinician defined
best practices)*

Consumer
Engagement

Test Innovation
*(mobile Text4Health
technology to engage
individuals in diabetes care
management)*

PCMH and Clinical Transformation

Implementation of 4 chronic care management interventions in 16 primary care practices:

population-based disease registries, risk stratification, care management/care team strategies, clinical decision support

Practice
Coaching

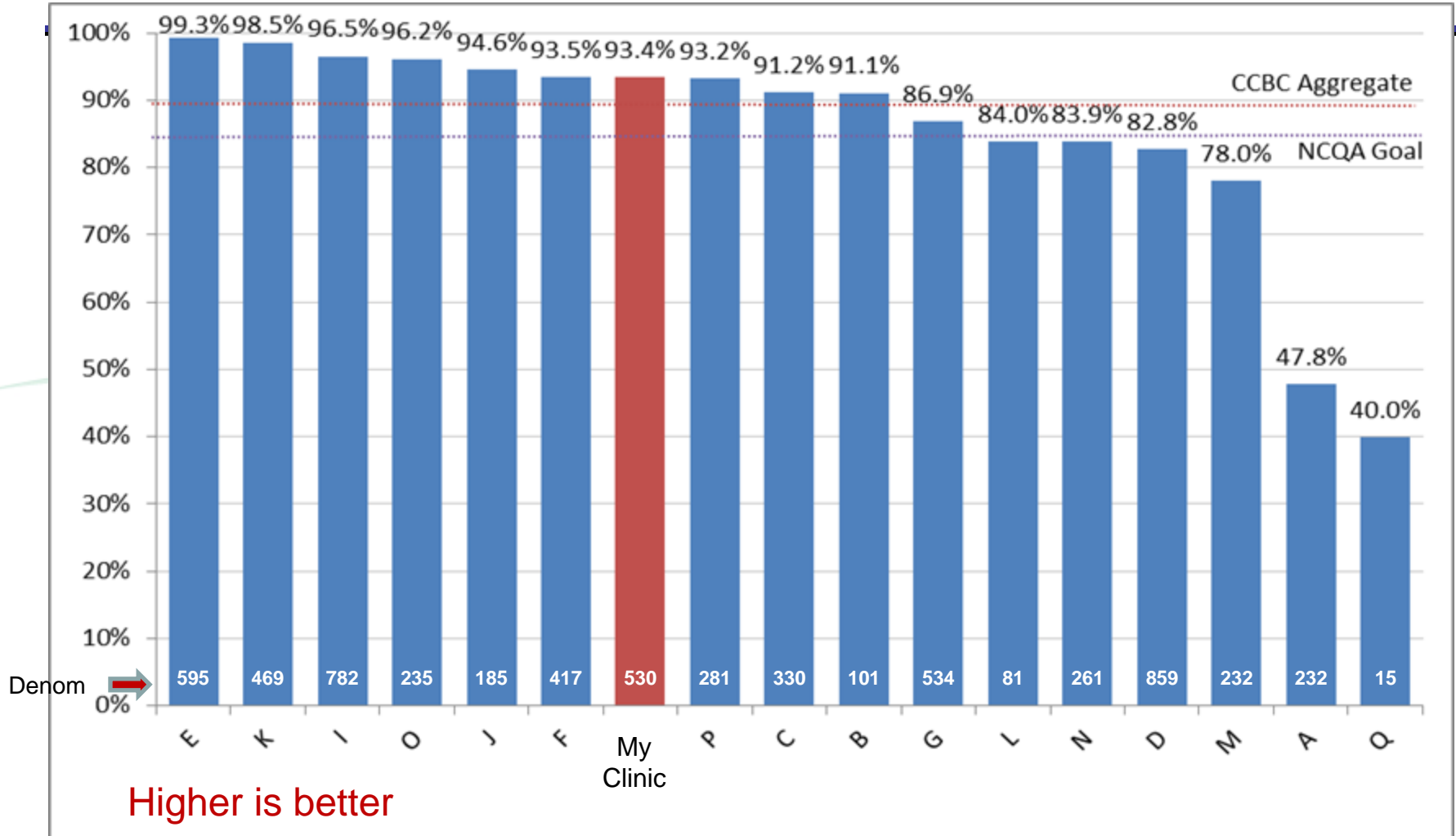
Learning
Collaborative

EMR
Optimization

NCQA
Certification

Clinical
Seminar
Series

Diabetes QI Measure: HbA1c Testing – Q8

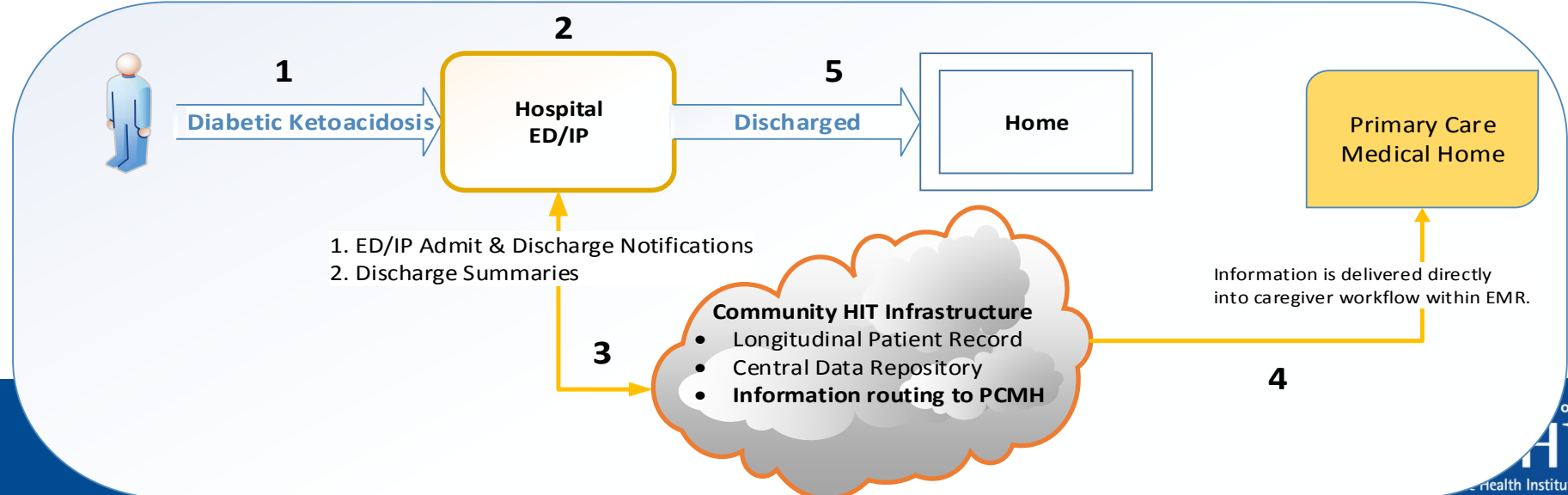
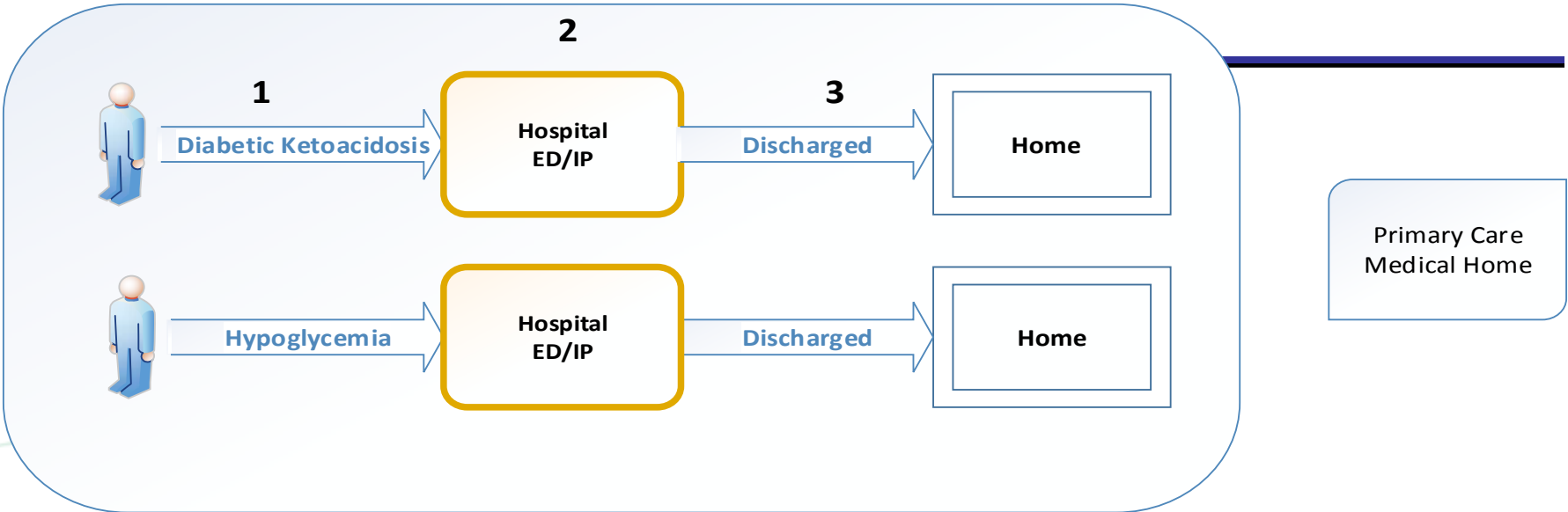


Progress on Quality Measures

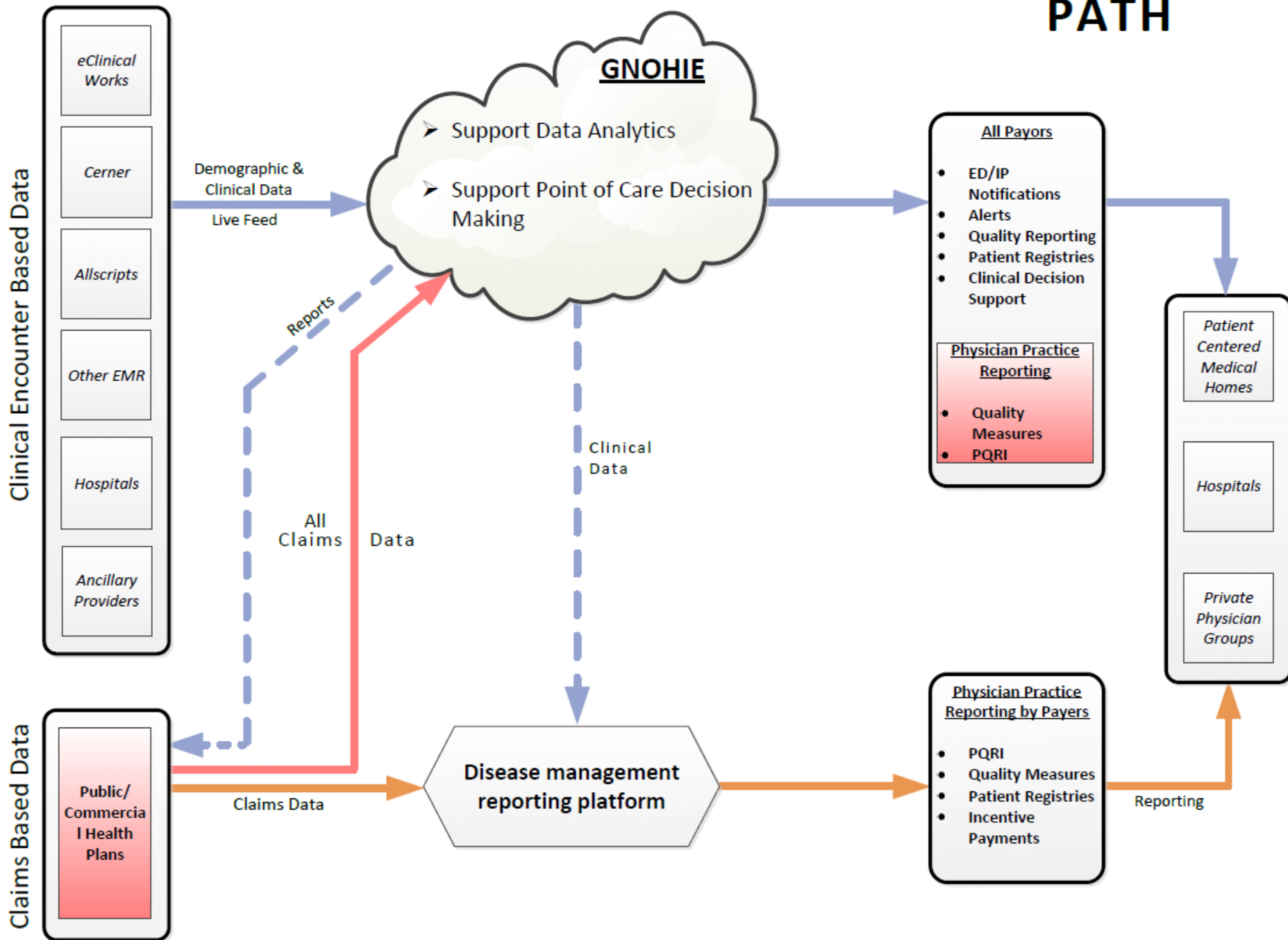
	Q4 to Q5 – April 2012 submission	Q5 – Q6 July 2012 submission	Q6 – Q7 Oct 2012 submission
Diabetes: A1C testing	↑	↑	↑
Diabetes: A1C control (<8.0%)	↑	↑	↑
Diabetes: Lipid testing	↓	↑	↔
Diabetes: Lipid control (<100mg/dL)	↔	↑	↑
Diabetes: Blood Pressure Control (<130/80)	↓	↔	↔
Ischemic Vascular Disease: Complete Lipid Profile	↑	↑	↔
Coronary Artery Disease: Drug Therapy for Lowering LDL-Cholesterol	↔	↔	↑
Ischemic Vascular Disease: Blood Pressure Control (<140/90)	↓	↔	↔

Legend: ↑ Improvement ↔ No Change/Mixed Trends ↓ Decline

Community Notifications for Transitions of Care (Before/After)



PATH



Life on the Road . . .

Patient History:

- African American couple in their 40's
- Husband is a truck-driver and wife travels with him
- Husband diagnosed with diabetes (08/2012), would lose job if he had to use insulin
- Wife diagnosed with diabetes (02/2013)

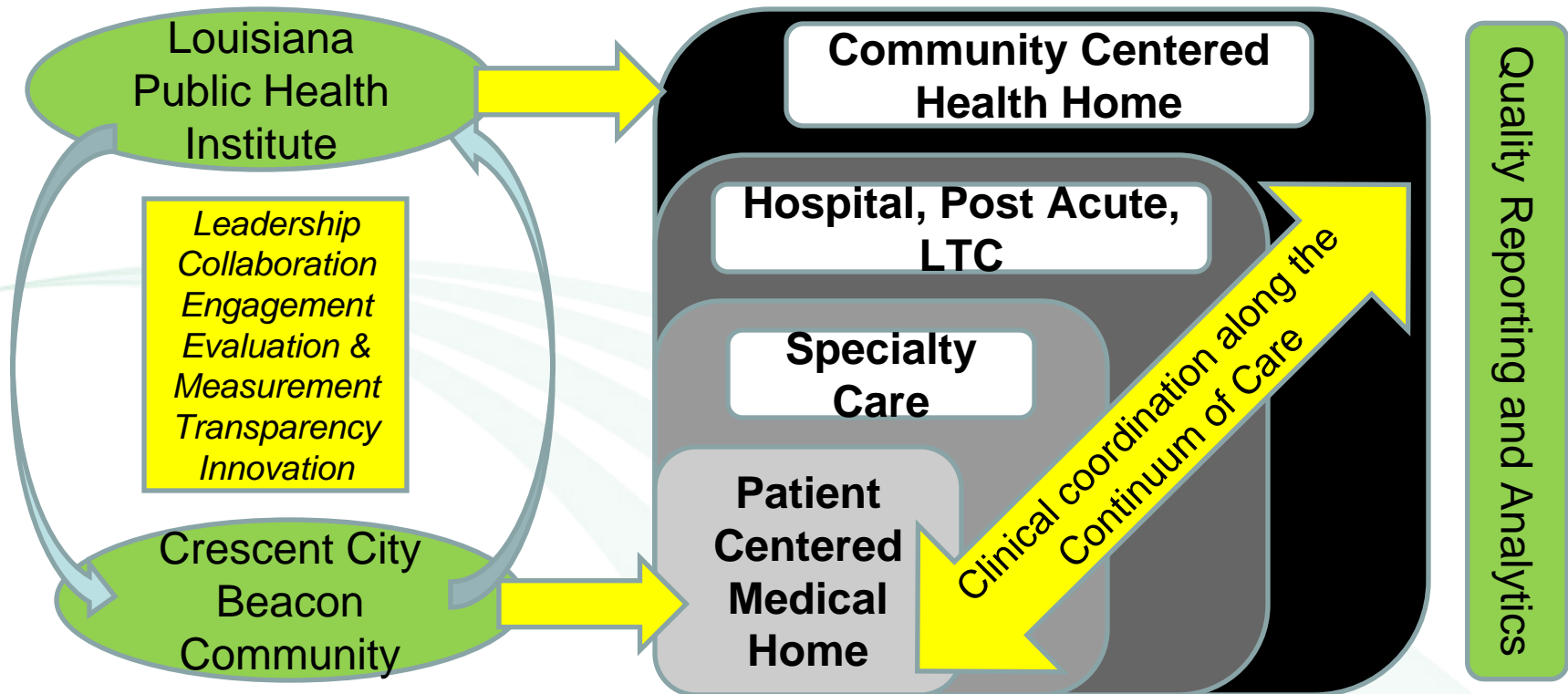
Treatment:

- Couple enrolled in Care Management at time of diagnosis
- Invested in freezer and microwave in their cab to have healthier food options
- Began exercising more regularly
- Husband's **HbA1c decreased from >10 to 6.8**, he remains off insulin

“She [care manager] has us sitting in the office like where she did a one-on-one, told us about the amount of food that we eat- what we can eat, what we can't eat. And about how to deal with it because it's hard being out here on the road.”

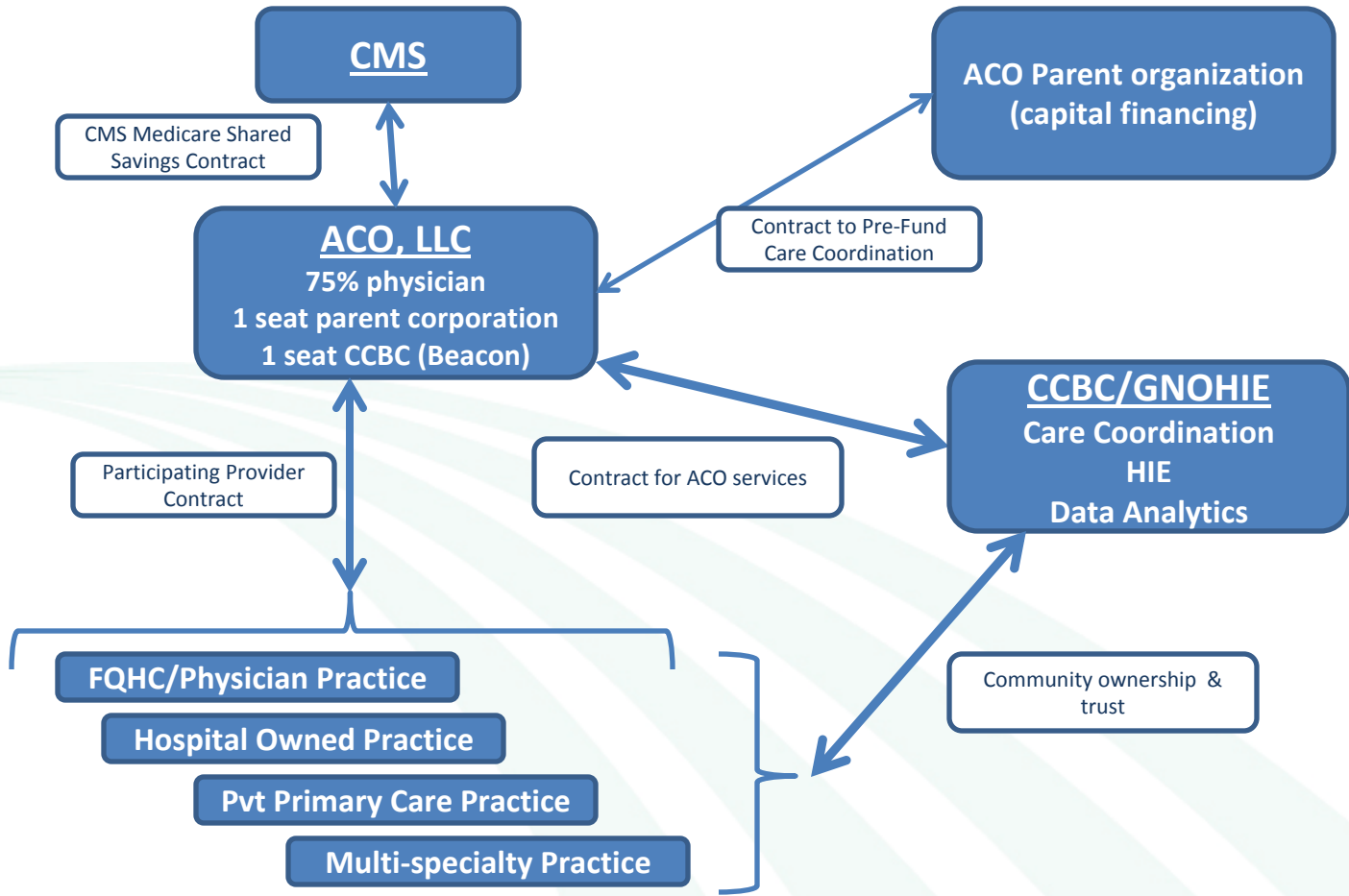
“As long as I can continue to get the support from the clinic, everything is good.”

Building a Foundation for Accountable and Affordable Care Through Collaboration and Care Coordination



CCBC and GNOHIE - a community based collaborative building trust and delivering results through people, process, technology and data

ACO Organizational Structure



Note: subject to meeting quality measures in each of the three years

Factors supporting an ACO

- ✓ Integrated solution of people, process, technology and data
- ✓ Infrastructural support through health information exchange and community-wide central data repository
- ✓ Support for cultural, organizational change with expertise and effective project management
- ✓ Built on Trust among providers, patients, payers
- ✓ Clinical leadership and community-centered
- ✓ Partnership with LPHI in addressing social determinants of health collaborating with community stakeholders

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Daniel Chavez

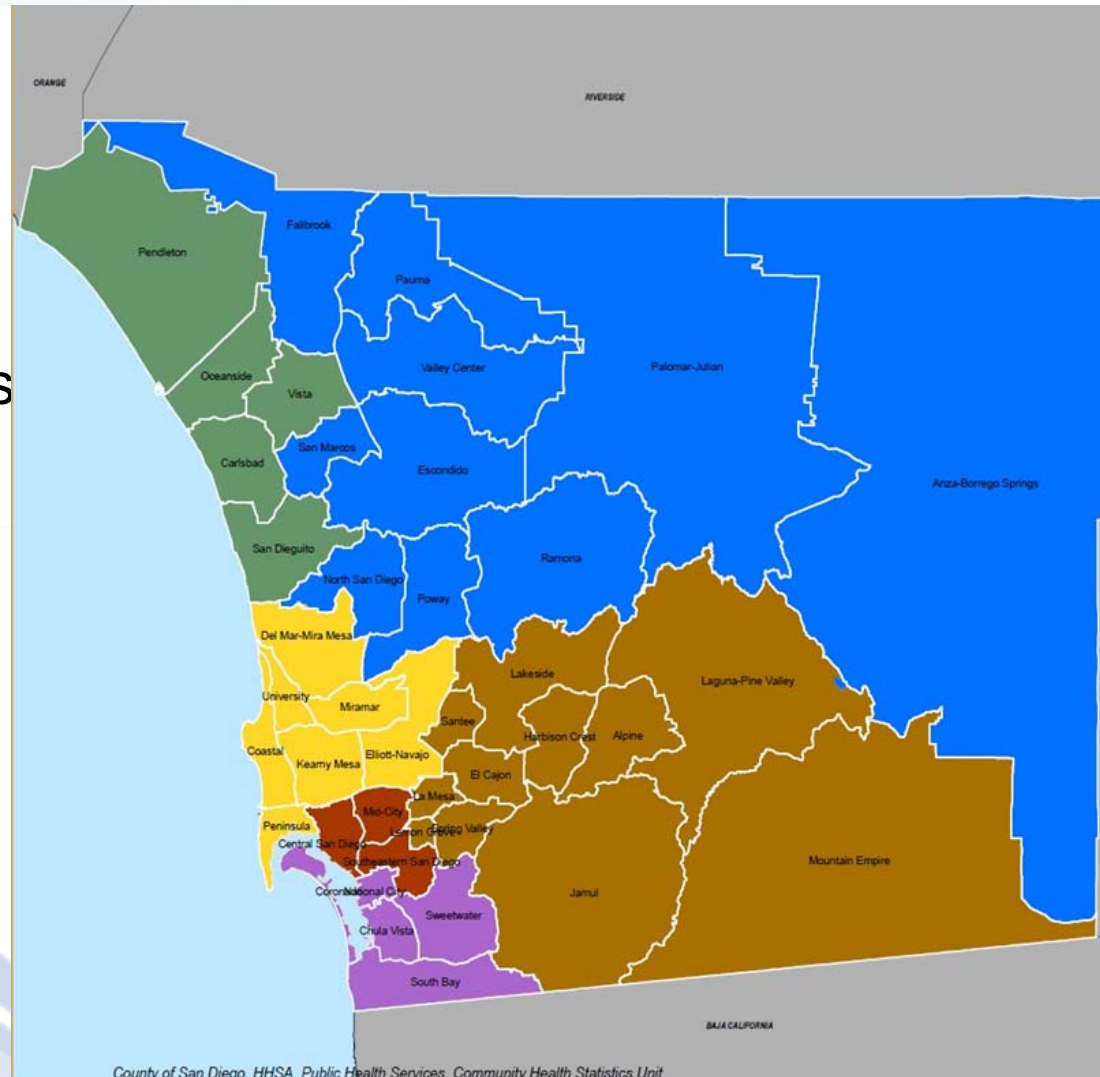
CEO

San Diego Health Connect

San Diego



- 3.2 million people
- 4,526 square miles
- 70 miles of coastline
- 86 miles of border
- 19 Acute Care Hospitals
- 4 Non-acute Hospitals
- 3 Military Facilities
- 115 clinics
- 9,000 physicians



San Diego



- No dominant health care entity (Scripps, Sharp, Kaiser, Rady, UCSD)
 - Hybrid-federated model
 - Large transient patient population
- 24% of all 30-day readmissions occurs at a different hospital than the first admission
- 15% of all ED patients and 69% of “frequent fliers” were seen in multiple hospitals

IT Requirements to Support Accountable Care



- Information Sharing between and among clinicians, patients, and other authorized entities
- Data Collection and Integration from multiple clinical, financial, operational, and patient-derived sources
- Patient Safety
- Privacy and Security

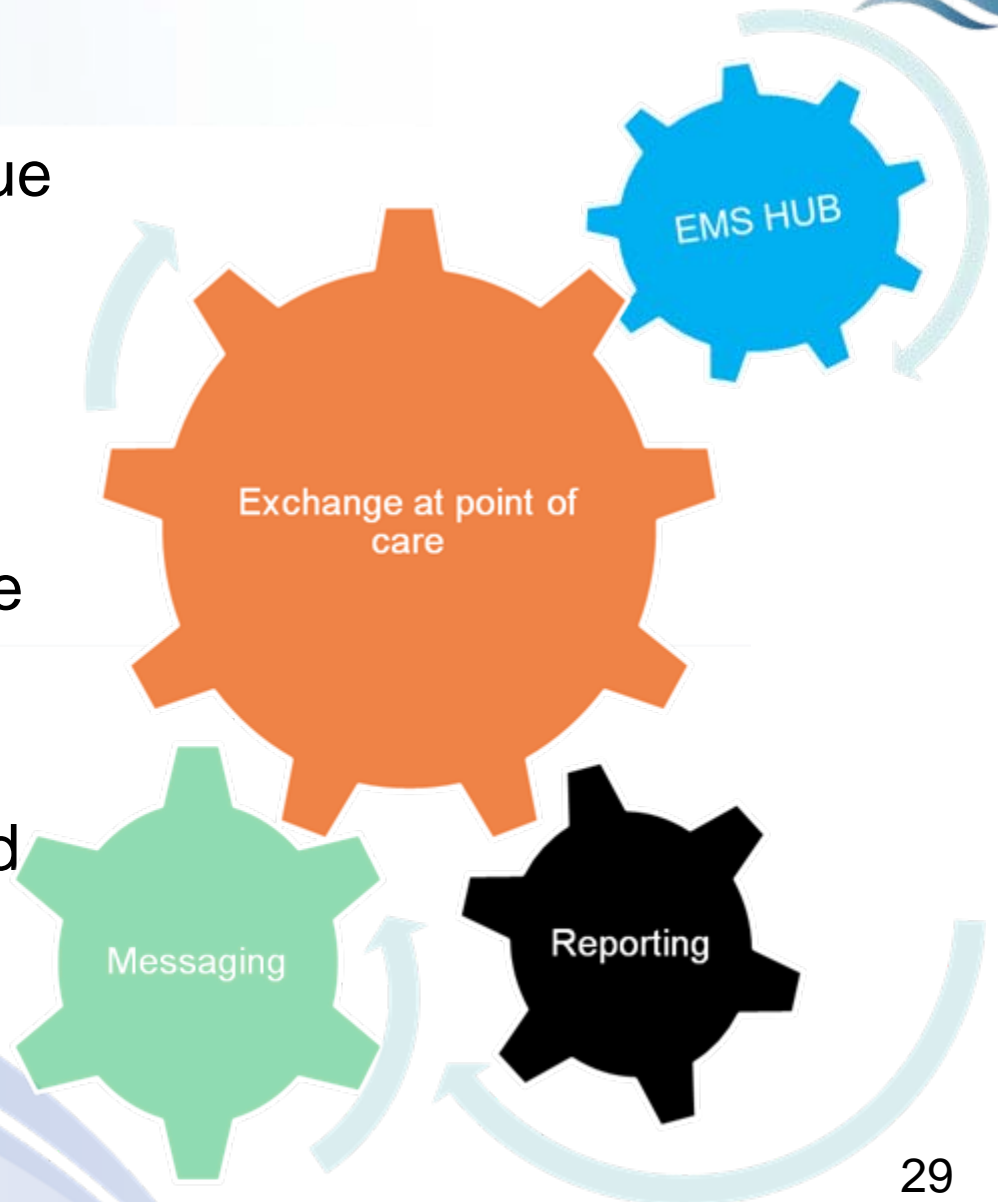
Streamlining Transitions of Care



- Previously linked networks of care strengthened
- Out of network services more clearly reportable
- Analysis of gaps in services provider types can be determined

Service Lines

- Services will add value for providers and patients
- Care coordination focus
- Right time, right place
- Provide a path to financial stability
- Patient records linked



Governance and Management



- Trust, credibility, execution
- Collaborate
 - Priorities and growth
 - New feature and function
 - Share and distribute costs
- Iterate
- Accord
- Adoption, utilization, interoperability
- Measure and evaluate

Supporting ACOs



- Need a new road map
- Set of services
 - Don't bump up against any participant's business plan
- Be a neutral party
- Establish a habit of ADT alerts
 - Results delivery
- Focus on patient transitions
- Add to a 360 degree view

Supporting ACOs continued



- Opportunity for further coordination
- Further data uniformity for exchange between logical parties
- Eliminate stumbling in patient data flow
- Speed the handoffs of patients between caregivers

Future



- Enable ACOs to partner with patients directly as they make their care choices
- Enhance the ACOs' ability to secure care for populations of subscribers to their plans
 - Quality and outcomes evaluations
 - Patient satisfaction measurement
 - Efficiency in patient throughput

Lessons Learned from the Beacon Community of the Inland Northwest

Fourth National Accountable Care
Organization Congress
November 5, 2013

BCIN Project Overview

- Goals
 - Help assure consistent care for individuals with chronic disease and other conditions (starting with diabetes) who see many different providers across the region
 - Combine information from different data sources (ambulatory and inpatient) and different organizations so that physicians have a more complete record for clinical decision-making
- Approach
 - Enable and promote common strategies for coordination of care, reinforced by common measures and quality reports
 - Establish a technology infrastructure to facilitate delivery and coordination of care and quality measurement across unaffiliated health care organizations



Beac*n Community™

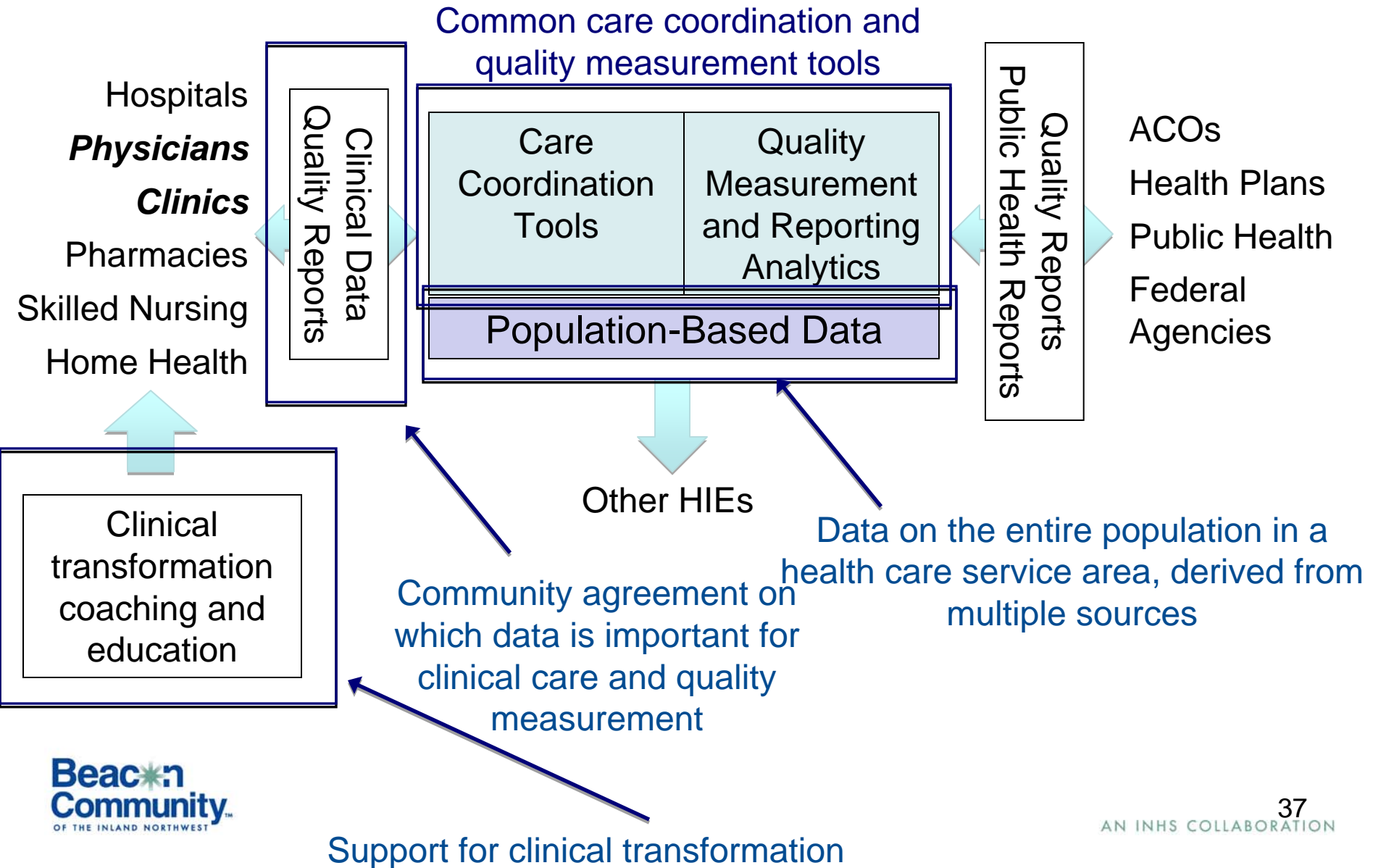
OF THE INLAND NORTHWEST

AN INHS COLLABORATION

Communities with BCIN Participants

Shaded area represents Spokane Referral Region as defined by Dartmouth Atlas

Elements of the BCIN Intervention



Technology Achievements

- Fully implemented, including an HIE with master patient index, clinical data repository, physician portal and notification tools, disease management pathways
- As of 7/30/13, interfaces established to and data being exchanged between:
 - 22 clinics at 46 different sites which use five different EHRs
 - One skilled nursing facility with three sites
 - 16 hospitals on three different hospital information systems
 - One state HIE
- Participation across 24 communities in two states
- Data is not just moved, but is cleaned and standardized through an extensive testing and validation process to provide a longitudinal record of patient care across settings, inpatient and ambulatory

CDR Focus Area

Clinician Portal

- Access to longitudinal clinical patient record
- Ability to view disease management tasks for a patient
- Ability to print Continuity of Care Document
- Ability to set and receive notifications and alerts, e.g. admissions to ED
- Ability to send data back to EHR
- Ability to enter portal via EHR

Disease Management

- Access to disease pathways and Clinical Decision Support
- Ability to view lists of tasks due by patient or by population (e.g., all patients with diabetes)
- Ability to assign tasks to members of care team
- Ability to conduct a patient assessment

Example: Quality Metrics Data

Measure Name	Numerator	Denominator	%	Quality Outcomes
Annual HbA1c Test Performed	2968	3599	82.47%	Achieved ADA goal of \geq 70% of patients.
HbA1c \leq 7.0%	1908	2968	64.12%	Achieved NCQA goal of \geq 40% of patients.
HbA1c \leq 8.0%	2478	2968	83.46%	Achieved NCQA goal of \geq 65% of patients.
HbA1c $>$ 9.0%	230	2968	7.75%	Achieved NCQA goal of \leq 15% of patients.
Annual LDL-C Test Performed	2478	3599	68.85%	Achieved ADA goal of \geq 60% of patients.
LDL-C $<$ 100 mg/dL	1540	2478	62.15%	Achieved NCQA goal of \geq 50% of patients.
LDL-C \geq 130 mg/dL	373	2478	15.05%	Achieved NCQA goal of \leq 35% of patients.
Blood Pressure Check Per Visit	3453	3599	95.94%	Achieved ADA goal of \geq 90% of patients.
Blood Pressure Control ($<$ 130/80)	1505	3453	43.59%	Achieved NCQA goal of \geq 25% of patients.
Blood Pressure Poor Control (\geq 140/90)	207	3453	5.99%	Achieved NCQA goal of \leq 35% of patients.
Annual Dilated Eye Exam	801	3599	22.26%	Did not achieve NCQA goal of \geq 60% of patients.
Annual Nephropathy Assessment	1492	3599	41.54%	Did not achieve NCQA goal of \geq 85% of patients.
Annual Foot Examination	1588	3599	44.12%	Did not achieve NCQA goal of \geq 80% of patients.

Challenges and Resolutions

- There were major changes in the regional health care market over the course of the project
 - We shifted our focus more quickly to smaller rural communities
- BCIN occurred at the same time as Meaningful Use Stage 1, creating competition for resources at the clinics and with the EHR vendors
 - We tried to be flexible and responsive, working with whichever sites and vendors had resources available

Challenges and Resolutions

- We needed to work with multiple EHR and HIS products and vendors, at a time when there were no interoperability standards
 - We used whatever means possible to get the data and whatever levers available to work with vendors
- Staff in the clinics had very little time for training
 - We modified our approach to learning sessions and created on-line education modules

Challenges and Resolutions

- There were major challenges with data quality in the ambulatory care settings
 - We did extensive mapping and testing for each site's system
- Both the technology and the expectations for population health management caused workflow disruption at the point of care
 - We worked with each clinic to help decide how to change staff roles for population health and how to integrate changes in the workflow

Lessons Learned

- Efforts to implement major health system changes have to be sensitive to the needs of end-users and to other environmental changes affecting those end-users
- Personal contact is extremely important for culture change in clinics
- The workflow in the clinics has to be as streamlined as possible, otherwise adoption of new technology or processes will be limited

Lessons Learned

- Many EHR vendors just did not have the capability to share discrete data in a way that would support integration of patient records
- Data quality was a major problem that caused delays in implementation and problems generating reports
- The growing influence of health care companies owned by regional and national players makes local initiatives more difficult

Key Issue for ACOs

- The BCIN spent a lot of time working to understand and validate the patient populations used to calculate quality measures, particularly which patients should be included in the numerator and which should be included in the denominator.
- While doing this we identified considerable variation between clinics and between EHRs in how the numerators and denominators are calculated. This variability limits the capability of providers, purchasers and policy makers to rely on quality measures for comparison purposes.

Questions?

Thank you!