Crescent City Beacon Community: Building Shared Infrastructure for an Accountable Care Community

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May 2014
Outline

• Accountable Care Community
• Crescent City Beacon Community
• Evaluating a Systems Change Program
• Shared infrastructure for CCBC and ACC
• Results from CCBC
• Lessons Learnt - Challenges
ACCOUNTABLE CARE COMMUNITIES
Accountable Care Community (ACC)

A collaborative, integrated, and measurable strategy that emphasizes shared responsibility for the health of the community, including health promotion and disease prevention, access to quality services, and healthcare delivery

Healthier by Design: Creating Accountable Care Communities, 2012
ACC Model Components

• Integrated medical and public health models
• Utilization of interprofessional teams
• Collaboration among health systems and public health
• A robust health information technology infrastructure
• An integrated and fully mineable surveillance and data warehouse functionality
• A dissemination infrastructure
• A robust ACC implementation platform
• Policy analysis and advocacy to facilitate ACC success and sustainability
ACC Results in Akron, OH

Already seeing positive results in 18 months

- 10% decrease cost per month of care for diabetics
- >50% participants lost weight
- 0% amputations because of diabetes
- $3,185 program savings per person per year
Health System Redesign in NOLA

- Clear vision of patient-centered, accessible, high quality, **community**-based, and **accountable** health system
- Federal, state, local, and philanthropic support
- Strong, collaborative leadership facilitated by LPHI for achieving improved population health
Dynamic Framework for Coordinated System of Care

Vulnerable Populations

Consumer Engagement
- Patient Education/Risk Reduction
- Patient Education/Disease Management

Healthy -- At-risk -- Acute -- Chronic -- Complex (w/comorbidities)

Chronic Care Management
- Screening visits
- Routine visits
- Wellness visits

Primary Care (Medical Home)
- Specialty Care
- Diagnostics

Transition of Care
- Identifying Frequent Users
- Setting up Medical Homes

Emergency

Preventable Admissions

Prevent-able ED Visits

Inpatient
System Integration to achieve health

Social Determinants of Health (Crime & Justice)

Social Determinants of Health (Social Services)

Social Determinants of Health (Education)

Social Determinants of Health (Economic Dev & Business)
Beacon Community Goals

Reduced burden of chronic diseases, mainly diabetes and cardiovascular disease by:

- **Improving the quality of care** for chronic disease patients in patient-centered medical homes, enabled by HIT
- **Reducing healthcare costs** by decreasing preventable emergency department and inpatient visits through better coordination of care for chronic disease patients
- **Engaging consumers** in the healthcare process through innovative technologies
CCBC Goals and Accomplishments

Clinical Transformation

Improve Quality
16 primary care practices using team approach and process improvement for better patient outcomes

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 prevention and management
Developmental Evaluation Model

• Developmental evaluation applies to an ongoing process of innovation in which both the path and destination are evolving

• evaluates innovative programs in real time by looking at the program as evolving, complex adaptive systems operating in complex, evolving settings

• through this framework, we categorized CCBC intervention components using the Structure-Process-Outcome model by Donabedian
CCBC Logic Model

**Interventions**
- Population-based Disease Registry
- Risk Stratification
- Care Management
- Clinical Decision Support
- Transitions of Care (ED/IP & Specialty Referral)

**Structure**
- Integrated Electronic Registry Built
  - Written Protocols
  - Trained Staff
- Written Protocols
  - Trained Staff
- Care Team
  - Care Manager
  - Written Protocols
  - Trained Staff
- HIT-enabled, Evidence Based Tools Built
  - Written Protocols
  - Trained Staff
- HIE-enabled Electronic Notifications & Results
  - Written Protocols
  - Trained Staff

**Process**
- Identify High-Risk Patients
- Conduct Care Management Activities with High-Risk Patients
- Increase # of DM & CVD patients with appropriate tests and screens performed
- Increase # of DM & CVD patients on appropriate medication

**Outcomes**
- Increase # of DM patients with HbA1C in control
- Increase # of DM and CVD patients with BP in control
- Increase # of DM and CVD patients with LDL in control
- Decrease ED Utilization for ACS (Ambulatory Care Sensitive Conditions)

**Data Sources:** LPHI/PCDC Assessments  Outcome Measure Reports  GNOHIE
CHRONIC CARE MANAGEMENT
PCMH and Clinical Transformation

1. population-based disease registries
2. risk stratification of patients
3. care management/care team strategies
4. clinical decision support systems
Care Management for CVD Patients

Stratify CVD Patients

Care Management for DM Patients

Stratify DM Patients

Registries

Individual Care Plans

Care Management Staff

SITES USING CARE MANAGEMENT PROCESSES: 2012-2013

Jan-12  Jul-12  Dec-12  Jul-13

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Patients with Diabetes Receiving Recommended Tests

- HbA1c testing: 83% → 91%
- LDL testing: 73% → 78%
- Nephropathy Screening: 57% → 61%
- Foot Exam: 13%
- Eye Exam: 14% → 24%
Outcomes Improvement

- **A1C < 8.0**
  - Q2: 47%
  - Q10: 57%

- **A1C Testing**
  - Q2: 82%
  - Q10: 91%
  - Increase: 10%

- **BP < 130/80**
  - Q2: 34%
  - Q10: 33%
  - Decrease: 4%

- **LDL Testing**
  - Q2: 71%
  - Q10: 75%
  - Increase: 6%

- **LDL < 100**
  - Q2: 35%
  - Q10: 38%
  - Increase: 8%
TRANSITIONS OF CARE
Common Measure Error Types

• Incorrect visit count parameters
• Use of non-standardized or highly customized order/CPT codes
• Non-structured lab data fields
• Practice management configurations for uninsured or non-billable visits
• Numerator miscalculation – inclusion criteria
• Denominator miscalculations
Mean Data Error Proportions for Diabetes Mellitus Measures Among CCBC Clinics Over Time

*\( p \) value < .05
CONSUMER ENGAGEMENT
Consumer Engagement

System collects:
- HEIGHT
- WEIGHT (BMI)
- AGE
- GENDER
- FAMILY HISTORY
- DIABETES DIAGNOSIS
- SMOKING STATUS

System categorizes:
- HIGH RISK
- LOW RISK
- UNDERWEIGHT
- AT WEIGHT
- OVERWEIGHT
- OBESE

Enrollment

Development of Profile (Risk Categorization)

Goal Setting/Tracking (Weight & Exercise)

Education/Motivation (According to Risk)

Local Connections (Care & Activities)
Engagement Campaign for txt4health

Pre and Post Campaign Survey Results:

Increase in awareness of txt4health campaign between the pre and post campaign survey, especially among priority audiences:

- 4% → 19% awareness of txt4health among those with Type 2 Diabetes in their family
- 8% → 29% awareness of txt4health among African Americans/Blacks
- 9% → 29% awareness of txt4health among those under 30 years of age
Txt4health Program Results

Age distribution of participants who entered age (N=1060)
- 30%: 18-29
- 41%: 30-44
- 29%: 45+

BMI of participants who entered weight and height information (N=1395)
- 44%: BMI < 25 Normal or Underweight
- 29%: BMI 25-30 Overweight
- 27%: BMI > 30

Reported weight goal (N=1057)
- 39%: Reported weight goal
- 61%: Did not report weight goal

Race/Ethnicity of those reporting (N=639)
- 71%: African American/Black
- 19%: White
- 10%: Other

Reported active for at least 30 minutes a day (N=1431)
- Days: 0 1 2 3 4 5 6 7
- Days active: 5% 4% 7% 45% 8% 25% 2% 4%
Governance Structure

CCBC Steering Committee (4 members):
Oversight and strategy (LA DHH, City of New Orleans, BCBS LA, LPHI)

GNOHIE Administrative Committee (15 members -- one representative per GNOHIE member):
Provide oversight and decision-making regarding CCBC-related interventions/activities/infrastructure and address strategic planning, sustainability, and GNOHIE adoption after the conclusion of the CCBC funding period

CCBC Operating Board (9 members):
Intervention operationalization (Selected partner hospitals and PCPs)

HIT Subcommittee
- Information Security and Administration
- Infrastructure and Standards

Clinical QI Subcommittee
- Transitions of Care
- Chronic Care Management
- HIT Use Optimization
- Analytics & Reporting

Sustainability Subcommittee
- Intervention Sustainability
- Funding Sources
Summary Project Timeline

Jun – Dec 2010: Formation of Operating Board; Discussions about alignment of partner needs; Slow start

Jan – Jun 2011: Formation of Steering Committee; Selection and prioritization of Interventions (CCM, TOC, CE); Pilot CCM in 5 clinic sites

Jul – Dec 2011: 1st Wave of CCM; Approval of GNOHIE set up; Planning and design of Txt4health; QI Subawards; Contract negotiations for CCM, TOC, and CE

Jan – Jun 2012: Formation of GNOHIE Administrative Committee; 2nd Wave & Clinical Coaching for CCM in 16 practices; Set up & functioning of GNOHIE for TOC; Launch of Txt4health

Jul 2012 – Sep 2013: Completion of CCM interventions; Fully operational GNOHIE; Txt4health reaches 1,800 enrollees; CCBC receives Health Care Informatics Innovation Award, 2013
CHALLENGES AND LESSONS
## CCBC to ACC

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Shared Infrastructure for ACC

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<td>Health Information Exchange; EMR optimization; Clinical Decision Support; mobile health technologies</td>
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<td>Information</td>
<td>Exchange of standard information; Data Sharing Agreements; Data quality training; Central Data Repositories; Analytics; Social Services and Behavioral Health data</td>
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<tr>
<td>Process</td>
<td>Agreed protocols, guidelines and QI efforts; PCMH implementation and clinical coaching; ACO services; User feedback</td>
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<tr>
<td>People</td>
<td>Collaborative governance (GNOHIE Admin Com + Subcommittees); Trust; Vertical and horizontal integration; txt4health social campaigns; PATH (shared services)</td>
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1. Community Ownership & Trust
Beacon Benefits

The team from our organization that participated in the Beacon Program have learned a great deal about care management and use of technology to achieve better health outcomes for our patients. It was an overall success for both our staff and patients.

Mark F. Keiser, MBA, MHA, MPH, FACHE, Executive Director/CEO, Access Health Louisiana

The CCBC initiative had facilitated the connection of community clinics network to specialty and tertiary care. It has helped to streamline smoother care coordination across the spectrum and established a framework for measurable quality matrixes.

Juzar Ali, MB.,BS (MD); FRCP(C); FCCP, Chief Medical Officer, Interim LSU Hospital
DM QI Measure: HbA1c Testing

3. Transparency & Accountability
Leveraging infrastructure

Beacon Community

4. Plan Early for Sustainability

- GRHOP: Gulf Region Health Outreach Project
- LACDRN: Louisiana Clinical Data Research Network (PCORI)
- HCCN: Health Center Controlled Network
- NOCHF: New Orleans Charitable Health Fund (Behavioral Health Integration)
- PATH: Partnership for Achieving Total Health
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.”
Thank you

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