Southeast Michigan Beacon Community

Michigan Diabetic Partners in Action Coalition

October 11, 2012

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DPAC

(Diabetes Partners in Action Coalition)

Mission:

To provide statewide leadership to prevent and control diabetes and reduce its impact in Michigan

The SEM Beacon Award

- **HITECH Act:**

  The ***Health Information Technology for Economic and Clinical Health*** (HITECH) Act,

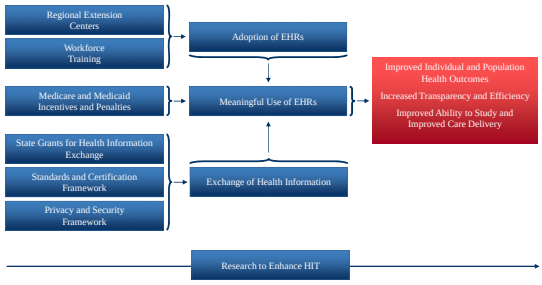
  – **Enacted** as part of the ***American Recovery and Reinvestment Act of 2009 – "The Stimulus Plan"***, was signed into law on February 17, 2009, ***to promote the adoption and meaningful use of health information technology.***

  – **Created:** *The Office of the National Coordinator for Health Information Technology* (The ONC)

ARRA-HITECH Funding Total = $1.7 B

• Regional Extension Centers	$677 M
• State Health Information Exchange	$564 M
• Workforce Training Programs	$118 M
• **Beacon Communities**	**$265 M**
• NHIN (National Health Information Network)	$ 64 M
• SHARP (Strategic HIT Advanced Research Projects)	$ 60 M

The HITECH Vision



Beacon Overview: *Clinical Transformation Project*

- **$265 M** Nationwide - 17 sites
- SEM award, **$16.225M**, is the largest in nation
- **Transform Health Care delivery and outcomes** through the effective sharing and use of health information.
- **36** month project; SEM Proj: **31 months**

Beacon Community Programs

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17 Beacon Communities

Bangor Beacon Community, Brewer, ME	$12,749,740
Beacon Community of the Inland Northwest, Spokane, WA	$15,702,479
Central Indiana Beacon Community, Indianapolis, IN	$16,008,431
Colorado Beacon Community, Grand Junction, CO	$11,878,279
Crescent City Beacon Community, New Orleans, LA	$13,525,434
Delta BLUES Beacon Community, Stoneville, MS	$14,666,156
Greater Cincinnati Beacon Community, Cincinnati, OH	$13,775,630
Greater Tulsa Health Access network Beacon Community, Tulsa, OK	$12,043,948
Hawaii County Beacon Community, Hilo, HI	$16,091,390
Keystone Beacon Community, Danville, PA	$16,069,110
Rhode Island Beacon Community, Providence, RI	$15,914,787
San Diego Beacon Community, San Diego, CA	$15,275,115
Southeast Michigan Beacon Community, Detroit, MI	**$16,224,370**
Southeastern Minnesota Beacon Community, Rochester, MN	$12,284,770
Southern Piedmont Beacon Community, Concord, NC	$15,907,622
Utah Beacon Community, Salt Lake City, UT	$15,790,181
Western New York Beacon Community, Buffalo, NY	$16,092,485

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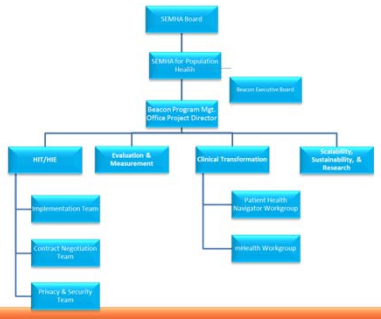
The SEM Beacon Award: **$16.2 M**

- **Southeastern Michigan Health Assoc. - SEMHA**
  - Now the Awardee and Fiduciary for the Beacon Grant
  - The Beacon Grant will be implemented by SEMHA
  - Funded through *American Reinvestment and Recovery Act* of 2009 (ARRA):HITECH -Health Information Technology, Economic and Clinical Health Act - HITECH

SEMBC Governance

(updated as of 07/15/2011)



Beacon Executive Board (BEB)

- Vernice Davis Anthony, Greater Detroit Area Health Council
- Yvonne Anthony, Dept. of Health & Wellness Promotion
- Leland Babitch, MD, Detroit Medical Center
- Thomas Cieszynski, Southeastern Michigan Health Association
- Cynthia Green-Edwards, Michigan Department of Community Health
- Ricardo Guzman, Community Health and Social Services Center
- Rick Hillbom, Oakwood Hospital and Medical Center
- Adam Jablonowski, Wayne County Medical Society ofr SE MI
- Marsha Manning, General Motors
- Toshiki Masaki, The Ford Motor Company
- Barbara Rossman, Henry Ford Macomb Hospital
- John Slaughter, Juvenile Diabetes Research Foundation
- Lucille Smith, Voices of Detroit Initiative
- **Herb Smitherman, MD**, **Co-Chair**, **Wayne State University SOM**
- David Spivey, CEO, St. Mary Mercy Hospital
- Cynthia Taueg, VP St. John Providence Health
- **Edward Wolking**, **Co-Chair**, **Detroit Regional Chamber**
- Robert Yellan, CEO, Michigan Peer Review Organization
- Beth Nagel, Michigan HIE Coordinator *(ex officio)*
- Derek Robinson, MD, The Centers for Medicare and Medicaid *(ex officio)*

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Why Diabetes?

Worldwide Prevalence of DM

- **2000: > 170 million people with DM**
  - ***70% developing countries***
- **est 2030: > 370 million people with DM**
  - ***73% developing countries***
  - ***New 2011: > 345 million people with DM***
  - ***Each Yr: 7 million people develop DM***
  - ***Each Yr: >3 million die of c/o DM***

Rank	Country	2000	2030
1	India	31.7	79.4
2	China	20.8	42.3
3	US	17.7	30.3

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The Toll of Unhealthy Lifestyles in MI:

- Chronic diseases are among the most common and costly diseases but also the most preventable
- 2 of every 3 deaths are caused by FIVE chronic diseases: ***heart disease, cancer, stroke, chronic lower respiratory disease, and diabetes***
- But the REAL causes of most chronic diseases and leading causes of preventable death in Michigan are:
  - ✓ Tobacco use
    - ✓25% of MI children Tobacco users
  - ✓ Overweight and obesity:
    - ✓61% of Michigan adults are overweight or obese
  - ✓ Physical inactivity
- Michigan's total costs, including health care costs and productivity losses, are more than $20 billion annually **($6.5 Billion [33%] DM Alone)**

Diabetes Mellitus: Prevalance

- Diabetes Mellitus prevalance is increasing through out the USA and the world in an epidemic proportion.
- Over **25 million** people with diabetes in the USA
  - Prevalence of diabetes has increased by **49%** over past decade
  - **25%** are unaware they have the Disease
- Over **1.3 million** in Michigan (**300,000 unaware**).
  - Michigan has the **7th highest** diabetes prevalence rate in the United States.

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Diabetes Mellitus: Costs

- According to MDCH FY2010 DM **in Michigan:**
  - In 2004, the estimated direct and indirect costs of diabetes in Michigan were nearly **$6.5 billion**.
  - The average health care cost for a person with diabetes was **$13,243** compared with **$2,560** for a person without diabetes-
    - **5x** the costs

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Diabetes Mellitus: Detroit

- Diabetes Prevalance: US: 7.8%; MI: 10%; **Detroit: 12.8% [many believe % closer to 16%]**
- Diabetes represents **23%** of all Detroit hospital discharges
- DRH Study **45%** either pre-DM or DM

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Preventable Hospitalizations: Detroit

- More common in Detroit than in Michigan
  - 404/10,000 vs 240/10,000 **(69% more)**
- Conditions with greatest difference:
  - Asthma: 50/10,000 vs 18/10,000 **(174% more)**
  - **Diabetes: 25/10,000 vs 11/10,000 (132% more)**

Wayne State University School of Medicine

The Need for Reform

The Opportunity

Hospital Readmissions	•~1.1M of 6.7M Medicare admits result in 30-day readmits •~250K of 2.8M non-elderly Medicaid discharges readmitted
ACS ED Utilization	•117M+ ED visits/yr; 56% of ED visits were ACS visits •70%+ of Medicaid ED visits potentially preventable/avoidable
Hosp. Acquired Conditions	•~1.7M patients affected by hospital-acquired infections/year •Causes or contributes to ~100,000 deaths/year
Adverse Drug Events	•Over 770,000 injuries or deaths/yr from ADEs in hospitals •~28-95% of ADEs preventable by reducing med. errors
Influenza	•~5,500 deaths/year (avg) among patients > 65 years old •~55-60% percent of seniors immunized for flu
Colorectal Cancer	•140,000 colorectal cancer diagnoses/year •53,000 deaths/year; 32,000 (60%) potentially preventable
Lung Cancer	•200,000 lung cancer diagnoses/year •90,000 deaths/year; 80%-90% attributable to smoking

Source: Centers for Disease Control and Prevention. Lung Cancer Profile. http://www.cdc.gov/features/lungcancer/. Accessed October 2010.

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Southeast Michigan Beacon Community Collaborative (SEMBC)

- Vulnerable Population
  - Detroit, Highland Park, Hamtramck, Dearborn, Dearborn Heights
  - Population Flight
  - Physician Flight
- Considerations
  - Unemployed
  - Uninsured
  - Limited access to healthcare

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SEMBC: Part of a Health Care Quality Revolution

- Guiding Principles:
  - Building and strengthening health IT infrastructure and exchange
  - Driving measureable improvements in cost, quality, and population health
  - Testing innovative, evidence-gathering approaches to improve health care performance measurement, technology integration, and delivery

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We've been busy.

We still have a lot of work to do . . .

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SEMBC Target Goals and Measures

1. A 5% increase in the proportion of diabetic patients who receive standard recommended testing and examinations
2. A 5% reduction in the proportion of non-urgent Emergency Department utilization among diabetic patients.
3. A 5% reduction in the proportion of diabetic patients having disparity ratios for quality of care and population health measure disparities related to gender, insurer, or race.

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SEMBC Interventions

Physician data reporting and performance feedback
- Establish a network of physicians who are committed to process change and data exchange.

Care Coordination – Ambulatory
•Utilization of patient navigators to help patients adhere to treatment plans.

Clinical Decision Support
- Targeted alerts, reminders, and decision support information.

Care Coordination – Hospital Emergency Departments
•Partnerships with ED that helps identify, treat, and coordinate care of diabetic patients.

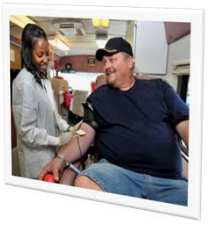
Patient Engagement
- Partnerships with community and faith-based organizations that extend the reach of SEMBC.

Telehealth
- Use mobile and other messaging options to identify diabetes within the SEMBC.

Clinical Transformation

Clinical Transformation

- Objective
  - Achieve a 5% increase in standard testing among diabetics at SEMBC-affiliated practices
  - High impact measures include
    - A1c testing
    - LDL-C testing
    - Eye Exams
    - Foot Exams
    - Blood pressure <140/90



Clinical Transformation Components

CT Participation and Outreach

Key Participants/Activities
46 SEMBC-Affiliated Practice Sites -FQHC 22 -Private Practice 24
123 SEMBC-Affiliated Physicians -FQHC 68 -Private Practice 55
4 Emergency Departments
7 Patient Health Navigators
29 Community/Faith Based Events

Patient Engagement

Ambulatory Care	Through 9/17/12
Total Patients: All Practices	183,599
Total Diabetic Patients	22,590
Patients Referred to Patient Health Navigator	1,298

Ambulatory Care
Practice Update

- **ALL** intervention practices have implemented some form of Clinical Decision Support tool
- **ALL** practices: enrolled in MCEITA
- **76/123** physicians: registered for Medicare/Medicaid Meaningful Use incentives
- Engaging practices beyond clinical transformation in IT integration as HIE is closer to implementation

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Patient Health Navigators

Activity	Participation Rates Through 9/14/12
Patients **REFERRED**	1,576 Target: 1,700
Patients **ENGAGED**	46% 732 of 1,576
Patients **DECLINED** •Inaccurate contact info. •Denial of presence of disease •Unable to reach by phone or mail	33% 520 of 1,576

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Early Results: By the Numbers

- Compared to baseline measures, Q1 2012 (the first quarter of CT intervention activity), High Impact Clinical Measures are encouraging; diabetic patients . . .
  - who received foot exams increased **29%**
  - who received LDL-C tests increased **5%**
  - who had A1c testing increased **5%**
  - with blood pressure readings <140/90 increased **6%**

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Emergency Department Intervention

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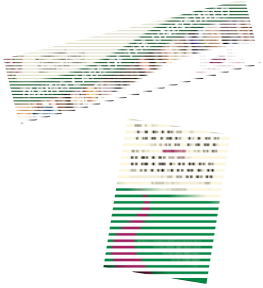
Safety Net Integration: PCP & ED

- Ongoing and active work with FQHCs
  - Direct patients with no medical home to FQHCs
  - Strategies for increased access
  - Patient Health Navigator support



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ED Intervention Background

- Objective
  - Identify and engage diabetics sooner rather than later
- Strategy
  - Work with local EDs to identify previously undiagnosed diabetics and pre-diabetics and direct them to an appropriate care setting

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Intervention Design

- Based on initiative that was started at Detroit Receiving Hospital
- Enhanced by
  - Increased accessibility
  - Linkage to primary care
  - Community-wide expansion

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Participating EDs

- Detroit Receiving Hospital
  - Point-of-care testing
  - Active: February 12, 2012
- St. John Hospital
  - Post ED visit data analysis
  - Active: March, 2012
- Henry Ford Hospital
  - Point-of-care testing
  - Active: July 1, 2012
- Sinai Grace Hospital
  - Q4 2012

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Participating EDs

- On site point of care process for non-acute patients
  - Simple screening process
  - Based on results
    - Patient education classes
    - Patient Health Navigator support
    - Access to primary care
    - Referral to endocrinology clinic
    - Txt4health

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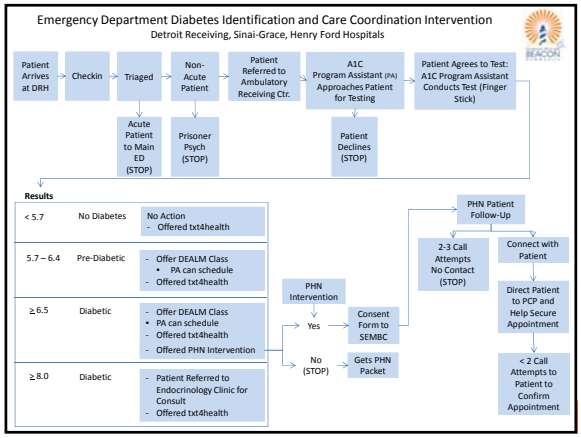

Preliminary Results

Non-Diagnosed Diabetics and Pre-Diabetics

	DMC Detroit Receiving Hospital		Henry Ford Health System		St John Health
	2/1/12 – 7/15/12		7/2/12-7/16/12		3/25/12 -7/15/12 (PHN referral)
# Eligible Patients	11,354		469		n/a
# Patients Tested	5,078	45.2%	199	42%	n/a
Pre-Diabetic (A1c 5.7-6.4)	1,481	29%	58	29%	n/a
Diabetic (A1c > 6.5)	315	6.1%	15	7.5%	n/a
PHN referrals from diabetic population	207	66%	6	40%	165

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Plus. . .

- Launching BeaconLink2Health
  - Groundbreaking Health Information Exchange
  - One hospital system and five pilot practices scheduled to launch early in Q4
- Ongoing support and promotion of txt4health
  - Beacon-affiliated practices and ED partners
  - Partner integration and community events
  - Launching program evaluation

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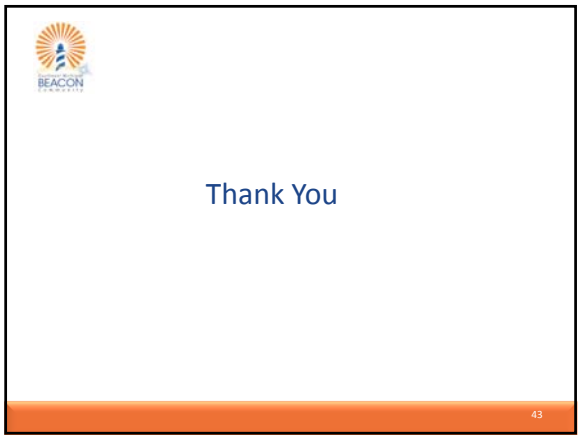
Thank You
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