Today’s Agenda

Welcome and Program Overview
Noreen Clark, PhD, Director, National Program Office, Alliance to Reduce Disparities in Diabetes

Introduction of Panelists
Jeffrey Levi, PhD
Executive Director, Trust for America’s Health

Panelist Presentations
Alliance Site Leaders

Discussion – How Alliance Sites Are Reducing Disparities in Diabetes and Using Local Experience to Inform Policy
Panelists

Q&A with Panelists
Moderated by Jeffrey Levi, PhD

Concluding Remarks
Noreen Clark, PhD
Today’s Panel

**Moderated by Jeffrey Levi**, PhD, Executive Director, Trust for America’s Health

Panelists:

- **Jeffrey Brenner**, MD, Executive Director, Camden Coalition of Healthcare Providers

- **Marshall Chin**, MD, MPH, FACP, Professor of Medicine, University of Chicago

- **James Walton**, DO, MBA, Vice President Network Performance, Baylor Quality Alliance, Baylor Health Care System
The Obstacles to Accessing Critical Health Data and Ways to Remove Them

Jeffrey Brenner, MD
Executive Director
Camden Coalition of Healthcare Providers
Camden Health Data

- 2002 – 2010 with Lourdes, Cooper, Virtua data
  - 500,000+ records with 98,000 patients
  - 50% population use ER/hospital in one year
- Leading ED/hospital utilizers citywide
  - 324 visits in 5 years
  - 113 visits in 1 year
- Total revenue to hospitals for Camden residents $100 million per year
  - Most expensive patient $3.5 million
  - 30% costs = 1% patients
  - 80% costs = 13% patients
  - 90% costs = 20% patients
## Top 10 ER Diagnosis 2002-2007 (317,791 visits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Diagnosis</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>465.9</td>
<td>ACUTE UPPER RESPIRATORY INFECTION (head cold)</td>
<td>12,549</td>
</tr>
<tr>
<td>382.9</td>
<td>OTITIS MEDIA NOS (ear infx)</td>
<td>7,638</td>
</tr>
<tr>
<td>079.99</td>
<td>VIRAL INFECTION NOS</td>
<td>7,577</td>
</tr>
<tr>
<td>462</td>
<td>ACUTE PHARYNGITIS (sore throat)</td>
<td>6,195</td>
</tr>
<tr>
<td>493.92</td>
<td>ASTHMA NOS W/ EXACER</td>
<td>5,393</td>
</tr>
<tr>
<td>558.9</td>
<td>NONINF GASTROENTERI (stomach virus)</td>
<td>5,037</td>
</tr>
<tr>
<td>789.09</td>
<td>ABDOMINAL PAIN-SITE NEC</td>
<td>4,773</td>
</tr>
<tr>
<td>780.6</td>
<td>FEVER</td>
<td>4,219</td>
</tr>
<tr>
<td>786.59</td>
<td>CHEST PAIN NEC</td>
<td>3,711</td>
</tr>
<tr>
<td>784.0</td>
<td>HEADACHE</td>
<td>3,248</td>
</tr>
</tbody>
</table>
Healthcare Cost Hotspots in Camden, NJ (Jan 2002-June 2008)

High Cost Buildings...

Northgate II
3,901 visits, 615 patients
$83 million in charges
($21,000 per visit)
$12 million in receipts
15% collection rate

Abigail House
1,414 visits, 332 patients
$92 million in charges
($65,000 per visit)
$15 million in receipts
16% collection rate

Overview of High Cost Hotspots...

Map includes only blocks with at least 1 visit

Receipts

- 37%

Visits

- 27%

Patients

- 18%

Area

- 10%

Blocks

- 6%

Source: Cooper, Lourdes, and Virtua Hospital and ER billing data
Jan 2002-June 2008

Camden Coalition of Healthcare Providers
www.camdenhealth.org
Trenton Health Team
Hospital Utilization Analysis
St Francis and Capital Health
2010 - 2011

Trenton Housing Authority
237 Oakland St
1,354 episodes

Providence Nursing & Rehabilitation Center
439 Bellevue Ave
1,174 episodes

Rowan Tower
620 W State St
1,065 episodes

Luther Towers
489 W State St
1,351 episodes

333 W State St
1,042 episodes

Rescue Mission of Trenton
98 Carroll St
2,313 episodes

Trent Center West
465 Greenwood Ave
1,335 episodes

Trenton Housing Authority
237 Oakland St
1,354 episodes

Royal Health Gate Nursing & Rehab
1314 Brunswick Ave
1,834 episodes

Trenton Center Apartments
511 Greenwood Ave
1,700 episodes

Camden Coalition of Healthcare Providers
www.camdenhealth.org
Newark Beth Israel Hotspot Analysis (2010)

**Total Costs per Census Block (deciles)**
- $0
- $1 - $1,097
- $1,098 - $4,595
- $4,956 - $10,700
- $10,701 - $18,685
- $18,686 - $31,353
- $31,354 - $54,230
- $54,231 - $86,719
- $86,720 - $167,531
- $167,532 - $1,793,955

**Hotspot** (> $200k in receipts and >50 patients)

**Mt Vernon and Manor Dr High Rises** (4 Buildings)
- 272 Patients
- 379 ER & Inpatient Visits
- $1.11 million in receipts

**Elizabeth Ave High Rises** (6 Buildings)
- 774 Patients
- 1,390 ER & Inpatient Visits
- $2.0 million in receipts

**Total Receipts by Zip Code**
- 07112: $26,079,842
- 07108: $16,353,538
- 07109: $14,181,310
- 07106: $11,784,444
- 07114: $7,022,224
- 07114: $6,440,656
- 07107: $5,194,532
- 07105: $5,496,100
- 07102: $4,106,627

**1060 Broad St**
- (1 Building)
- 87 Patients
- 198 ER & Inpatient Visits
- $993 thousand in receipts
What is a hot spot?
A hot spot is any geography where a large number of high utilizers reside. High Utilizers are defined as any individual with 3 or more hospital admissions or 6 or more ER visits within 2 years. Hot spots range from blue (no hot spot) to red (intense hot spot).
# Comparing Emergency Room High Utilizers in Camden, Trenton, and Newark

<table>
<thead>
<tr>
<th>Emergency Department High Utilizers</th>
<th>Top 1% 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Camden</strong></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>386</td>
</tr>
<tr>
<td>Visits</td>
<td>5169</td>
</tr>
<tr>
<td>Visits/Patient</td>
<td>13.4</td>
</tr>
<tr>
<td>% visiting more than one hospital</td>
<td>80.6%</td>
</tr>
<tr>
<td><strong>Trenton</strong></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>504</td>
</tr>
<tr>
<td>Visits</td>
<td>7616</td>
</tr>
<tr>
<td>Visits/Patient</td>
<td>15.1</td>
</tr>
<tr>
<td>% visiting more than one hospital</td>
<td>78.2%</td>
</tr>
<tr>
<td><strong>Newark</strong></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>928</td>
</tr>
<tr>
<td>Visits</td>
<td>14367</td>
</tr>
<tr>
<td>Visits/Patient</td>
<td>15.5</td>
</tr>
<tr>
<td>% visiting more than one hospital</td>
<td>71.1%</td>
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</tbody>
</table>
Tackling Diabetes Disparities on the South Side of Chicago Using Integrated, Team-based Care and Community Partnerships

Marshall Chin, MD, MPH, FACP
Professor of Medicine
University of Chicago
Tackling Racial/Ethnic Disparities in Diabetes Care and Outcomes on the South Side of Chicago

Marshall H. Chin, MD, MPH
Professor of Medicine
The University of Chicago
South Side of Chicago

• **Challenges:**
  – Poverty
  – Social challenges
  – Food deserts
  – Unsafe recreation
  – Mistrust of healthcare
  – Weakened hospital safety net

• **Strengths**
  – Historical social, political and cultural traditions
  – Community resources and institutions
  – Healthcare institutions
Early Lessons From An Initiative On Chicago’s South Side To Reduce Disparities In Diabetes Care And Outcomes

ABSTRACT
Interventions to improve health outcomes among patients with diabetes, especially racial or ethnic minorities, must address the multiple factors that make this disease so pernicious. We describe an intervention on the South Side of Chicago—a largely low-income, African American community—that integrates the strengths of health systems, patients, and communities to reduce disparities in diabetes care and outcomes. We report preliminary findings, such as improved diabetes care and diabetes control, and we discuss lessons learned to date. Our initiative neatly aligns with, and can inform the implementation of, the accountable care organization—a delivery system reform in which groups of providers take responsibility for improving the health of a defined population.

Racial and ethnic disparities in diabetes care and outcomes arise from multiple causes. These include differential access to high-quality health care, healthy food, and opportunities for safe recreation; cultural traditions regarding cooking; beliefs about disease and self-management; distrust of medical care providers; and socioeconomic status. Consequently, the solution must be multifactorial. Improving patients’ knowledge and increasing their motivation to make healthy lifestyle changes will have minimal impact if their limited access to healthy food and physical activity is not simultaneously addressed.

To date, few interventions have taken a multifaceted approach to improving outcomes among and practice are encouraging greater interaction and collaboration among health care providers and communities. One driver of this collaboration is the creation of accountable care organizations, as authorized under the Affordable Care Act of 2010. Accountable care organizations are likely to have financial incentives to take responsibility for broad health care outcomes and costs for a defined population. Thus, accountable care organizations are potentially motivated to prioritize evidence-based prevention strategies that build on community resources and create a continuum of care from community settings to health care systems.

Racial or ethnic minorities are disproportionately represented among high-risk patients with complex medical conditions. Thus, accountable...
Conceptual Model

The Chronic Care Model

Community Partnerships | Quality Improvement

Community | Health Systems

Patient | Practice Team

Patient Activation | Provider Training

Productive Interactions
Integrating Patient Education and Community Partnerships

• “The [food pantry] helps, because it is healthy. I might be running short, and then they kind of fill in, so it all fits in together, it works perfectly…KLEO is there as a community thing and I wouldn’t have known anything about it if it wasn’t for the class. It’s a wonderful thing to know you’re on the right track, that what you’re doing is working. I’m doing what I’m supposed to do, and I’m going to continue.”
Findings

- Culturally tailored patient classes can improve outcomes
- Organizations can change
- People are enthusiastic about the initiative
- It’s a gradual process
Challenges

• Integrated health care – community approaches are not incentivized
  – Variable buy-in from senior management
  – Minimal business case from clinic perspective

• Team-based care not incentivized in fee-for-service world

• Working out non-traditional collaborations when few models exist
Challenges 2

- Need basic quality improvement infrastructure and buy-in as starting point
- Community relationship building
  - Alignment of missions; trust; time
- How to integrate so not stand-alone interventions – linkage to health care system
  - Monthly food pantries
- Role of city evolving
  - Chicago Department of Public Health
Suggestions

• Establish financial incentives
  – Caring for a population – ACOs
  – Attention outside the clinic – global payments, bundled payments
  – Performance incentives to reduce disparities
  – Team-based care
  – Community health workers

• Convene stakeholders

• Give technical assistance – e.g. QI, introduction to integrated care models

• Promote message that integrating health care and community approaches is essential
Community Health Workers and Ways to Overcome Scope of Practice Barriers

James Walton, DO, MBA
Vice President Network Performance
Baylor Quality Alliance
Baylor Health Care System
Merck Alliance to Reduce Disparities in Diabetes Webinar

Jim Walton, DO, MBA

July 9, 2012
Diabetes Equity Project:

- Primary Goals
  - Support Dallas County physicians - providing a standard approach to diabetes self-management training & advocacy for diabetic patients experiencing disparities in care and outcomes.
  - Expand the role of Community Health Workers within a health care system to include a chronic disease management support function.

http://www.youtube.com/watch?v=jYr2IkB0UZc
Diabetes Equity Project

The Intervention

• Patient Relationship Expansion
  ➢ Community Diabetes Education Program (CoDE™)
  ➢ One-on-One format - Up to 7 patient contacts per year
  ➢ Culturally competent, relationship-based program delivery
  ➢ Treatment adherence & disease control troubleshooting

• Knowledge Transfer Expansion
  ➢ AADE’s 7 Self-Care Behavior Education

• System Expansion
  ➢ Community Health Worker Role Expansion
  ➢ Disease registry management – Targeted patient recall (VIPs)
  ➢ Regular physician reporting – Fax, Scanned, HIE (future)
Dallas County:

- 9th largest in U.S. (Pop. - 2,307,502)
  - Hispanics = 37%
  - AAs = 20%
  - Whites = 37%
- 27.8% Uninsured Rate (National-15.9%)
- 40.4% Medically Indigent (< 200% fpl) = 932,231 people
  - 270,346 (29%) - Medicaid/CHIP
  - 661,885 (71%) - Uninsured
CHWs augmenting traditional primary medical care

## Critical Success Factors

- **System commitment to improve quality/equity**
- **System commitment to CHW development**
  - Robust initial and ongoing training
  - Career paths
- **Medical Home and System recognition of CHW benefit**
  - Dedicated diabetes registry linked to PCP
  - Communicates output of CHW/patient encounters
  - Measures clinical outcomes
  - Intentional communication of program outcomes (clinical, patient satisfaction, utilization) to all stakeholders
  - Aligned financial incentives to utilize CHWs
Surveillance Outcomes
Baylor Community Care
Diabetes Equity Project: All Programs
Percent of Patients with A1c < 7 by Fiscal Year

<table>
<thead>
<tr>
<th></th>
<th>FY'10 (Oct'09-Jun'10)</th>
<th>FY'11 (Jul'10-Jun'11)</th>
<th>FY'12 YTD (Jul'11 - Mar'12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Total</td>
<td>43.2%</td>
<td>45.8%</td>
<td>49.9%</td>
</tr>
<tr>
<td>n</td>
<td>347</td>
<td>751</td>
<td>728</td>
</tr>
</tbody>
</table>

*Note: Data obtained from DiaWeb diabetes management software. Includes patients with two or more A1c measurements within the applicable timeframe, evaluating the most recent measurement. Includes all program types (DEP, CoDE, Non-Research, etc.).

The State of Health Care Quality 2011: Good Glycemic Control HbA1c <7% for Commercial HMO (2010) = 42.5%
DEP Outcomes: A1c > 9%

Baylor Community Care
Diabetes Equity Project: All Programs
Percent of Patients with A1c > 9 by Fiscal Year

- **FY'10 (Oct'09-Jun'10)**: 20.5%
- **FY'11 (Jul'10-Jun'11)**: 11.2%
- **FY'12 YTD (Jul'11 - Mar'12)**: 12.6%

<table>
<thead>
<tr>
<th>Program Total</th>
<th>FY'10 (Oct'09-Jun'10)</th>
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The State of Health Care Quality 2011: Poor Glycemic Control HbA1c >9% for Commercial HMO (2010) = 27.3%
Baylor Community Care
Diabetes Equity Project: All Programs
Percent of Patients with BP < 130/80 by Fiscal Year

The State of Health Care Quality 2011: Blood Pressure Control (<130/80 mm HG) Commercial HMO (2010) = 33.9%

*Note: Data obtained from DiaWeb diabetes managements software. Includes patients with two or more BP measurements within the applicable timeframe, evaluating the most recent measurement. Includes all program types (DEP, CoDE, Non-Research, etc.) © 2009 Baylor Health Care System
Diabetes Equity Project:
Mean of Hemoglobin A1c by Visit
Year 1 Patients (At Least 2 Visits)
DiaWeb Data: October 2009 – March 2012

<table>
<thead>
<tr>
<th>Visit</th>
<th>A1c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit 1</td>
<td>8.4</td>
</tr>
<tr>
<td>Visit 4</td>
<td>7.2</td>
</tr>
<tr>
<td>Visit 5</td>
<td>7.3</td>
</tr>
<tr>
<td>Visit 6</td>
<td>7.1</td>
</tr>
<tr>
<td>Visit 7</td>
<td>7.1</td>
</tr>
<tr>
<td>Endpoint</td>
<td>7.3</td>
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PCMH-supported Population Management

- Physician-led, CHW-delivered chronic disease management protocols and pathways support

<table>
<thead>
<tr>
<th>Critical Success Factors</th>
<th>Policy Needs</th>
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<tbody>
<tr>
<td>Physician commitment to reduce disparities</td>
<td>Pay-for-Performance incentives to reduce disparities – improve quality</td>
</tr>
<tr>
<td>System commitment to CHW development</td>
<td>Health Care System subsidy to recruit, train, and deploy CHWs</td>
</tr>
<tr>
<td>System/Medical Home recognition of CHW benefit</td>
<td>Care Coordination payments for utilizing CHWs</td>
</tr>
<tr>
<td></td>
<td>• Existing E&amp;M codes 96150-96155</td>
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</table>
Discussion – How Alliance Sites Are Reducing Disparities in Diabetes and Using Local Experience to Inform Policy

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Director, National Program Office,
Alliance to Reduce Disparities in Diabetes
Center for Managing Chronic Disease,
University of Michigan
Connect with the Alliance

**Website:**
[alliancefordiabetes.org](http://alliancefordiabetes.org)

**Facebook:**
Alliance to Reduce Disparities in Diabetes

**Twitter:**
@arddd_diabetes
Overcoming Barriers to Reducing Diabetes Disparities in Communities: Lessons from the Local Experience

July 9, 2012
12-1 pm ET

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