A Coordinated Community-Based Approach to Reducing the Burden of Asthma

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Capital Region

Suburban, Rural and Urban areas

- Population
  - County: 155,000
  - City: 66,000
  - High population density

- Disparities
  - Guyanese: 8,000 city residents
    - 30% Type 2 diabetes

- Unemployment: 7.4%

- Poverty: 18% of children under 18
  - Some zip codes as high as 40%

- Obesity: 33% of county residents obese
Policy, System and Environmental Changes
Partnerships to Improve Community Health Grant

Community and Clinical Linkages

Partnerships to Improve Community Health Racial and Ethnic Disparities: Guyanese – Type 2 Diabetes
Equality doesn't mean Equity
Partnership at its BEST

Ellis Medicine

Schenectady County
New York

Capital District Tobacco-Free Coalition

Smoke-Free Housing
Change is in the air.

Asthma Coalition of the Capital Region
Community Health Improvement Plan

• Schenectady Coalition for a Healthy Community

• CHA/CHIP – 2013

• Prevention Agenda Priority – Asthma and Smoking
• Spring 2013
• Face to face - door to door Survey
• Trained Community Health Workers
• 2,200 surveys
• 283 questions
• Neighborhood, Street level data
Asthma

20% told by a health professional they have asthma

ED use 1,000 asthma visits - 2013

Total cost $2 million

Smoking

52.8% smoked at least 100 cigarettes in lifetime

37% of adults are current smokers
Age-adjusted Asthma ED Visit Rate per 10,000, NYS, excl. NYC, and Schenectady County, 2005-2013

<table>
<thead>
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<th>Year</th>
<th>Schenectady</th>
<th>NYS excl. NYC</th>
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<td>52.8</td>
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<td>2006</td>
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<td>2008</td>
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<td>2010</td>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>74.8</td>
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County Health Rankings & Roadmaps

- Coaching –
  - Roadmaps to Health Action Awardee

- Community Engagement – Building Capacity

- Data supporting PH Focus

- Generates a Community Conversation
Clinical Community Linkages
Addressing Asthma

• Evidence Based Approach
  Boston Children’s Hospital

• Capacity
  Existing Programs at Ellis and SCPHS

• Funding - Private Public Partnerships
  NYS Health Foundation
  The Schenectady Foundation, GE, MVP
Schenectady Asthma Support Collaborative

• Established team
• Roles
  – Public Health
    • Facilitator / Convener
    • Grant writer
    • Community Linkages
    • Home visiting programs
    • Public Health lens
  – Healthcare Organization
    • Clinical expertise
    • LEAN process improvement
    • Care Management
    • Asthma Care Management Program
Three – Pronged Approach

• Care Central

• Asthma Education

• Healthy Neighborhoods
SASC Process

1. Acquire Asthma Patients in ED
2. Enroll them in Care Central
3. Assign to Care Manager

- PH Nurse Home Visit
- Enroll in Asthma Education Program
LEAN Process Improvement
Ellis Care Central

- Embedded Care Manager into ED
- Consent into program
- Dual referrals
- Address barriers
Ellis Asthma Education Program

ED Visits and Hospital Admission by 83%
SCPHS Healthy Neighborhoods Program

Home Visits, Re-visits
Public Health Nurse
Reinforce education, skill mastery
Working Together

- Bi-directional referrals

- **Case conferencing**

- Refer out to other CBO’s

- Care Management – other issues – mental health, insurance, PCP, transportation, literacy, language

- **Course corrections as needed**
SASC Participants Poorly Managed Asthma, and Were Primarily on Medicaid

Baseline Symptom Management (N=65)

- Coughing: 77%
- Shortness of Breath Symptoms Experienced at least Once a Day: 71%
- Wheezing: 64%
- Chest Tightness: 54%

Race:
- Black: 50
- White: 24
- Hispanic: 2
- Unknown: 14

Age of Participants:
- Pediatric (0-17): 23
- Senior (65+): 3
- Adult (18-64): 44

Payer Mix:
- Medicaid: 44
- Medicare: 8
- Commercial: 8
- Self Pay: 8
- Medicaid & Medicare: 8
Program Utilization Within Two Months of Consent

- Seen in ED: 87
- Consented: 68
- Consented, on study for 2 months: 57
- Asthma Education or Healthy Neighborhoods: 26
- Asthma Education & Healthy Neighborhoods: 13

*Group analyzed for attrition analysis*
Comorbidities

• A single comorbidity increased the likelihood of completing the program.

• Those diagnosed with asthma as a child (<18 years old) were less likely to participate.
Systemic Problems Identified

- Medication upon leaving ED
- Significant delay in obtaining PCP appointment
- Patient engagement
- Transportation
- Reliance upon ED
Opportunities to Improve

• IT system to share data – EMR improvements

• Asthma Care – EMR access

• Incorporate IT mechanism feedback to PCP

• Workforce – More CAE’s needed

• PCP Care Managers trained
Moving Forward Together

Gaining momentum: Community and Clinical Linkages

- Asthma, Diabetes, Hypertension

Sustainability - DSRIP goal alignment

Health Equity, Reducing Disparities, Community Engagement
Contact Information

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