Howard County Community Integrated Medical Home Model

Program and Initiatives
Community Integrated Medical Home

• Utilizes population health strategies to decrease preventable hospital readmissions
• Partnership with The Horizon Foundation, Howard County Health Department, Healthy Howard, and Howard County General Hospital
• Based on principles of the State Innovation Models (SIM) program
Essential Components

- Strategic use of data - hotspotting data analysis
- Community Care Team
- Transforming Primary Care Practices
CIMH Model’s Beginning

• SIM work group meetings
• The Horizon Foundation work with the Camden Coalition and Howard County General Hospital to map out “hot spots” of high health care utilization
• Grant opportunity through the Community Health Resources Commission to support enhancement of the Local Health Improvement Coalition (LHIC) as the hub for data and community involvement
• CHRC support of Advanced Primary Care Practice
### Hot-spotting Analysis

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Early Stage High Utilizers</th>
<th>High Utilizers</th>
<th>Extreme High Utilizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median IP Visits (year)</td>
<td>2012</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Median ED Visits (year)</td>
<td>2012</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Unique Patients</td>
<td>2012</td>
<td>1,229</td>
<td>322</td>
<td>61</td>
</tr>
<tr>
<td>Total Charges</td>
<td>2012</td>
<td>$29,330,377</td>
<td>$15,541,161</td>
<td>$4,591,567</td>
</tr>
<tr>
<td>% of Total Unique Patients</td>
<td>2012</td>
<td>3.18%</td>
<td>0.83%</td>
<td>0.16%</td>
</tr>
<tr>
<td>Charges (% Total)</td>
<td>2012</td>
<td>19.28%</td>
<td>10.21%</td>
<td>3.02%</td>
</tr>
<tr>
<td>Median Total Charges Per Patient</td>
<td>2012</td>
<td>$18,761</td>
<td>$38,466</td>
<td>$69,214</td>
</tr>
<tr>
<td>% ED Avoidable</td>
<td>2012</td>
<td>5%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>% ED Mental Health/Substance Use</td>
<td>2012</td>
<td>23%</td>
<td>33%</td>
<td>54%</td>
</tr>
<tr>
<td>% IP 0-60 Day Readmissions</td>
<td>2012</td>
<td>29%</td>
<td>48%</td>
<td>67%</td>
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</tbody>
</table>
Potential Savings

Extreme High Utilizers

High Utilizers

Early Stage High Utilizers

61
$610,000

322
$3,220,000

1,229
$12,290,000
Community-Integrated Medical Home Model

Wrap-Around Community Supports
- Community-Based Clinical Care Coordination
- Behavioral Health Coordination
- Public Health Interventions
- Social Services

Primary Care Based Delivery Reform Model
- PCMH
- Medicare ACO
- Medicaid Health Homes
- FQHC

Shared data (LHIC)
Role of Community Care Team (CCT)

• **Goal**
  To reduce unnecessary hospitalizations among Howard County’s high-utilizers by delivering cost-effective community interventions

• **Rationale**
  Costs to treat high-utilizers represent a disproportionate amount of the County’s health care costs
  Patients who are connected with primary care receive better coordinated care
  Closing the communication gap between hospital and outpatient providers leads to less fragmented care
CCT Intervention

• Provide hands-on transitional care coordination at time of discharge
• Connect clients with primary care and other health care providers
• Provide in-home medication reconciliation and chronic disease management education
• Coordinate transportation to and from appointments as needed
• Connect with community services and assist with other social service needs
• Facilitate client’s ability to manage their health conditions on their own
Role of Howard County General Hospital

• Provide hospital admissions and discharge data.
• Electronic Health Record (EHR): HCGH generates daily reports using its EHR. Reports identify patients eligible for the CCT.
• Case Management: Case managers are sent EHR reports and review the patient’s medical record to assess and confirm patient eligibility criteria. Case managers refer eligible patients to the CCT.
• Data Analysis: HCGH staff partnered with CCT members to better understand HCGH readmission patterns (i.e. diagnoses, by unit, by discharge disposition).
Advanced Primary Care Pilot Program

• **Goal**
  o Promote primary care practice redesign across Howard County to implement principles of patient-centered care

• **Rationale**
  o Lack of follow-up among patients can lead to poor outcomes and unnecessary hospitalizations

• **Expected Outcomes**
  o Improved care coordination and care transitions
  o Better patient outcomes and management of chronic conditions
  o Fewer preventable hospitalizations
Advanced Primary Care Pilot Program

• Components
  o Maryland Healthcare Innovations Collaborative provides onsite and group learning

• Integration with Community Care Team

• Utilizing CRISP to identify high utilizers of inpatient and emergency department care

• Three practices
  o Large, small, and FQHC
Role of LHIC in CIMH

• Serve as hub for Howard County health data
  o Comprehensive database for health-related Howard County data
    • Howard County Health Assessment Survey
    • Hospital admissions/ED Use
    • Vital Statistics

• Make recommendations and identify gaps in services

• Engage the community in improving the quality and length of life of Howard County residents
CCT Outcomes - 54 Participants

<table>
<thead>
<tr>
<th>Metric</th>
<th>Percent</th>
<th>Goal</th>
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</thead>
<tbody>
<tr>
<td>Clients with a Care Plan Created at First Home Visit</td>
<td>92%</td>
<td>100%</td>
</tr>
<tr>
<td>Clients with an Initial PCP Visit within 7 days of Hospital Discharge</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>Clients with an Initial Home Visit within Three Days Post-Discharge</td>
<td>55%</td>
<td>60%</td>
</tr>
<tr>
<td>Clients Successfully Graduating</td>
<td>86%</td>
<td>70%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metric</th>
<th>Average Time</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Days until Graduation</td>
<td>82</td>
<td>90 days</td>
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CCT Successes

• Developed relationships to coordinate complex program
• Built trust and received input from community stakeholders from the outset
• Access to hospital data (EPIC Care Link) process was developed for CCT to access patient data
• Use of technology to receive referrals and follow client post intervention (Real-time CRISP notifications for enrolled clients); Track Via database to collect and analyze program data
• Evaluation built in from the outset
• Flexibility among partners to adapt the pilot as lessons are learned
Other HCGH Readmissions Initiatives

• Pharmacy Medication List Review
  – Hospital pilot using pharmacy residents to review patient medication lists of patients admitted to HCGH.

• Discharge Specific Condition Pathways
  – EHR discharge summary templates for conditions that comprise a large percentage of HCGH readmissions: Sepsis, Pneumonia, CHF

• Evaluating Multidisciplinary Rounds
  – Restructuring rounds with a focus on family and patient centered care

• Redesigning social work and case management departments
  – Using Lean methodologies to better understand and determine necessary resources for departments
Final Thoughts