Securing Sustainable Funding for Asthma Home Visits

Great Lakes Regional Asthma Summit
June 9, 2016

Kim Tierney, Program Supervisor
Healthy Homes Asthma Program
Maternal Child and Family Health
Multnomah County Health Department
2005 HUD Demonstration Grant - Healthy Homes Asthma Program - Six month nursing case management program serving low income children with asthma. The nurse serves as the case manager and community health worker provides environmental interventions. Both refer and link to community services. Program is largely funded through Targeted Case Management through Medicaid.

2009 Asthma Inspection and Referral Program (AIR) 2009 – One time visit by EHS with report to families and referring providers – funded through county general fund

2009 HUD Healthy Homes Demo Grant – CAIR – Six month program served children with asthma and other environmentally caused health conditions. CAIR program worked with community partners to provide small home repair, access to medical care, and linkages to social services, including relocation. The case manager was a community health worker who referred to a nurse for health care concerns and an EHS for physical home repair. Like Healthy Homes there was a budget for supplies.
Healthy Homes Program

- Multidisciplinary team with a nurse case manager and CHW
- Provision of supplies including vacuum cleaners, green cleaning kits, encasements ( $336)
- Environmental education & behavioral intervention
- Linkage and referral to community partners who assist with weatherization or relocation
- Evaluation component that measures return on investment, cost savings, and quality of life.
Work Flow for Healthy Homes, AIR and CAIR programs

Referral Comes into AIR/CAIR or Healthy Homes

Healthy Homes
185% FPL
Uncontrolled Asthma
Has Medical Provider

Nurse contacts Medical Provider
and makes initial home visit

Community Health Specialist
provides behavioral mgt
and links families to services, 4 visits

HH Nurse provides medical case management for 4 visits over 6 mos.

CAIR Nurse
Provides medical case management for 4 visits over 6 months

CAIR Nurse links family to medical home at MCHD ICS clinic
Manages care plan with provider & client

CAIR Nurse provides medical case management for 4 visits over 6 months

CAIR RS
Determines need for Medical follow up
Referral to CAIR nurse/medical home

CAIR RS
Determines need for Minor remediation, behavioral changes,
RS to follow family for 4 visits over 6 months

CAIR Nurse
Determines need for Physical Remediation
Referral to CAIR EHS and Repair Funds

CAIR RS
Determines need for Physical Remediation
Referral to CAIR EHS and Repair Funds

Out-stationed Remediation Specialists (RS)
conduct Environmental Assessment

EHS provides a summary report to medical provider and family

EHS conducts Environmental Health Assessment

CAIR Community Referral
185% FPL
Health/Housing Issues

Intake determines program

AIR – One time visit. Above 185% FPL
MC resident

Medical programs will conduct additional evaluations.

Pre and Post Assessments will be conducted for CAIR and Healthy Homes at initial and six month visits. Medical programs will conduct additional evaluations.
Out-stationed staff at Community Agencies

Web based referral and data system

Partners to provide home repair

Partners to provide medical homes

Broader health issues than just asthma

Addressed the needs of the whole family

Expanded interventions – Air Quality, Safety, Hazards
Physical Remediation

Portland Housing Bureau-
Portland Development Commission Lead Hazard and Abatement Program
Small Rental Rehab Program
Relocation Program

Multnomah County Weatherization
Community Energy Project
Metro – Green Cleaning Kits

Medical Partners
Multnomah County Health Dept.
ICS Clinics
Lead Prevention Program & Immunization Program

Social Services Partner/ Referring Agencies
Human Solutions
Self Enhancement Inc - SEI
Community Alliance of Tenants – CAT
Impact Northwest
Friendly House
IRCO
Metro Multifamily Housing
Housing Authority of Portland

HUD – City of Portland
Healthy Homes and Lead Hazard Abatement Grant

Advisory Committee-
Healthy Homes Collaborative

Subcontractors -
Human Solutions
Self Enhancement Inc
Out-stationed Remediation Specialist
Structural Components

- Multidisciplinary Team –
  - EHS
  - Community Health Workers
  - Nurse/Asthma Educator
  - Bilingual Staff/Intake Specialist

- Physical Remediation
- Nursing Case Management
- Environmental Assessment and Intervention
- Six month case management program
- Web based database system, charting and mobile access
- Program Evaluation and Return on Investment
- Targeted Case Management Medicaid Reimbursement
- Policy component and strong partnerships
Partnership Success Story

CAIR Program

- Conducted Nursing Case Management. • Provided medical supplies. • Dust containment. • Mold and moisture mitigations, increase ventilation, monitor humidistat. • Childproofing, smoke alarms, and general home safety.

Partner Support:

- OHP Transportation – medical transportation
- Community Warehouse – Replaced moldy household furnishings
- SEI – Energy assistance
- REACH - Physical repair - Replaced kitchen sink drain, bathtub and bath vanity lines. • Replaced old gutter to direct water to front yard. • Replaced foundation vent screens with 1/4" mesh. • Replaced broken vinyl window sash. Replaced window.
Before and After Intervention
Goal: Secure Sustainable Funding for Healthy Homes Interventions

Method:

- To develop a Healthy Homes Targeted Case Management by amending the State Health Plan
- Provide opportunities for other Health Departments to provide this service
PORTLAND, OR 2006-08-10 The Multnomah County Health Department has started a new program to raise awareness about asthma and to help struggling families.

Asthma is becoming increasingly common in the U.S. It's a disease that leaves people wheezing and panting for breath. Those who live in cities are at higher risk, but asthma is growing even faster among minority populations, who often live in older homes and closer to large industrial areas.

Maribel Correa, who moved to the U.S. from Colombia 7 years ago, lives in Northeast Portland with her husband and four kids. Her two youngest have had problems with asthma. Last spring one got sick with a cold.

"It started to fill up his throat and she went to the hospital and they said he had bronchitis, and it had never happened before and she got scared," translates Correa's 11-year-old daughter, Melissa. "They gave her some medicine to give to the kids and in three days it got worse and so she took him to the hospital." Correa says eventually they found out it wasn't bronchitis - it was asthma. Doctors told her that her son's respiration was half the level it should be.
My name is Niima Ramirez. I am 15 yrs old. I live in SE Portland with my mom and my six sisters. My family means everything to me! Four of my sisters have asthma. It is hard for me when I see one of my sisters struggling to catch their breath when they are in an environment where it is not clean.

The healthy home program is a program that has helped us get out of an environment like that. This program has done so much for my family and me.

Throughout this program it has helped us understand the medicines that can help my sisters with the asthma and also the proper way to use chemicals around the house. The kind of chemicals that are less dangerous. Also, the underst

of indoor air quality. The last time I remember being in the emergency room because of one of my sisters was about 5 yrs ago. It all started when we were on our way to the clinic for an appointment to my self. When we arrived, I realized my younger sister had come down with a fever. I remember I carried her into the clinic because she had no strength to hold herself up. When we were in the clinic, they checked me.
Direct Advocacy

Educating and influencing decision makers on public policy.

Investing in Best Practice for Asthma:

A Business Case for Education and Environmental Interventions

Original material written by Polly Hoppin and Molly Jacobs, University of Massachusetts Lowell and Laurie Stillman, Asthma Regional Council of New England. Additions from the Multnomah County Environmental Health Services Healthy Homes Program, Portland, Oregon.
Key steps to sustainable funding

- Research national efforts
- Measure outcomes
- Communicate Return on Investment (ROI)

Convene and enlist support from:
  - Directors of Managed Care Plans
  - Politicians
  - Champion within Medicaid Program

Identify key steps to implementing Targeted Case Management
Key steps to sustainable funding

- Develop a plan and timeline and coordinate monthly meetings with DMAP staff.
- Review other TCM programs
- Analyze policy to determine billable activities
- Submit a State Plan Amendment (SPA) waiver to Center for Medicaid Services
- Implement immediate time study
- Negotiate rate with DMAP
- Begin TCM!
Targeted Case Management (TCM) Implementation

- Develop TCM Chart Forms/Standards
- Develop Billing System
- Develop Workflow
- Quarterly Time Studies
- Evaluate Program
- Audit Charting
- Revise Productivity down
- Revise Costs upward
## Sample Time Study

### Billable Healthy Homes TCM Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1-Direct Client Contact</td>
<td>1.50</td>
<td>0.75</td>
<td>0.75</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2-Support Client Care</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3-Assessment/Re-Assessment</td>
<td>0.25</td>
<td>0.25</td>
<td>1.00</td>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4-Care Plan Development</td>
<td></td>
<td></td>
<td>0.75</td>
<td></td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5-Referral/Linking and Coordination of Services</td>
<td>0.75</td>
<td>0.25</td>
<td>0.50</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6-Monitoring &amp; Follow up</td>
<td>1.50</td>
<td>1.25</td>
<td>1.25</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A7-Reassessment of Status/Need</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A8-Transportation TCM Visits</td>
<td>2.50</td>
<td>1.25</td>
<td>2.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1-Consult with Staff</td>
<td>0.25</td>
<td>0.25</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2-Staff Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3-Referral/Linking and Coordination of Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4-Mgmt of TCM</td>
<td>0.25</td>
<td>1.00</td>
<td>0.50</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Non-Billable Healthy Homes TCM Activities:

- **C1-TCM NON-BILLABLE**: 2.50, 1.75, 1.50, 1.25
- **C2-Transportation (No Show)**: 0.75

### Other Activities - Not HH TCM Related

- **EPA**: 0.50
- **Other (Gen. Fund, Lead, TPEP, etc)**: 0.50

### Non-Working Paid Time

- **Sick Leave**: 0.00, 0.00, 0.00, 0.00
- **Vacation**: 0.00, 0.00, 0.00, 0.00
- **Holiday**: 0.00, 0.00, 0.00, 0.00

### Total Paid Time

- 9.00, 8.00, 8.00, 9.50, 0.00, 0.00, 0.00, 0.00

### Total HH TCM Billable

- 6.00, 6.25, 6.50, 7.50, 0.00, 0.00, 0.00, 0.00

### Percent HH TCM Billable

- 66.7%, 78.1%, 81.3%, 78.9%, 0.0%, 0.0%, 0.0%, 0.0%
Target group: Medicaid eligible children with poorly controlled asthma or a history of environmentally induced respiratory distress which can result in a life threatening asthma exacerbation or exacerbation of respiratory distress.

Risk factors could include, but are not limited to:
- (a) Unscheduled visits for emergency or urgent care;
- (b) One or more in-patient stays;
- (c) History of intubation or Intensive Care Unit care;
- (d) A medication ratio of less than or equal to .33;
- (e) Environmental or psychosocial concerns raised by medical home;
TCM Healthy Home – Description of services

**Comprehensive assessment of individual needs:**

- Taking client history;
- Evaluation of the extent and nature of recipient’s needs (medical, social, educational, housing, environmental, including assessment for risk of lead exposure and existence of second hand smoke and other specified asthma triggers and irritants, and other services) and completing related documentation;
- Gathering information from other sources to complete assessment

**Development of specific care plan**

**Monitoring and follow-up activities**

**Linking/Referral, etc**

**Reassessment**
Healthy Homes TCM– Provider Requirements

- Licensed Registered Nurse
- Registered Environmental Health Specialist,
- Asthma Educator certified by the National Asthma Education and Prevention Program,
- Community Health Worker certified in the Stanford Chronic Disease Self-Management Program, or
- Worker working under the supervision of a licensed Registered Nurse or a registered Environmental Health Specialist.
Demonstrate Return on Investment
Collect Data

- Emergency Room Visits
- Hospitalization
- Medication Ratio – Control to Rescue
- Change in Environmental Scores
- ACT or TRACK Scores
- Quality of Life questions
- Work or School Days lost
Healthy Home Program Results

Cost Savings ED Utilization for 100 children (80 cases + 20 siblings)
- 1.0 visits reduction per child
- 105 prevented visits
- $760*105 = $79,800 (2009 dollars)
- Adjusted for Oregon medical inflation rate (8%) for four years = $108,567 (2013 dollars)

Cost Savings Hospitalization
- (105 visits x 38%) x $8,970 (2010 hospitalization visit cost) = $941,850 (2010 dollars)
- Adjusted for medical inflation rate = $1,281,377 (2013 dollars)

Parental Lost Wages
- $285 per day in lost wages in 2003 dollars with applied inflation at 3.2% = $390 per day x 2.5 days lost per asthmatic child = $976 (2013 dollars)  976 *100 = $97,600

*65 visits x $760 (Center for Financing, Access and Cost Trends, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 2009.)
**Hospitalization admissions per emergency department referral for children 0-5 with an asthma diagnosis are 38% from Multnomah County discharge data
For $941,200, my program will reduce ER visits and hospitalizations by 100% percent for 162 pediatric patients in my community and will generate $923,113 in health cost savings for my community over the next 2 years.

http://www.asthmacommunitynetwork.org/resources/valueproposition
Lessons Learned

- Sicker kids
- Younger kids
- Siblings
- Source of referrals
- Reimbursement per visit/not time increments
- Avoid limits on time in program and # visits
<table>
<thead>
<tr>
<th>PAST AND PRESENT</th>
<th>AFFORDABLE CARE ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee for Service</td>
<td>Capitated System</td>
</tr>
<tr>
<td>Targeted Case Management</td>
<td>Global Budget</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>Performance Metrics</td>
</tr>
<tr>
<td>More visits</td>
<td>Shared data systems</td>
</tr>
<tr>
<td>Less clients</td>
<td>Less visits</td>
</tr>
<tr>
<td>Specialized services</td>
<td>More clients</td>
</tr>
<tr>
<td></td>
<td>More service integration</td>
</tr>
</tbody>
</table>
County Health Department contribute “Match” dollars to State
State sends local and federal match funds to CCO Global Budget
CCO takes 8% Admin
CCO sends funds to County Health Dept.
Capitation? – Per Member Per Month—set amount of $
Outside of Global Budget? – based on caseload, specific for services in SPA
Contract with defined deliverables
Questions and feedback:

Kim Harris Tierney, retired
Kim.H.Tierney@multco.us

Jessica Guernsey, MCFH Director
jessica.guernsey@multco.us
503) 764-6645
http://web.multco.us/health/healthy-housing