Multnomah County Healthy Homes

Business Case for Home Asthma Interventions Colorado Summit

Kim Tierney, Program Supervisor,
Healthy Homes and Families
Multnomah County
Environmental Health

Healthy Homes Program Models:

- 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.

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

"New Program Highlights Household Asthma Triggers"

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.

Media Engagement

Getting your message out to decision makers and the public.

My name is wilma Hamirez I Am 15 vrs Old, I live in SE. portland with mu mom and my six sisters. My family means everything to me! Four of my sisters have asthmax It is hard for me when I see one of my sisters struggleing to catch their breath when they are in omment where it is not olean The healthy home program is a program that has keized us act out enviornment like that. This program done so much for my family and Throughout this program it has helped US linderstand the modicines 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 understa of indoor airquality the last time I remo boing in the emorgency room because of one of my sisters was about 5yrs ago. It all started when we were on our way to the chnic for an appointment to my seif when we arrived I realized my younger sister had come down with a fover remember I carried har into the clinic because she had no strength to hold her self up. When we were in they check me

Public Engagement

Building awareness and support

Davesting in Best Practice for Asthmas

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.

Direct Advocacy

Educating and influencing decision makers on public policy.

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

	6/16/14	6/17/14	6/18/14	6/19/14	6/20/14	6/21/14	6/22/14
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Billable Healthy Homes TCM Activities:							
A1-Direct Client Contact		1.50	0.75	0.50			
A2-Support Client Care		0.25	0.25	0.50			
A3-Assessment/Re-Assessment	0.25	0.25	1.00	1.50			
A4-Care Plan Development	0.25			0.75			
A5-Referral/Linking and Coordination of Services	0.75	0.25	0.50	0.75			
A6-Monitoring & Follow up	1.50	1.25	1.25	0.25			
A7-Reassessment of Status/Need	0.25	0.25		0.25			
A8-Transportation TCM Visits	2.50	1.25		2.75			
B1-Consult with Staff	0.25	0.25	1.25				
B2-Staff Supervision			1.00				
B3-Referral/Linking and Coordination of Services							
B4-Mgmt of TCM	0.25	1.00	0.50	0.25			
Non-Billiable Healthy Homes TCM Acitivities:							
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							
Other (Gen. Fund, Lead, TPEP, etc)	0.50						
Non-Working Paid Time							
Sick Leave							
Vacation							
Holiday							
Total Paid Time	9.00	8.00	8.00	9.50	0.00	0.00	0.00
Total HH TCM Billable	6.00	6.25	6.50	7.50	0.00	0.00	0.00
Percent HH TCM Billable	66.7%	78.1%	81.3%	78.9%	0.0%	0.0%	0.0%

TCM Healthy Home - Risk Criteria

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, 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

- \cdot (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

EPA's Value Proposition

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.

Lessons Learned

- Sicker kids
- Younger kids
- Siblings
- Source of referrals
- Reimbursement per visit/not time increments
- Avoid limits on time in program and # visits



Future Trends

PAST AND PRESENT

- Fee for Service
- Targeted CaseManagement
- Return on Investment
- More visits
- Less clients
- Specialized services

AFFORDABLE CARE ACT

- Capitated System
- Global Budget
- Performance Metrics
- Shared data systems
- Less visits
- More clients
- More service integration

Questions and feedback:

Kim Harris Tierney

Kim.H.Tierney@multco.us

503 988 3663 x 22850

http://web.multco.us/health/healthyhousing