

Snapshot of In-Home Asthma Care Programs: The Path to Reimbursement

This working document, developed for the Northwest Tribal Summit on Improving Outcomes in Children: Securing Sustainable Financing for In-Home Visits, summarizes key components of in-home programs receiving or working to receive reimbursement from public and/or private insurance. It is not a comprehensive list, and reflects current knowledge as well as current stages of pilot programs. As new information is identified, this document will be updated accordingly. The information from this document is derived from multiple sources including CDC's National Asthma Control Program's 'Asthma Self-Management Education and Environmental Management: Approaches to Enhancing Reimbursement,' as well as 'MRT Asthma Background' developed by Amanda Reddy while employed by the NYS Department of Health. Ms. Reddy is currently employed by the National Center for Healthy Housing.

Program Target Population	Public Insurance	Private Insurance	Visit(s) Provided By:	# Visits	Education	Assessment	Remediation (Minor, Moderate, Major)*	Demonstrated Cost Savings/Return on Investment	Outcomes
Asthma Network of West Michigan Children and adults with poorly controlled asthma	Yes -Code 551: Skilled Nursing Visit for RN, RRT, or LMSW	Yes	Registered Nurses, Respiratory Therapists, Certified Asthma Educators	1 to 18	Yes. Participants receive in-home asthma education directed towards overcoming psychosocial barriers to pursuing asthma interventions	Yes. Home visits performed to evaluate current state of environment, state of asthma symptoms, and potential triggers	Minor: Environmental assessments	Savings over time for Medicaid members of \$1.7 million	Reduction in ED visits and hospitalizations and length of hospitalization stays
Maine Health AH! Asthma Program Maine residents with asthma	Yes -S9441: asthma education, non-physician provider, per session	Yes	Certified Asthma Educators	N/A	Yes. Program allows for educational facility visits for participants to learn asthma self-management skills (patients and families, as well as healthcare providers)	No	N/A	Annual savings of \$275,000 in pediatric healthcare costs	Reduction in pediatric ED visits and hospitalizations
Massachusetts (Asthma Prevention and Control Program, Asthma Disparities Initiative, Bundled Payment for Asthma Care) High-risk pediatric asthma patients with uncontrolled asthma	Yes (pending final results of pilot program and grant project)	Yes (pending final results of pilot program and grant project)	Community Health Workers	Varies	Yes. Education provided on how to reduce environmental triggers in the home as well as self-management	Yes. Home visits performed to evaluate current state of environment, state of asthma symptoms, and potential triggers	Minor: Environmental assessments	Data on these results will be available late 2014 pending ending of grant funding period and release of accompanying final report	Data on these results will be available late 2014 pending ending of grant funding period and release of accompanying final report

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Minnesota Department of Health Families of children with asthma	Yes - reimbursement offered for Medication Therapy Management and services provided by Certified Asthma Educators -S9441: services provided by Certified Asthma Educators	Yes	Public Health Nurses, Pharmacists, Certified Asthma Educators	64 families involved in pilot program, 2 visits each	Yes. Families were provided appropriate education materials (brochures, etc.) to limit exposure to allergens and asthma-provoking environmental triggers	Yes. Home visits performed to evaluate current state of environment, state of asthma symptoms, and potential triggers	Minor to moderate: most commonly used interventions were HEPA air cleaners, pillow and bed dust encasements, and HEPA vacuum cleaners	\$1960/patient over 12-month period	Statistically significant decline in unscheduled office visits, use of oral prednisone, number of school days missed; statistically significant improvement in daytime symptom and functional limitation scores
Multnomah County (Oregon) Healthy Homes Collaborative Children from low-income families with poorly-controlled asthma (recent hospitalization)	Yes - T1017: Targeted Case Management	No	Team of case managers (Registered Nurse, registered EHS, Certified Asthma Educators) and Community Health Workers	Approx. 7	Yes. Educational services provided as part of the program	Yes. Home visits included assessment of environment and asthma conditions, as well as review of medications and asthma actions plans	Moderate: families given HEPA filters and vacuums, pillow and bed dust encasements, and other supplies to reduce environmental triggers	\$350,000 in savings from avoided health care utilization	Statistically significant reduction in hospitalizations of children who have completed the program; significant reduction in observed environmental triggers in participating homes; improvement in ACT scores among participants

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Neighborhood Health Plan of Massachusetts Asthma Disease Management Plan People with uncontrolled asthma living in low-income or high-risk households	No	Yes	Respiratory Therapists, Registered Nurses, Certified Asthma Educators	Varies; approx. 20,000 patients use services annually	Yes. Educational services provided both through generalized mailings as well as personalized home visits to discuss environmental trigger reduction and asthma self-management.	Yes. Home visits included assessment of environment and asthma conditions, as well as review of medications and asthma actions plans.	Moderate: families given HEPA filters and vacuums, pillow and bed dust encasements, and other supplies to reduce environmental triggers.	Data not available. NHP uses its own budget to fund program, and does not equate ROI with program success.	ED visits declined from 15.3% to 10.5% and hospitalizations declined from 3.5% to of 2.5%; increase in members receiving an inhaled corticosteroid; and 96% of members surveyed report that the ADMP has positively affected their quality of life.
New York State Healthy Home Environments for New Yorkers with Asthma People ages 4-65 years old living with poorly controlled asthma (ED or hospitalization visit in the previous six months or medication history)	No	Yes	Sanitarians, Public Health Nurses, Certified Asthma Educators	140 patients involved in the pilot, 2 visits each	Yes. Patients received education materials on controlling environmental asthma triggers	Yes. Home assessments performed and referrals were to take action on noted triggers and environmental conditions	Minor: Environmental assessment	Cost of approximately \$325/patient (ROI not given, but low cost suggests a high ROI)	Significant improvement in housing/environmental conditions, asthma self-management knowledge, and quality of life at three-month revisit
<p>* As defined by the CDC Community Guide's "Asthma Control: Home-Based Multi-Trigger, Multicomponent Environmental Interventions ." Minor remediation efforts at minimum provide advice on recommended environmental changes to be performed by the members of the household and often provide low cost items such as mattress and pillow allergen impermeable covers. Moderate remediation includes the provision of multiple low cost materials, and the active involvement of the trained home visitor(s). Activities in this category include the provision and fitting of mattress and pillow allergen impermeable covers, small air filters and dehumidifiers, integrated pest management, professional cleaning services or equipment, and minor repairs of structural integrity (patching holes). Major remediation efforts involve structural improvements to the home including carpet removal, replacement of ventilation systems, or extensive repairs of structural integrity (roof, walls, and floors).</p>									