

LEADING THE WAY TO BETTER BREATHING:

Managed Care Organizations and Asthma
Home Visiting Services in California



Acknowledgements

RAMP thanks the following individuals who graciously and generously provided insights about their work and/or feedback on the development of this white paper. Any omissions or errors are the sole responsibility of RAMP.

Lorene Alba, California Department of Public Health

Linda Ayala, Alameda Alliance for Health

Judith Balmin, California Department of Public Health

Carlos Bello, Kern Health Systems

Anna Hamedani, L.A. Care Health Plan

Melanie Hudson, California Asthma Financing Workgroup Coordinator/Facilitator, Contractor to U.S. Environmental Protection Agency

Johanna Kichaven, L.A. Care Health Plan

Ashley Kissinger, California Department of Public Health

Katrin Kral, U.S. Environmental Protection Agency

Mariela Lopez, U.S. Environmental Protection Agency, Region 9

Macarena Millan, L.A. Care Health Plan

Sandra Rose, California Health and Wellness

Brenda Rueda-Yamashita, Alameda County Public Health Department

Elaine Sadocchi-Smith, L.A. Care Health Plan

Karen Schlein, Contra Costa Health Plan

RAMP extends great appreciation to our funders. This document was developed under a grant from The California Endowment as well as Cooperative Agreement XA-83924101-0 awarded by the U.S. Environmental Protection Agency. The document has not been formally reviewed by any funders. The views expressed in this document are solely those of Regional Asthma Management & Prevention, a project of the Public Health Institute.

Dear managed care leader,

Asthma home visiting services are a tried and true method for improving member health outcomes, lowering health care utilization costs, improving patient care, and reducing health care disparities. Yet, far too many people with poorly controlled asthma don't have access to these key interventions.

You can change that.

The purpose of this tool is to support your managed care organization (MCO) with improving asthma management among your members by ensuring the provision of asthma home visiting services. If a home visiting program sounds daunting, it's not, and fortunately you don't have to figure this out on your own as there are a number of existing tools and best practices to help you incorporate these services.

In this tool, we highlight the numerous benefits of asthma home visiting services, from their ability to achieve triple aim goals to supporting quality improvement initiatives to addressing more "upstream" health determinants.

We also walk you through an abundant number of opportunities you can take advantage of to make your support for asthma home visiting services as easy and as efficient as possible, including some best practice examples from the field.

MCOs are fundamental to California's health care system. While at the local and state levels there are numerous efforts to support people suffering from poorly controlled asthma, we can't do it without you. You're a key part of solving the asthma puzzle, and we look forward to working with you.

— Regional Asthma Management and Prevention (RAMP)

“Asthma home visiting services make a real difference in the lives of our members. They improve member health and reduce more costly medical interventions. By meeting members where they live, asthma home visiting services reflect our desire to be a valuable asset to the communities we serve. As participants of the safety net, the Alliance is committed to expanding these benefits to more homes throughout Alameda County. I'm proud of our support for asthma home visiting and the improved quality of care that comes along with providing these vital services.”

— Scott Coffin, Chief Executive Officer, Alameda Alliance for Health

A home visit in action

Asthma home visiting services vary in the number of visits and specific activities; here's a snapshot of what a program can look like.



Julia is an asthma home visitor working for a community-based organization in a neighborhood with a high burden of asthma. With support from a Medi-Cal managed care organization, Julia visits Marco and his parents in their home. Marco is seven, and recently went to the emergency department for asthma — his second trip in the past year.

Julia hopes to connect with the family to support them as they learn how to better manage Marco's asthma. Over the course of 3–5 visits over 6–12 months, she'll provide education and work with the family to address any environmental triggers in the home. It helps that Julia is fluent in Spanish, the family's primary language. Julia will also serve as a helpful liaison to Marco's primary care team, helping him get access to any other care he needs.

(continued)

i / What should asthma home visiting services look like in California?

Asthma home visiting services

include asthma education, home environmental asthma trigger assessments and home environmental trigger remediation provided by qualified professionals.

Asthma education means providing information about basic asthma facts, the use of medications, self-management techniques and self-monitoring

skills, and actions to mitigate or control environmental exposures that exacerbate asthma symptoms.

Environmental asthma trigger assessment means the identification of environmental asthma triggers commonly found in and around the home, including allergens and irritants. This assessment guides the self-management education about

actions to mitigate or control environmental exposures as well as remediation activities.

Home environmental trigger remediation means conducting specific actions to mitigate or control environmental exposures. Most home visiting programs provide minor to moderate environmental asthma trigger remediation. Examples include providing and putting on

dust-proof mattress and pillow covers, providing products such as high-efficiency particulate air vacuums, asthma-friendly cleaning products, dehumidifiers and small air filters, and utilizing integrated pest management including performing minor repairs to the home's structure, such as patching cracks and small holes through which pests can enter.

“On her final visit, the family reports that Marco has been doing great, his symptoms have improved, and the entire family feels more confident about the future.”

(A Home Visit continued)

During the first visit, Julia talks with the family about how they're managing his asthma, and listens to their barriers and challenges. She provides basic asthma education — describing, for example, what happens to the lungs during an asthma attack — that reinforces messages provided by Marco's doctors. She helps the family members address the barriers they've identified. For example, if he gets his two inhalers confused, she may put stickers on them indicating which is the rescue inhaler and which is the controller medication.

During the second visit, after having already established trust and rapport, Julia and the family conduct an environmental assessment to identify asthma triggers. Julia provides education about ways to reduce exposure to those triggers. For example, Marco's dad smokes, so Julie suggests that he smoke outside using a plastic smoking jacket she provides for short-term help; she also provides him with smoking cessation resources for a longer-term solution. She also checks to see if the family is having any difficulties following the doctor's directions for medications, and to see if any new issues have arrived.

A month later, for the third visit, Julia returns with a HEPA vacuum. The family's entire apartment is carpeted, so this type of vacuum will help reduce dust, a common asthma trigger. She also brings asthma-friendly cleaning supplies to replace the bleach-based products the family was using.

During this visit, the mom mentions that a neighbor has experienced a bad cockroach infestation, and they've seen a few in their kitchen. Julia provides some advice on what the family can do, and provides gels and other traps that will help capture some of the cockroaches without the use of pesticide sprays. She also provides some materials to help patch a few holes under the kitchen sink through which the pests are likely entering. On her final visit, the family reports that Marco has been doing great, his symptoms have improved, and the entire family feels more confident about the future.



A home visitor explains how to change an air filter cartridge in a HEPA vacuum cleaner.

Triple Aim goals

As a leader of a managed care organization, you're deeply motivated to improve your members' health, increase the quality of the health care they receive, and keep health care costs in check. Asthma home visiting services will help you achieve all three.

Improved health outcomes.

The benefits of asthma education and environmental trigger remediation are well established. The Guidelines for the Diagnosis and Management of Asthma,¹ developed by the National Institutes of Health, include four vital components for effective asthma management:

- Assessment of disease severity and control,
- Comprehensive pharmacologic therapy,
- Patient education, and
- Environmental control measures to avoid or eliminate factors that contribute to asthma onset and severity.

While the first two components are routinely addressed during medical visits, evidence indicates declining rates of patient education.² Meanwhile, reducing environmental triggers in the home — where people spend the vast majority of their time — can be difficult to support from a distant clinic. That's where asthma home visiting services come in. Comprehensive in-home education and environmental interventions significantly reduce emergency department (ED) visits and associated costs, as well as missed days of school and work.³⁻⁷ According to a study by

Lower health care utilization costs.

America's Health Insurance Plans (AHIP), health plan designs that support home-based asthma assessments and trigger remediation reduce ED visits and improve patient experiences.⁸

Asthma home visiting services can save money too by significantly reducing the use of more expensive health care services. The national Community Preventive Services Task Force's comprehensive, research-based assessment found cost-benefits from \$5.30 to \$14 per \$1 invested among home-based asthma interventions for children and adolescents.⁹ OptimaHealth won the EPA National Environmental Leadership Award in Asthma Management for a comprehensive home-based asthma care program that returned an estimated \$4.40 for every \$1 invested.¹⁰ Among interventions that incorporated home visits into multifaceted asthma interventions, ROIs grew as high as \$23.75 for every \$1 spent.¹¹ While the cost-benefit evidence is stronger for interventions targeting children and adolescents, some evidence suggests adults benefit from such interventions as well.

Increased health care quality.

“The national Community Preventive Services Task Force's comprehensive, research-based assessment found cost-benefits from \$5.30 to \$14 per \$1 invested among home-based asthma interventions for children and adolescents.”

Reducing health disparities

There is no doubt you're aware that the Medi-Cal population's health burden is greater than California's overall population.

Low-income populations, like the nearly two million Medi-Cal members who have been diagnosed with asthma at some point in their lives,¹² have higher asthma severity, poorer asthma control, and higher rates of asthma emergency department (ED) visits and hospitalizations.¹³ Among the nearly 1.5 million Medi-Cal members with current asthma, 15% (223,000) have poorly controlled asthma. In 2016, Medi-Cal members represented 50% of asthma ED/urgent care clinic visits, even though members represented only 33% of Californians.¹⁴ There are also significant disparities based on race and ethnicity. As just one example, African Americans were nearly four times more likely than whites to report asthma-related ED or urgent care use in 2015.¹⁵

The good news: Asthma home visiting services are a tried and true method for alleviating this disparate burden. Why? One reason is that evidence shows greatest improvements in health outcomes and cost savings when targeting people with poorly controlled asthma.

Another reason is that these services are often provided by professionals especially qualified to support members that need help the most. For example, the Community Preventive Services Task Force specifically cites the value of community health workers (CHWs) in asthma interventions:

"[I]t is beneficial to hire and train CHWs to implement this intervention for the purpose of reaching out to primarily low-income, ethnic minority populations. CHWs play an essential role in the implementation of interventions, bridging the gaps between underserved populations and researchers. Especially when they are from the same community, CHWs can connect culturally with local populations and build trusting relationships with clients and their families."¹⁶ As one group of researchers notes, "Interventions by [CHWs] appear to be effective when compared with alternatives... particularly when partnering with low-income, underserved, and racial and ethnic minority communities."¹⁷

Of course, CHWs represent one type of professional that has successfully implemented asthma home visiting services. Depending on needs and capacities, MCOs can pick from a range of qualified professionals, both licensed and non-licensed, including community health workers, *promotoras de salud*, certified asthma educators, lay asthma educators, social workers, respiratory therapists, healthy homes specialists, nurses and others.

“...evidence shows greatest improvements in health outcomes and cost savings when targeting people with poorly controlled asthma.”

Fulfilling MCO contractual obligations related to case management and disease management services

Your MCO is likely already providing sound member support for asthma (including both clinical management and education) as part of your overall health care mission.



Support for member case management generally — and disease management services more specifically — is also a core part of your Medi-Cal managed care contract with the state of California. Whether your disease management program is in-house, or you contract out with a third-party vendor, adding asthma home visiting services will build on your current strengths and help you realize additional improvements in asthma outcomes. Asthma home visiting services may also be a useful resource for supporting basic or complex case management.

High-quality research shows again and again that asthma home visiting services significantly reduce emergency department (ED) visits and associated costs.¹⁸⁻²² For example, according to a study by America's Health Insurance Plans (AHIP), when MCOs provide support in the home for members with poorly controlled asthma, they end up going to the ED and hospital less, and their patient experience is better.²³

“...when MCOs provide support in the home for members with poorly controlled asthma, they end up going to the ED and hospital less, and their patient experience is better.”

Quality improvement initiatives

As a managed care leader, you're involved in strengthening the quality of the care your organization delivers, whether it's changing the type of care delivered or delivering care in a more efficient manner. Given their proven record of success, asthma home visiting services can be an important tool to add to your quality improvement "toolbox."

HEDIS Measures

The Healthcare Effectiveness Data and Information Set (HEDIS) is one of the health care sector's most common performance improvement resources. There are two HEDIS measures for asthma:

1. Medication Management for People with Asthma (MMA), which assesses the degree to which members with asthma stay on their medication during a treatment period, and
2. Asthma Medication Ratio (AMR), which assesses whether members are receiving the right ratio of controller medications to total asthma medications.

In California, the AMR is gaining institutional traction; recently the Department of Health Care Services updated its External Accountability Set to replace the MMA with the AMR, which is a better predictor of future asthma exacerbations.²⁴⁻²⁶

If your asthma HEDIS measures are below Minimum Performance Levels, or you're simply interested in making a solid score even higher, asthma home visiting services can help you get there. During asthma home visits, home visitors can reinforce key educational messages provided during the clinic visit. These include messages about the importance of following prescribed medication regimens. Additionally, home visitors often excel at identifying barriers to medication compliance and helping the families overcome those barriers. These services can improve the HEDIS outcomes.

Member Satisfaction and the Consumer Assessment of Healthcare Providers and Systems Program (CAHPS)

Launched over twenty years ago, CAHPS serves as a national standard for measuring consumers' health plan experiences. CAHPS can provide valuable information for consumers, as a tool to navigate the health insurance landscape, and to managed care organizations interested in assessing their own performance.

Effectively implemented, members receiving asthma home visiting services often report high levels of satisfaction with the quality of care received.

For example, L.A. Care's Disease Management program offers its members asthma home visits through QueensCare Healthcare Centers. One five-year old member with asthma made tremendous progress after completing the home visiting program. At the time of the referral, his mother reported that he was newly diagnosed with asthma and had been to the emergency department

i / CAHPS survey sample question

25. In the last 6 months, how often did customer service at your child's health plan give you the information or help you needed?

1 Never
2 Sometimes
3 Usually
4 Always

“I can actually say that my children are living a better life because of [the home visitor]. A resource like this can change your entire life. I can honestly say it really works. It really works.”

— Veona Rogers, client of Esperanza Community Housing Corporation’s home visiting program



and hospitalized several times over the past year. His mother was especially concerned because her son also has a diagnosis of autism and is unable to verbalize symptoms. His mother was unfamiliar with asthma symptoms and felt overwhelmed by the medications for her son. With the assistance of an asthma home visitor, she became familiar with her son’s asthma triggers and symptoms. Her son’s Asthma Control Test went from a very poorly controlled score of 13 at referral to a controlled score of 23 after completing the asthma home visits. Needless to say, the family was very satisfied with the asthma home visiting services they received.

Veona Rogers, a client from Esperanza Community Housing Corporation, another asthma home visiting program in Los Angeles, shares a similar story: “I can actually say that my children are living a better life because of [the home visitor]. A resource like this can change your entire life. I can honestly say it really works. It really works.”

While there are many factors that go into CAHPS results, asthma home visiting services can help move the needle towards positive outcomes and member satisfaction in the health plan and the quality of its health care.

Achieving NCQA accreditation

In an increasingly competitive health care marketplace, more MCOs aim to distinguish themselves by achieving health plan accreditation from the National Committee for Quality Assurance (NCQA). If your MCO is pursuing NCQA accreditation, asthma home visiting services can help.

Specifically, asthma home visiting services can enhance several different components of NCQA's population health management (PHM) requirements. Below are some key excerpts from the *2018 HP Standards and Guidelines for the Accreditation of Health Plans* (the Standards).²⁷

PHM 1: PHM Strategy

As part of an MCO's comprehensive strategy for meeting the needs of its members, in Factor 1 of Element A: Strategy Description, there are four areas of focus. Asthma home visiting services can help address two of them (right).

For both areas of focus, asthma home visiting services can help demonstrate an MCO's comprehensive PHM strategy.

Managing members with emerging risk: Among those diagnosed with asthma, there are different levels of risk; home visiting services are typically offered to those with the highest risk. Within the Standards, asthma is one of the examples provided for managing members with emerging risk.

Managing multiple chronic illnesses: Asthma can present with a variety of comorbidities. For example, in California adults who have respiratory co-morbidities, such as COPD, are also significantly less likely to have well controlled asthma (35.5%) than those who do not have respiratory co-morbidities (60.6%).²⁸

PHM 1: PHM Strategy 113

- Programs or services: Community flu clinics, e-mail and mail reminders, radio and TV advertisement reminding public to receive vaccine.
- **Goal:** 10 percent of targeted population reports meeting self-determined weight-loss goal.
 - Targeted population: Members with BMI 27 or above enrolled in wellness program.
 - Programs or services: Wellness program focusing on weight management.

Managing members with emerging risk

- **Goal:** Lower or maintain HbA1c control <8.0% rate by 2 percent compared to baseline.
 - Targeted population:
 - Members discovered at risk for diabetes during predictive analysis.
 - Members with controlled diabetes.
 - Programs or services: Diabetes management program.
- **Goal:** Improve asthma medication ratio (total rate) by 3 percent compared to baseline.
 - Targeted population: Diagnosed asthmatic members 18–64 years of age with at least one outpatient visit in the prior year.
 - Programs or services: Condition management program.

Patient safety

- **Goal:** Improve the safety of high-alert medications.
 - Targeted population: Members who are prescribed high-alert medications and receive home health care.
 - Activity: Collaborate with community-based organizations to complete medication reconciliation during home visits.

Outcomes across settings

- **Goal:** Reduce 30-day readmission rate after hospital stay (all causes) of three days or more by 2 percentage points compared to baseline.
 - Targeted population: Members admitted through the emergency department who remain in the hospital for three days or more.
 - Program or services: Organization-based case manager conducts follow-up interview post-stay to coordinate needed care.
 - Activity: Collaborate with network hospitals to develop and implement a discharge planning process.

Managing multiple chronic illnesses

- **Goal:** Reduce ED visits in target population by 3 percentage points in 12 months.
 - Targeted population: Members with uncontrolled diabetes and cardiac episodes that led to hospital stay of two days or more.
 - Programs or services: Complex case management.
- **Goal:** Improve antidepressant medication adherence rate.
 - Targeted population: Members with multiple behavioral health diagnoses, including severe depression, who lack access to behavioral health specialists.
 - Programs or services: Complex case management with behavioral health telehealth counseling component.

Factor 3: Activities that are not direct member interventions

- Data and information sharing with practitioners.
- Interactions and integration with delivery systems (e.g., contracting with accountable care organizations).
- Providing technology support to or integrating with patient-centered medical homes.

for Surveys Beginning On or After July 1, 2018

2018 HP Standards and Guidelines

PHM 2: Population Identification

Asthma home visiting services can also help MCOs to assess the needs of its population and determine actionable categories for appropriate interventions. Specifically, these services can help MCOs review community resources for integration into program offerings to address member needs. From Element C: Activities and Resources:

Factor 3: Community resources: The organization connects members with community resources or promotes community programs. Integrating community resources indicates that the organization actively and appropriately responds to members' needs. Community resources correlate with member needs discovered during the population assessment. Actively responding to member needs is more than posting a list of resources on the organization's website; active response includes referral services and helping members access community resources.

Examples:

- Social workers or other community health workers that contact members to connect them with appropriate community resources.
- Referrals to community resources based on member need.

Element C: Activities and Resources—Refer to Appendix 1 for points

The organization annually uses the population assessment to:

1. Review and update its PHM activities to address member needs.
2. Review and update its PHM resources to address member needs.
3. Review community resources for integration into program offerings to address member needs.

Scoring

| 100% | 80% | 50% | 20% | 0% |
|--------------------------------------|-------------------|----------------------------------|---------------------------------|----------------------------------|
| The organization meets all 3 factors | No scoring option | The organization meets 2 factors | The organization meets 1 factor | The organization meets 0 factors |

Data source

Documented process, Reports, Materials

Scope of review

This element applies to Interim Surveys, First Surveys and Renewal Surveys.

For Interim Surveys: NCQA reviews the organization's policies and procedures.

For First and Renewal Surveys: NCQA reviews committee minutes or similar documents showing process and resource review and updates.

For Interim Surveys, First Surveys, and Renewal Surveys: Prior to the survey date.

Factors 1, 2: PHM activities and resources

The organization uses assessment results to review and update its PHM structure, strategy (including programs, services, activities) and resources (e.g., staffing ratios, clinical qualifications, job training, external resource needs and contacts, cultural competency) to meet member needs.

Factor 3: Community resources

The organization connects members with community resources or promotes community programs. Integrating community resources indicates that the organization actively and appropriately responds to members' needs. Community resources correlate with member needs discovered during the population assessment.

Actively responding to member needs is more than posting a list of resources on the organization's website; active response includes referral services and helping members access community resources.

Examples

Community resources and programs

- Population assessment determines a high population of elderly members without social supports. The organization partners with the Area Agency on Aging to help with transportation and meal delivery.
- Connect at-risk members with shelters.
- Connect food-insecure members with food security programs or sponsor community gardens.
- Sponsor or set up fresh food markets in communities lacking access to fresh produce.
- Participate as a community partner in healthy community planning.
- Partner with community organizations promoting healthy behavior learning opportunities (e.g., nutritional classes at local supermarkets, free fitness classes).
- Support community improvement activities by attending planning meetings or sponsoring improvement activities and efforts.
- Social workers or other community health workers that contact members to connect them with appropriate community resources.
- Referrals to community resources based on member need.
- Discounts to health clubs or fitness classes.

Local public health departments or community-based organizations offering asthma home visiting services would likely jump at the chance to create connections with MCOs to increase access to these services. For those cases where MCOs already offer asthma home visiting services in-house, you can still identify and refer to additional community resources. For example, staff with Contra Costa Health Plan's home visiting program provide referrals to the County's weatherization program.

PHM 5: Complex Case Management

One factor in Element C of the Complex Case Management Standard requires MCOs to assess and respond to a members’ social determinants of health — those social, environmental and economic conditions that affect health, well-being, and capacity to follow a care plan. Typically,

asthma home visiting services identify and help remediate any environmental triggers contributing to a member’s poorly controlled asthma. Home visitors also connect the member to other community-based resources — such as legal aid services to help tenants correct housing code problems caused by landlords — that can affect health.

PHM 5: Complex Case Management 149

Factor 4: Initial assessment of behavioral health status
 Complex case management policies and procedures specify the process for assessing health status, including:
 • functions:
 • member’s ability to communicate and understand instructions.
 • member’s ability to process information about an illness.
 • health conditions.
 • substance use disorders.

Initial assessment of social determinants of health
 Complex case management policies and procedures specify the process for assessing social determinants of health, which are economic and social conditions that affect a member’s health, functioning and quality-of-life outcomes and risks that may affect a member’s ability to meet case management goals.

Initial assessment of life-planning activities
 Complex case management policies and procedures specify the process for assessing whether members have completed life-planning activities such as wills, living wills or advance directives, health care powers of attorney and Medical or Physician Orders of Life-Sustaining Treatment (MOLST or POLST) forms.
 If a member does not have expressed life-planning instructions on record, during the first contact the case manager determines if life-planning instructions are appropriate. If they are not, the case manager records the reason in the member’s file.
 Providing life-planning information (e.g., brochure, pamphlet) to all members in case management meets the intent of this factor.

Factor 7: Evaluation of cultural and linguistic needs
 Complex case management policies and procedures specify a process for assessing culture and language to identify potential barriers to effective communication or care and acceptability of specific treatments. It should include consideration of cultural health beliefs and practices, preferred languages, health literacy and other communication needs.

Factor 5: Initial assessment of social determinants of health:
 Complex case management policies and procedures specify the process for assessing social determinants of health, which are economic and social conditions that affect a wide range of health, functioning and quality-of-life outcomes and risks that may affect a member’s ability to meet case management goals.

“The asthma home visiting program provides evidence of compliance with several NCQA Accreditation standards, especially Population Health Management Strategy. It helps us meet two of the four required areas in that section: managing members with emerging risk and managing multiple chronic illnesses. The program should also improve the scores on the two HEDIS asthma measures, giving us more points toward the Accreditation score.”

— Kevin Drury, Director of Quality, Contra Costa Health Plan

Fostering positive perceptions in your community

There is something meaningful about “meeting people where they are.” It generates trust and makes relationships more productive.

Asthma home visiting services can literally and figuratively embody the best of meeting people where they are: by entering a member’s home, seeing what the family’s day-to-day environment is like, and providing much needed help and support, an MCO representative can establish trust and rapport that’s hard to replicate in other settings.

Not only does this trust and rapport have positive outcomes for the member, but it has positive outcomes for the MCO as well. Beyond improving the health of the members and reducing member costs, asthma home visiting services can improve community relations and strengthen local connections.

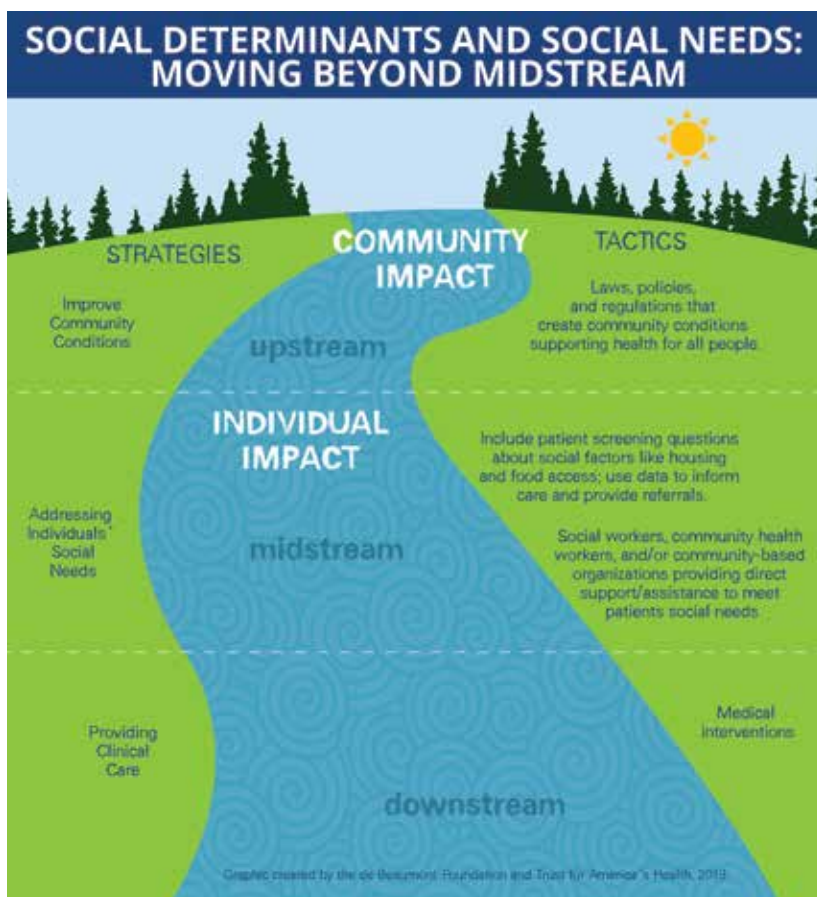


Help align MCOs with health care trends

Asthma home visiting services are not a new intervention, yet in many ways they provide leading-edge care.

Providing these services can help your MCO get ahead of the curve on growing needs and better align with a variety of today's health care trends. Here are just a few:

- **Prevention:** Research demonstrates asthma home visiting services help keep members from utilizing more intensive and costly health care services such as urgent care, emergency department visits and hospitalizations.²⁹⁻³³ In this era of limited health care dollars, prevention is key.
- **Social and environmental conditions:** The health care sector is shifting its services to account for the fact that social and environmental conditions facing individuals and families — the social determinants of health — have as much if not more effect on health than medical care. By assessing and helping to improve members' living conditions, asthma home visiting services can promote healthy environments.
- **Health equity:** Across the health care field, it's a growing priority to not just improve the health outcomes of a population, but to also close gaps between different groups. Asthma home visiting services can play a key role in reducing disparities.



Created by the de Beaumont Foundation and Trust for America's Health, 2019

“Providing asthma home visiting services can help your MCO get ahead of the curve on growing needs and better align itself with a variety of today's health care trends.”

Targeted enrollment for maximum benefits

Asthma home visiting services aren't necessary for all people with asthma; offering them strategically is an important way to maximize the benefits to your members and your MCO. Given the research-based health improvements and cost benefits, targeting those with poorly controlled asthma is the place to start.

While the national guidelines for asthma clinical management don't provide a ready-to-use definition of poorly controlled asthma, examples from across the clinical field demonstrate some clear trends. Asthma home visiting programs often select some of the following criteria; a member qualifies for the service when meeting any one of the following:

- An asthma-related emergency department visit in the past 6 or 12 months;
- An asthma-related hospitalization in the past 6 or 12 months;
- Two asthma-related urgent care visits in the past 6 or 12 months;
- A score of 19 or lower on the Asthma Control Test, a validated patient questionnaire used to assess control; and/or
- Inhaled beta-agonist to anti-inflammatory ratio of 5:1 or greater.

Asthma home visiting services are best matched to the highest utilizers — both because these members are in the greatest need of the services, and because it will help your MCO realize the greatest cost savings.

As for *how* to identify members with poorly controlled asthma, you may have in-house data management expertise that can assist you. There are also resources from the field that may help you move forward quickly. For example, the National Center for Healthy Housing (NCHH) offers a factsheet, *Client Identification and Eligibility: Sample Report Specifications to Identify Eligible Clients*.³⁴ Among other things, it contains a real-world example of report specifications developed by a health plan to identify members who would benefit from being part of a pilot program to provide home-based asthma services. Your specific needs and access to specific types of information will likely vary, but getting a glimpse into how others have structured a process to identify potential clients can be a useful reference as you work through your own.

Targeted enrollment can also help you set the stage for any outcome measurement you may want to track. There are several indicators MCOs can use to monitor the impact of their expanded services, from health outcome improvements to health care utilization decreases to improved beneficiary quality of life. While your MCO likely has evaluation expertise in-house, you can also rely on external resources like *Building Systems to Support Home-Based Asthma Services*, an eLearning and technical assistance platform produced by NCHH, which includes an evaluation module.



Need additional assistance?

Reach out to us! Call 510-285-5711 or email: info@rampasthma.org

Diverse models for program structure and design

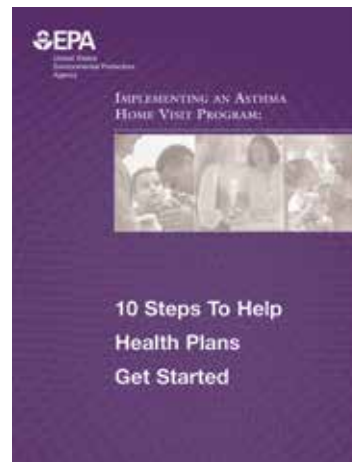
There is no “one size fits all” approach to structuring and implementing asthma home visiting services.

Rather, there are many different program models, giving MCOs a great deal of flexibility for determining how to best accommodate needs of members, quality assurance, staffing capabilities, community partnerships and cost considerations.

For a deeper dive, the U.S. Environmental Protection Agency’s *Implementing an Asthma Home Visit Program: 10 Steps To Help Health Plans Get Started*³⁵ is an excellent resource; below is a quick recap of some typical considerations.

Some MCOs may prefer to build a new asthma-specific program in-house. Others may opt to take an existing home visiting program focused on other topics and build on its established infrastructure by adding asthma. Still other MCOs may decide to connect with external partners such as clinics, community-based organizations, public health departments or other third-party vendors to provide the services.

Regardless of the approach your MCO takes, you’ll expand the number of valuable resources available to your members.



Much like program structure, MCOs can also lean on ready-to-go resources to determine the nuts and bolts of program design. Of course, you’ll tailor your program to meet your own needs, but that likely means making small tweaks to existing resources rather than reinventing the wheel.

There are already a number of standardized and tested tools and materials you can take advantage of. The EPA’s 10 Steps guide mentioned above is one such example. Another is *Building Systems to Support Home-Based Asthma Services*, an eLearning and technical assistance platform produced by the National Center for Healthy Housing. The platform provides video modules and a wide range of easy-to-access technical assistance tools.³⁶

Last but not most certainly not least, any asthma home visiting service you provide to your members — no matter how it’s structured or designed — can also rely on the resources and expertise that may already be on the ground. For example, tough environmental trigger remediation problems uncovered by a home visit may be too difficult for an MCO’s program to handle; when that’s the case, county healthy housing programs may be able to step in. Similarly, sometimes MCOs may find it useful to tap into groups like local medical foundations and hospital community benefit programs to help provide a more complete range of home visiting equipment and supplies such as mattress covers and HEPA vacuums.

Help is out there: California benefits from an array of asthma home visiting programs serving communities in Southern California, the Central Valley and the Bay Area. Some have extensive experience working with MCOs.



Workforce options and resources

Regardless of which program structure you use, there's a good chance your MCO will want to take advantage of resources related to developing the workforce that will ultimately deliver the services.

Asthma home visiting services have traditionally relied heavily on qualified, non-licensed professionals to deliver anywhere from some to all of the support to members.

Of course, the mix of professionals is ultimately up to you. Some services are staffed fully by licensed providers like nurses, who manage cases including conducting home visits. More commonplace are services where home visiting staff have clear connections to licensed practitioners (e.g., often as supervisors) but are themselves non-licensed. The use of qualified, non-licensed staffing configurations seen in the field is typically a function of multiple factors including costs — licensed staff are simply more expensive — or needing extremely high levels of cultural familiarity and expertise to connect with a variety of populations.

There are several resources you can take advantage of to quickly help staff build the requisite skills to provide effective services. Here are just a few:

- California Breathing, a program of the California Department of Public Health, runs the Asthma Management Academy, which is a curriculum that meets the unique needs of non-licensed members of the asthma care team. These include community health workers, *promotoras de salud*, health or patient advocates, and others with trusted relationships who visit the homes of those in underserved areas. CDPH is



offering the AsMA curriculum as a series of in-person training modules for these valued members of the asthma care team. See <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/CPE/Pages/Asma.aspx> for more details.

- The Association of Asthma Educators (AAE), a national organization developed to strengthen the asthma educator workforce, offers a variety of trainings and resources. Classes include preparatory sessions for those reading for the Certified Asthma Educator exam, as well as more introductory trainings for community health workers. See <https://www.asthmaeducators.org/> for more.
- The Asthma Community Network has resource banks, including Community Health Worker (CHW) Training Programs. This tool was designed to help you find existing training options for CHWs in your community and nationally. For more information, visit www.asthmacommunitynetwork.org/chw_programs.
- Many community colleges in California are excellent pipelines for the health education workforce. For example, City College of San Francisco offers a Community Health Worker Certificate Program. Loma Linda University also trains Community Health Workers. Community colleges in your area may be able to offer trainings and services to meet your own needs.
- Non-profit organizations are another source of training support. As just two examples, Vision y Compromiso and Esperanza Community Housing Corporation offer a wide range of training and capacity building support services for CHWs/*promotoras de salud*.³⁷

Future policy and financing supports

As described throughout this document, MCOs can support asthma home visiting services now, and some MCOs in California are already doing so.

There are also some exciting new opportunities on the horizon. RAMP and the California Asthma Financing Workgroup, a diverse set of stakeholders including home visiting program leaders, health care advocates and medical providers, are helping to implement policy changes to make it even easier for MCOs to provide asthma home visiting services to members with poorly controlled asthma.

Currently Medi-Cal doesn't reimburse for asthma home visits provided by non-licensed professionals, but help is on the way. Specifically, the FY 2019–2020 budget makes a one-time \$15 million appropriation for asthma-related environmental mitigation, education, and disease-management services. For up to date details about implementation, please visit www.rampasthma.org.

In the meantime, MCOs do have some options to support asthma home visiting services. For instance, MCOs can use funding from their administrative — rather than medical budgets — to support home visitors. Additionally, MCOs may have already-funded internal staff (e.g., disease management staff) with capacity to take on home visits for members with the highest need.

More broadly, the outlook on prevention-oriented health care in California is looking bright. For example, Medi-Cal is currently implementing its Health Homes Program (HHP), which, through managed care plans, offers additional education and community support for members with complex chronic conditions, including asthma. Similarly, Medi-Cal's Whole Person Care Pilot program can provide housing supports to members with some of the toughest physical and behavioral challenges.



California Senator Melissa Hurtado (right) introduces legislation to expand asthma home visiting services to low-income families.

“RAMP and our partners are working toward policy changes to make it even easier for MCOs to provide asthma home visiting services to members with poorly controlled asthma.”

Support to help MCOs move forward

If the idea of your MCO supporting asthma home visiting programs sounds daunting, don't worry: it's likely not as complicated as it sounds.

More importantly, if you have a question about how to support, implement or otherwise operationalize these services, the answer is likely close by. Asthma home visiting services are not a new idea, and technical assistance is available through a wide range of different options.

Here are some "tip of the iceberg" examples:

- The U.S. Environmental Protection Agency has a how-to guide specifically for MCOs. *Implementing an Asthma Home Visit Program: 10 Steps to Help Health Plans Get Started*, provides helpful, nuts and bolts-level details for this work. https://www.epa.gov/sites/production/files/2013-08/documents/implementing_an_asthma_home_visit_program.pdf

- The National Center for Healthy Housing has an extensive set of online resources available free of charge — including eLearning

- modules — as part of its *Building Systems to Sustain Home-Based Asthma Services* program. <https://nchh.org/tools-and-data/financing-and-funding/building-systems-to-sustain-home-based-asthma-services>



- America's Health Insurance Plans (AHIP) published case studies and strategies to support MCOs in this work. *Next Generation Asthma Care: Integrating Clinical and Environmental Strategies to Improve Asthma Outcomes* is a useful overview. https://www.ahip.org/wp-content/uploads/2016/11/AsthmaReport_11.18.16.pdf
- More tailored, one on one technical assistance and support may also be available from organizations like Regional Asthma Management and Prevention, the National Center for Healthy Housing, California Breathing, or local home visiting programs. Contact us; we're here to help!



Need additional assistance?

Reach out to us! Call 510-285-5711 or email: info@rampasthma.org

- 1 The best practice guidelines, called the EPA 3 Guidelines on Asthma, were developed by an expert panel commissioned by the National Asthma Education and Prevention Program (NAEPP) Coordinating Committee, coordinated by the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health. <https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma>. Accessed September 2018.
- 2 Lee MG, Cross KJ, Yang WY, Sutton BS, Jiroutek MR. Frequency of asthma education in primary care in the years 2007–2010. *The Journal of Asthma*. 2016; 53: 220–226.
- 3 Shani Z, Scott RG, Schofield LS, Johnson JH, Williams ER, Hampton J, Ramprasad V. Effect of a home intervention program on pediatric asthma in an environmental justice community. *Health Promotion Practice*. Mar 2015; 16(2): 291–298.
- 4 Bhaumik U, Sommer S, Giller-Leinwohl J, Norris K, Tsopelas L, Nethersole S, Woods E. (2017). Boston children's hospital community asthma initiative: Five-year cost analyses of a home visiting program. *Journal of Asthma*, 54(2), 134–142.
- 5 Largo TW, Borgialli M, Wisinski CL, Wahl RL, Priem WF. Healthy Homes University: a home-based environmental intervention and education program for families with pediatric asthma in Michigan. *Public Health Rep*. 2011;126(Suppl 1): 14–26.
- 6 Turyk M, Banda E, Chisum G, Weems D Jr, Liu Y, Damitz M, Williams R, Persky V. A multifaceted community-based asthma intervention in Chicago: effects of trigger reduction and self-management education on asthma morbidity. *J Asthma*, 2013; 50(7): 729–736.
- 7 Margellos-Anast H, Gutierrez MA, & Whitman S. Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention. *Journal of Asthma*, 2012; 49(4): 380–389.
- 8 America's Health Insurance Plans. *Home-Based Asthma Interventions: Keys to Success*. https://www.ahip.org/wp-content/uploads/2016/11/AsthmaReport_11.18.16.pdf. Accessed February 20, 2019.
- 9 Nurmagametov TA, Barnett SBL, Jacob V, Chattopadhyay SK, Hopkins DP, Crocker DD, Dumitru GG, Kinyota S, Task Force on Community Preventive Services. Economic value of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review Adobe PDF File [PDF - 873 kB]. *Am J Prev Med* 2011;41(2S1):S33-47.
- 10 Optima Health: 2005 Winner of EPA's National Environmental Leadership Award in Asthma Management.
- 11 Hsu, Joy, et al. Economic Evidence for US Asthma Self-Management Education and Home-Based Interventions. *Journal of Asthma and Clinical Immunology: In Practice*. Nov 2016; 4(6): 1126–1134.e27.
- 12 California Health Interview Survey data.2017. UCLA Center for Health Policy Research. <https://healthpolicy.ucla.edu/Pages/AskCHIS.aspx>. Accessed February 19, 2019.
- 13 Milet M, Lutzker L, Flattery J. *Asthma in California: A Surveillance Report*. Richmond, CA: California Department of Public Health, Environmental Health Investigations Branch, May 2013.
- 14 California Health Interview Survey data. 2016. UCLA Center for Health Policy Research. <https://healthpolicy.ucla.edu/Pages/AskCHIS.aspx>. Accessed January 26, 2018. Note: We used a recent visit to an emergency department or urgent care clinic as a proxy for poor control.
- 15 California Health Interview Survey data.2015. UCLA Center for Health Policy Research. <https://healthpolicy.ucla.edu/Pages/AskCHIS.aspx>. Accessed February 19, 2019.
- 16 Crocker DD, Kinyota S, Dumitru GG, Ligon CB, Herman EJ, Ferdinands JM, Hopkins DP, Lawrence, BM, Sipe TA, Task Force on Community Preventive Services. Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review *Am J Prev Med* 2011;41(2S1):S5-32.
- 17 Kim K, Choi JS, Choi E, Nieman CL, Joo JH, Lin FR, Gitlin LN, Han HR. Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review. *Am J Public Health*. 2016 Apr;106(4):e3-e28. doi: 10.2105/AJPH.2015.302987. Epub 2016 Feb 18.
- 18 Shani Z, Scott RG, Schofield LS, Johnson JH, Williams ER, Hampton J, Ramprasad V. Effect of a home intervention program on pediatric asthma in an environmental justice community. *Health Promotion Practice*. Mar 2015; 16(2): 291–298.
- 19 Bhaumik U, Sommer S, Giller-Leinwohl J, Norris K, Tsopelas L, Nethersole S, Woods E. (2017). Boston children's hospital community asthma initiative: Five-year cost analyses of a home visiting program. *Journal of Asthma*, 54(2), 134–142.
- 20 Largo TW, Borgialli M, Wisinski CL, Wahl RL, Priem WF. Healthy Homes University: a home-based environmental intervention and education program for families with pediatric asthma in Michigan. *Public Health Rep*. 2011;126(Suppl 1):14–26.
- 21 Turyk M, Banda E, Chisum G, Weems D Jr, Liu Y, Damitz M, Williams R, Persky V. A multifaceted community-based asthma intervention in Chicago: effects of trigger reduction and self-management education on asthma morbidity. *J Asthma*, 2013; 50(7): 729–736.
- 22 Margellos-Anast H, Gutierrez MA, & Whitman S. Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention. *Journal of Asthma*, 2012; 49(4): 380–389.
- 23 America's Health Insurance Plans. *Home-Based Asthma Interventions: Keys to Success*. https://www.ahip.org/wp-content/uploads/2016/11/AsthmaReport_11.18.16.pdf. Accessed February 20, 2019.

- 24 Yong PL, Werner RM. Process quality measures and asthma exacerbations in the medicaid population. *Journal Allergy Clin Immunol*. 2009 Nov;124(5):961-6. doi: 10.1016/j.jaci.2009.07.027. Epub 2009 Sep 12.
- 25 Schatz M1, Zeiger RS, Yang SJ, Chen W, Crawford WW, Sajjan SG, Allen-Ramey F. Relationship of asthma control to asthma exacerbations using surrogate markers within a managed care database. *Am J Manag Care*. 2010 May;16(5):327-33.
- 26 Beck AF, Bradley CL, Huang B, Simmons JM, Heaton PC, Kahn RS. The pharmacy-level asthma medication ratio and population health. *Pediatrics*. 2015 Jun;135(6):1009-17. doi: 10.1542/peds.2014-3796. Epub 2015 May 4.
- 27 National Committee for Quality Assurance. *2018 HP Standards and Guidelines for the Accreditation of Health Plans*. 2018.
- 28 Milet M, Lutzker L, Flattery J. Asthma in California: A Surveillance Report. Richmond, CA: California Department of Public Health, Environmental Health Investigations Branch, May 2013.
- 29 Shani Z, Scott RG, Schofield LS, Johnson JH, Williams ER, Hampton J, Ramprasad V. Effect of a home intervention program on pediatric asthma in an environmental justice community. *Health Promotion Practice*. Mar 2015; 16(2): 291-298.
- 30 Bhaumik U, Sommer S, Giller-Leinwohl J, Norris K, Tsopelas L, Nethersole S, Woods E. (2017). Boston children's hospital community asthma initiative: Five-year cost analyses of a home visiting program. *Journal of Asthma*, 54(2), 134-142.
- 31 Largo TW, Borgialli M, Wisinski CL, Wahl RL, Priem WF. Healthy Homes University: a home-based environmental intervention and education program for families with pediatric asthma in Michigan. *Public Health Rep*. 2011;126(Suppl 1):14-26.
- 32 Turyk M, Banda E, Chisum G, Weems D Jr, Liu Y, Damitz M, Williams R, Persky V. A multifaceted community-based asthma intervention in Chicago: effects of trigger reduction and self-management education on asthma morbidity. *J Asthma*, 2013; 50(7): 729-736.
- 33 Margellos-Anast H, Gutierrez MA, & Whitman S. Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention. *Journal of Asthma*, 2012; 49(4): 380-389.
- 34 National Center for Healthy Housing. *Client Identification and Eligibility: Sample Report Specifications to Identify Eligible Clients*. Available through the Building Systems to Sustain Home-Based Asthma Services eLearning Program (free registration required). <https://nchh.org/tools-and-data/financing-and-funding/building-systems-to-sustain-home-based-asthma-services/>. Accessed February 20th, 2019.
- 35 U.S. Environmental Protection Agency. Implementing an Asthma Home Visit Program: 10 Steps To Help Health Plans Get Started. https://www.epa.gov/sites/production/files/2013-08/documents/implementing_an_asthma_home_visit_program.pdf. Accessed February 19, 2019.
- 36 National Center for Healthy Housing. *Building Services to Sustain Home-Based Asthma Services*. <https://nchh.org/tools-and-data/financing-and-funding/building-systems-to-sustain-home-based-asthma-services/>. Accessed February 19, 2019.
- 37 For Vision y Compromiso, see <http://visionycompromiso.org/>. For Esperanza Community Housing Corporation, see <http://www.esperanzacommunityhousing.org/>.



Need additional assistance?

Reach out to us! Call 510-285-5711 or email: info@rampasthma.org

RAMP's mission is to reduce the burden of asthma with a focus on health equity. Emphasizing both prevention and management, we build capacity, create linkages, and mobilize networks to advocate for policy and systems changes targeting the root causes of asthma disparities. RAMP envisions healthy communities where asthma is reduced and well-managed, and the social and environmental inequities that contribute to the unequal burden of the disease for low-income communities and communities of color are eliminated. For more information, visit www.rampasthma.org.

