Introduction

Background

The Center at Sierra Health Foundation (The Center) was founded by the Sierra Health Foundation in 2012 as an independent 501(c)(3) nonprofit organization. With offices in Sacramento and Fresno, The Center pursues the promise of health and racial equity in communities across California.

In August 2020, The Center was awarded the California Department of Health Care Services (DHCS) $15 million Asthma Mitigation Project (AMP) contract. Assembly Bill No. 74 (AB74) authorized the AMP funding.

With the DHCS funds, The Center funded 22 nonprofit organizations, local health departments, medical providers, and community-based organizations (CBO) statewide. Known as “funded partners”, these organizations deliver new or existing culturally and linguistically responsive asthma home visiting services to children and adults with poorly controlled asthma. During the three-year funding period, The Center will provide infrastructure to support funded partner program implementation, including trainings and ongoing learning opportunities, regular convenings to build partnerships and share knowledge, and access to technical assistance from subject matter experts including Regional Asthma Management and Prevention (RAMP), California Pan-Ethnic Health Network (CPEHN), and Children Now.

Through AMP, The Center intends to build the asthma home visiting workforce capacity and create a statewide asthma service provider network for families who are members of Medi-Cal or do not have health insurance, including undocumented adults under 50 years of age who do not qualify for Medi-Cal.

Funded Partners

- Alameda County Public Health Department
- Breathe California of the Bay Area, Golden Gate, and Central Coast
- Central California Asthma Collaborative
- Comite Cívico del Valle
- Community Action Partnership of Kern
- Contra Costa Health Services
- El Concilio, Catholic Council for the Spanish Speaking of the Diocese of Stockton
- El Sol Neighborhood Educational Center
- Esperanza Community Housing Corporation
- Juddah Project
- La Maestra Family Clinic
- LifeLong Medical Care
- Little Manila Foundation
- Mercy Foundation – Bakersfield
- Mutual Assistance Network of Del Paso Heights
- Roots Community Health Center
- San Mateo County Family Health Services
- Santa Barbara Neighborhood Clinics
- Santa Rosa Community Health Centers
- Sigma Beta XI
- Vision y Compromiso
- Watts Healthcare

The Asthma Mitigation Project is funded by the California Department of Health Care Services and is managed by The Center at Sierra Health Foundation.
This home visiting network should help fill gaps in asthma care and reduce disparities in asthma outcomes by increasing funded partners’ capacity to serve individuals with poorly controlled asthma and building advocacy networks to support asthma prevention and treatment.

AMP comes at a time when the California Advancing and Innovating Medi-Cal (CalAIM) proposal seeks reforms to expand, transform, and streamline Medi-Cal service delivery and financing. The proposal adds a new In-Lieu of Service Benefit for asthma remediation services. Under federal rules, “In Lieu of Services” (ILOS) are generally nonmedical services provided as alternatives to standard Medicaid benefits in the managed care delivery system. ILOS are intended to be provided in place of more expensive, standard Medicaid benefits. As part of the January 2020-21 CalAIM package, asthma remediation services are included in a menu of ILOS that managed care plans could choose to provide. These asthma ILOS services would consist of physical modifications made to a beneficiary’s home to mitigate environmental triggers that exacerbate asthma conditions. The asthma remediation benefit generally would be limited to $7,500 in a beneficiary’s lifetime. Allowing managed care plans to have these ILOS costs reflected in their capitated rates could encourage them to provide these important services.

CalAIM’s ILOS work is an example of the kind of policy that AMP and the evaluation findings could inform.

The 22 funded partners that are part of the AMP cohort implementing these asthma prevention-oriented services are listed in the sidebar. All funded partners’ proposed programs adhere to AMP’s logic model (see Appendix Exhibit 1), which describes the primary activities, outputs, and short-, intermediate-, and long-term outcomes for participants. Key outcomes include:

1. Improved asthma self-management and asthma control
2. Decreased exposure to common household asthma triggers
3. Improved asthma outcomes and quality of life
4. Decreased asthma-related costs for payors

The Center, in consultation with key stakeholders, selected Harder+Company Community Research (Harder+Company) to evaluate the DHCS AMP. The purpose of the evaluation is to generate useful data that can improve implementation, assess changes in asthma outcomes for program participants, and examine the long-term impacts of AMP’s asthma mitigation services on health and healthcare-related costs. Evaluation findings will both inform program implementation as well as offer insights into future asthma preventive services funding, policy, and sustainability opportunities.

Currently, the evaluation is in its first phase, formative evaluation. This phase, which is the focus of this evaluation report, has explored program delivery and program activities in year one. Findings from this phase will help set the stage for the next phase, the summative evaluation, which will focus on AMP outcomes for participants as funded partner programs become more solidified. Subsequent evaluation reports will include these findings.
**Methods**

The AMP evaluation uses a mixed-methods approach, incorporating both quantitative and qualitative data. Data collection includes: (1) document review; (2) focus group with The Center’s staff and technical assistance partners; (3) interviews with program leaders; (4) interviews with home visiting professionals; and (5) semiannual progress report data.

**Document review.** To understand how planned program implementation varied among funded partners, the evaluation team conducted a systematic document review in September and October 2020. Documents included:

- funded partner applications, budgets, and scopes of work;
- organization websites; and
- information from Regional Asthma Management and Prevention (RAMP) technical assistance calls attended by the evaluation team.

Data were abstracted for a defined set of key implementation variables, including the geographic focus, priority populations, implementation stage at the time of AMP application, and details about the asthma home visitation model. Once data abstraction was complete, the evaluation team reviewed and discussed all data for initial insights into variability of implementation across AMP programs that could inform the evaluation plan. As AMP progresses, data from this initial abstraction will be updated to reflect actual program implementation. These variables will then be used to stratify program outcomes, shedding light on which variables are associated with successful and unsuccessful outcomes.

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**This evaluation report highlights findings from the following data collection activities**

**Center Staff Focus Group.** The evaluation team conducted a focus group with key staff at The Center and RAMP technical assistance partners in January 2021. The purpose was to obtain baseline insights about the context in which AMP is being implemented, their capacity to support funded partners, anticipated challenges and successes during AMP implementation, and AMP’s intended impact.

**Program Lead Interviews.** The evaluation team conducted in-depth, semi-structured video interviews with program leaders from all of the funded partner organizations in February 2021. This helped build an understanding of their work to learn more about the population they are serving, their program model, and anticipated implementation barriers and successes. These interviews also shed light on implementation and program delivery changes given the COVID-19 pandemic.

**Home Visitor Interviews.** Harder+Company also conducted in-depth, semi-structured video interviews with home visiting staff from 19 of the funded partner organization in May 2021. These interviews helped to shed light on what is working well and what can be improved in terms of program delivery. Interview questions asked about implementation drivers, including training and supervision, staff communication, outreach strategies, and perceived participant experience with home visiting and asthma mitigation services.

**Progress Report Data.** As part of their grant requirements, funded partners capture and submit data about their AMP programs in biannual progress reports. These reports allow The Center to monitor program progress and identify opportunities to support implementation, while also providing ongoing evaluation insights into AMP’s overall reach, interventions, and early outcomes.
Beginning in September 2020, the evaluation team began working with The Center to develop the progress report form. Initial measures considered for inclusion were informed by key outputs and outcomes in the AMP logic model, document review, guidance set forth in AB74 regarding AMP funding, and discussions with The Center and RAMP. These measures were further informed by an online survey of funded partners conducted in November 2020 to understand their current data collection practices, as well as the feasibility of adding additional data collection measures.

These measures were then compared to data required by the California Department of Public Health's California Breathing program from all funded partners who participate in the Asthma Management Academy (AsMA) training. This comparison was completed to assess the feasibility of aligning AsMA’s existing reporting requirements (expected to apply to a majority of AMP funded partners) with AMP’s monitoring and evaluation to minimize the data collection burden for all funded partners. Based on these conversations, the progress report form was developed to fulfill both AMP evaluation goals and data required by California Breathing. The Center, California Breathing, and Harder+Company signed a data sharing agreement in December 2020 to ensure that all parties receive appropriate data.

The progress report form was finalized and shared with funded partners on January 7, 2021. A training webinar was held on January 12, 2021, and funded partners received follow up technical assistance to support their completion of the first submission, which was due February 1, 2021.

The Program Reach section of this report, below, summarizes the most up-to-date progress report data, submitted by funded partners on July 31, 2021.
Program Implementation

Before assessing outcomes, it is important to understand how funded partners are implementing their programs. This section begins with a brief overview of the scope of work requirements and then describes funded partners’ experiences with initial program implementation components including training, infrastructure supports, and service delivery.

AMP Participant and Funded Partner Requirements

Eligible program participants should have moderate to severe or poorly controlled asthma. Severity can be determined by an asthma-related emergency department visit or hospitalization, two sick or urgent care asthma-related visits in the past 12 months, a score of 19 or lower on the Asthma Control Test, or the recommendation from a licensed physician, nurse practitioner or physician assistant.

AMP services should be provided by home visiting professionals including qualified, non-licensed professionals such as community health workers, promotoras, health educators, and certified asthma educators. Services should be culturally and linguistically appropriate and reflect the communities being served. Home visiting professionals should be trained using curricula, materials, face-to-face client interactions, and/or other resources that cover a core set of topics such as basic facts about asthma, roles of medications, environmental control measures (including how to identify, avoid, and mitigate environmental exposures), and educating participants on how to read an asthma action plan.

AMP funding covers up to five home visits (in-person or virtual) for participants who are 21 years old and younger and up to three home visits for participants over age 21. Home visiting services should include asthma education, environmental asthma trigger assessments, and home environmental trigger remediation. Up to $1,000 per participant may be used for minor to moderate remediation of environmental asthma triggers.

1 Asthma education includes providing information about basic asthma facts, the use of medications, self-management techniques, self-monitoring skills, and actions to mitigate or control environmental exposures that exacerbate asthma symptoms, consistent with the National Institutes of Health’s 2007 Guidelines for the Diagnosis and Management of Asthma (EPR-3), any future updates of those guidelines, and other clinically appropriate guidelines.

2 Environmental asthma trigger assessment is the identification of anything found in and around the home that induces coughing, wheezing, trouble breathing, or other asthma symptoms, including allergens, irritants, and moisture sources. The assessment is used to guide education about actions to mitigate or control environmental exposures.

3 Minor to moderate environmental asthma trigger remediation is intended to mitigate or control environmental exposures in the home. Examples include providing and putting on dust-proof covers for mattresses and pillows; providing low-cost products such as high-efficiency particulate air vacuums, asthma-friendly cleaning products, dehumidifiers, and air filters; and using integrated pest management, including performing or referring for minor repairs to homes’ structures, such as patching cracks and small holes through which pests can enter.

AMP funded partner eligibility criteria

- Be located and provide services in California
- Be a 501(c)(3) community-based organization, health department, or community-based healthcare or Medi-Cal managed care organization
- Have good working relationships or a willingness to establish such relationships with Medi-Cal populations, managed care organizations, and Medi-Cal providers
- Evidence of inclusivity and non-discrimination based on race, color, religion (creed), gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation, or military status in any activities or operations.
All funded partners, including the asthma home visiting professionals, are expected to participate in regular learning convenings, technical assistance, and evaluation.

Within the context of these requirements, our evaluation aimed to capture funded partner experiences as they initially set up and launched their AMP-funded asthma home visitation work. The main areas of inquiry were training, infrastructure supports, and service delivery. Summary findings are included, below.

**Training**

The Asthma Management Academy (AsMA) training was well-received.

Through interviews, we heard that attendees were very satisfied with the training and reported being confident in their ability to implement the AMP program after participating in this series. Even those with little to no previous knowledge of asthma reported leaving the training with a wealth of knowledge about asthma overall, triggers and trigger mitigation, asthma action planning, and remediation. An interviewee stated, “We had a really extensive training...going over asthma, just the condition, everything that has to do with it, how it affects the lungs, how to communicate this with patients without using crazy jargon that they wouldn’t understand...they also trained us about cultural humility, motivational interviewing, speaking with patients, conducting home visits virtually...”

AMP quarterly convenings are useful.

We consistently heard from funded partners and home visitors that the AMP quarterly convenings are useful. They highlighted that the most valuable part of these convenings are the small group breakouts where they have the opportunity to share best practices, tools, and experiences, including implementation successes and challenges to learn from each other. Also, the leaders and home visiting staff of the funded partners found the initial convening on asthma racial inequities in California particularly valuable.

On-going training is critical.

Interviewees highlighted that continued participation in on-going training is important not only to stay up to date on the latest asthma and home visiting trends but to stay current on best practices for working with clients. We consistently heard the importance for home visiting staff to participate in cultural competency, cultural humility, trauma-informed and motivational interviewing training. Also, home visiting staff described the importance of on-the-job shadowing. These opportunities allow home visitors to directly see and experience service delivery but also provide space for them to ask questions, process, and reflect on best practices around strategies and approaches in real-time.

**Infrastructure Supports**

The Center and RAMP have the capacity and infrastructure to fully support funded partners.

Focus group findings from the discussion with The Center and RAMP revealed that both organizations have dedicated staff and resources, transparent processes for making decisions, and a clear vision of success to fully support the funded partners. They acknowledged their commitment to ongoing, open communication and collaboration between their two agencies as well as with the funded partners. DHCS funding allowed for sub-contracts — including sub-contracts with RAMP,
Children Now, and California Pan-Ethnic Health Network (CPEHN) — to provide funded partners with a network of support. Both The Center and RAMP are using a strengths-based approach, building on funded partners’ assets and specifically seeing them as resourceful.

Funded partners are finding the on-going support and resources available to them useful.

Through interviews, funded partners reported that both The Center and RAMP have been fully accessible, flexible, and intentional in their approaches. They are receptive to funded partner input, for example, giving the funded partners opportunities to provide feedback on drafts of the progress report form. They have approached problems from an understanding and flexible point of view, communicating to funded partners that they are there if needed and happy to help. The Center and RAMP also proactively reach out to funded partners from time to time to inquire if they need support. A home visitor stated, “I think they should continue to [offer ongoing support]. We have the opportunity to send an email to our partners in the RAMP meetings and ask about any information that we’re not sure of, or any information that we might need to know.”

AMP funded partners cultivated new and existing partnerships and peer learning networks.

Funded partners credited The Center for establishing meaningful communication among the network of funded partners at convenings and trainings. One AMP program found mentorship in another funded partner and shared that, “It’s important to have a mentor, someone you can call upon if you have a question, or if you’re not sure about something. It’s a very important collaboration.” We also heard that funded partners are leveraging each other for resources, peer learning of best practices and strategies, and even referrals when serving overlapping service areas.

The Center is building a statewide asthma network.

Interview and focus group findings revealed that The Center was intentional about carrying out this asthma work in partnership, specifically naming grantees “funded partners” in the request for proposals. From the outset, they sought to build out a network of partners representing diverse organizations and communities to engage in local asthma preventive services. Even more noteworthy is their intentional use of a health equity lens to ensure services are available and accessible to the low-income communities and communities of color who need them most. Building on this commitment, after careful review of the funded partners, The Center acknowledged they reached many of their desired populations but that some gaps still existed; thus, they decided to launch a round two funding opportunity. In July 2021, The Center accepted applications from organizations such as community-based organizations, local health departments, community-based healthcare providers, and Medi-Cal managed care organizations to work on specific culturally and linguistically appropriate asthma home visiting programs.

Key Service Delivery Components

The successful program planning set the foundation for funded partners to launch their programs. At this stage, a year into AMP, all funded partners have established their program workflow; developed or are developing comprehensive assessment tools; and established or are establishing their referral systems to enroll children and adults into AMP. Almost all funded partners have begun home visits (mostly virtual), and are conducting environmental assessments, providing participants...
with trigger remediation supplies, and providing other social service supports as needed. Even in this early stage of the work, funded partners and home visitors have identified key components and strategies they believe are imperative for successful AMP service delivery, described below.

Employing a community health worker/health educator model

Most AMP funded partners described their home visitors as bicultural, representing the communities they serve. Funded partners are advocates of the community health worker model, as these health workers or promotores share many of the same social, cultural, and economic characteristics as the participants, and can be the bridge between their communities and the healthcare system. As a funded partner described, “These ‘agents of change’ are well trusted in the community and can meet participants where they are at, intentionally building rapport, trust, comfort, and connection.” A home visitor commented, “I grew up in this community, so I can relate. My patients feel like, ‘Oh, she knows how it is. She knows what I’m going through. She understands that I might have pests in my home and that doesn’t mean I am not clean. She’s not going to judge me.’” We heard that this model can be particularly valuable in rural communities and places where transportation is limited and travel to the target population is difficult or time-consuming for a typical healthcare provider.

Using participant-centered service delivery models

Home visitors reported the importance of using participant-centered service delivery models, tailored to participants’ unique needs and preferences. They expressed that, when using these approaches, participants are more engaged and likely to comply with home visitor suggestions. As a home visitor stated, “The participant is empowered to take positive control over their life. It isn’t just about, here we fixed this. It’s more like, let’s empower you and work for sustainable change rather than quick easy fixes.” Specific to the asthma work, home visitors acknowledged the asthma action plan as an important tool and starting point to work directly with participants, understand their individualized asthma circumstances, and document the steps each participant can take to keep their asthma from getting worse. We heard the importance of using active listening when reviewing these plans to discover what is important to the participant, what their daily needs are, their preferences, and their desired outcomes while respecting their history and cultural background.

Using a culturally responsive curriculum and asthma education approach

All AMP funded partners described intentionally grounding their programs in culturally responsive programming. Most offer services in English and Spanish languages, with at least one home visitor who speaks Spanish. Several mentioned having access to interpretation support if other language needs were presented. For one funded partner, this involved a language line that can interpret communication in other languages such as Punjabi and Khmer, spoken by Cambodian community members. Home visitors also reported being flexible and willing to adapt their approaches and schedules to best work with the communities or participants they serve. As one home visitor shared, “We tell them, ‘If you want to meet with me at 9:00 at night, I’ll meet with you at 9:00 at night. I can adjust my schedule to that.’ We’re available. So, I think that’s really helped.” Asthma education approaches have also been tailored to participants’ age (child vs adult); for example, TikTok videos were created to help educate children on asthma. Cleaning recipe books were created and tailored based on supplies available to specific families.

“I grew up in this community, so I can relate. My patients feel like, ‘Oh, she knows how it is. She knows what I’m going through. She understands that I might have pests in my home and that doesn’t mean I am not clean. She’s not going to judge me.’”

– AMP Home Visitor
Treating the whole person through a holistic care approach

Funded partners reported that home visitors approach participants holistically, embracing the mind, body, and spirit by actively listening to participants’ experiences and working in partnership to develop actions that improve their overall health and wellbeing. As a home visitor described, “I like to use mindfulness techniques and meditation with my participants to help control their stress before talking about their asthma. If I can’t help the participant decompress and focus, I won’t be able to help with their asthma.”

Offering mitigation supplies and resources that catalyze education into action

All AMP programs have dedicated funds to provide participants with mitigation supplies at no cost. Providing supplies such as air purifiers, ingredients for cleaning, and mattress covers reduce participants’ barriers to implementing asthma mitigation strategies.

Using existing programmatic infrastructure to build out AMP

Interviews with funded partners shed light on the fact that it is easier to launch a program like AMP when funded partners can leverage other organizational departments or other health system partners for outreach, recruitment, and referrals. Several funded partners acknowledged their access to a pre-existing database of participants diagnosed with asthma as a starting point for outreach. Another mentioned their ability to provide participants a warm hand-off from one internal medical department to the next. Other funded partners talked about their intentional approach to collaboration by drafting letters to local medical clinics, setting up phone calls with large medical plans in the area, partnering with community health systems close by, and even making connections with local University health systems.
Program Reach

This section of the report highlights funded partners’ ability to successfully implement AMP programs and reach diverse populations, even in the midst of the COVID-19 pandemic. AMP funded partners are highly dedicated to addressing inequities and disproportionate rates of asthma among low-income communities and Black, Indigenous, and people of color. Data from the two progress reports funded partners have submitted to date was used to begin answering the evaluation questions: how effective is AMP at reaching diverse populations and what are asthma outcomes for program participants?

Program Reach

Since the beginning of the AMP program in August 2020, through June 2021, the 22 funded partners have enrolled 757 participants – including 142 in the program’s first six months, ramping up to 615 in the second six months. Half of participants (50%) were existing clients of the funded partners’ organizations and another third (36%) were referred from community-based organizations, health plans, or healthcare providers (Exhibit 1).

Exhibit 1. Source of newly enrolled AMP participants (n=757)

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing client</td>
<td>50%</td>
</tr>
<tr>
<td>Referred by another healthcare plan</td>
<td>22%</td>
</tr>
<tr>
<td>Referred by another healthcare provider</td>
<td>14%</td>
</tr>
<tr>
<td>Community outreach</td>
<td>9%</td>
</tr>
<tr>
<td>Referred by another CBO</td>
<td>1%</td>
</tr>
<tr>
<td>Other source</td>
<td>5%</td>
</tr>
</tbody>
</table>

Funded partners enrolled participants of all ages (Exhibit 2). About a third (35%) were under 12 years old, 28% were between 12 and 21 years old, and a similar portion (29%) were over 21. Participants were also enrolled across race/ethnicity (Exhibit 3). The largest group of participants were Hispanic/Latino/Latinx (48%), followed by African American/Black (27%).

Exhibit 2. Age of AMP participants (n=757)

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 11 years</td>
<td>35%</td>
</tr>
<tr>
<td>12 to 21 years</td>
<td>28%</td>
</tr>
<tr>
<td>22 years and older</td>
<td>29%</td>
</tr>
<tr>
<td>Unknown age</td>
<td>8%</td>
</tr>
</tbody>
</table>
Exhibit 3. Race/Ethnicity of AMP participants (n=757)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino/Latinx</td>
<td>48%</td>
</tr>
<tr>
<td>African American or Black</td>
<td>27%</td>
</tr>
<tr>
<td>White</td>
<td>8%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4%</td>
</tr>
<tr>
<td>Asian</td>
<td>2%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.4%</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>0.3%</td>
</tr>
<tr>
<td>A race/ethnicity not listed here</td>
<td>2%</td>
</tr>
<tr>
<td>Race/ethnicity unknown</td>
<td>6%</td>
</tr>
</tbody>
</table>

Consistent with the AMP goal to provide asthma home visiting services to Medi-Cal clients, about two-thirds of participants (68%) were insured only through Medi-Cal, with an additional 3% having dual Medi-Cal and Medicare coverage; 11% were uninsured (Exhibit 4). Notably, about one-third of participants (30%) had visited urgent care or the emergency department or been hospitalized for asthma within the year prior to enrolling in the program.

Exhibit 4. Insurance status of newly enrolled participants (n=757)

<table>
<thead>
<tr>
<th>Insurance Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medi-Cal only</td>
<td>68%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>11%</td>
</tr>
<tr>
<td>Medi-Cal and Medicare dual coverage</td>
<td>3%</td>
</tr>
<tr>
<td>Insurance coverage unknown</td>
<td>18%</td>
</tr>
</tbody>
</table>

Program Delivery

In service of the 757 participants, AMP funded partners have conducted 256 in person and 926 virtual home visits (Exhibit 5). As part of these visits, home visitors have conducted 715 environmental assessments during the participants’ AMP enrollment.
Exhibit 5. Home visitor visits and assessments during AMP year 1

256  In-person visits
926  Virtual home visits
715  Environmental assessments

Training home visitors from funded partner communities is part of building the asthma workforce and delivering quality services. Toward this goal, in the first six months of the program, funded partners had 40 trained home visiting professionals offering AMP home visits. In the second six-month period, this had risen to 61 trained professionals offering home visiting services to community members with asthma. In addition, 269 funded partner staff have received training on culturally responsive methods.

Program Completion and Early Outcomes

Although AMP has been operating for less than a year, 208 participants from nine different funded partners have finished the program, defined as completing at least two visits for adult participants over age 21, or three visits for participants ages 0-21. The characteristics of completed participants are generally similar to those for program participants overall (Exhibit 2 and Exhibit 3). There are two notable differences: the proportion of participants who identify as white is larger among those who have completed the program (18%) than among enrollees (9%), and the proportion of participants with unknown insurance status is also larger among those who have completed the program (34%) than among enrollees (19%). With the program still in the early stages, however, we should monitor future progress reports to see if these differences remain as more participants complete service delivery.

Among these 208 program completers, 62 (30%) had a follow up after the final visit, where asthma outcomes were assessed (Exhibit 6). Funded partners focused their efforts on three outcomes: improvement in asthma self-management, decreased exposure to environmental triggers, and improved asthma outcomes.

Exhibit 6. AMP program completion and follow up

208  Participants completed AMP
62  Received a follow up after final visit

The strong majority of participants who started the program with poorly controlled asthma showed improvement at follow up (Exhibit 7). Improvements were also made in asthma self-management knowledge (94% showed improvement at follow up), self-management skills (94%), confidence in ability to manage asthma (95%),
and self-reported controller medication adherence (77%). Almost all (92%) had most of their asthma triggers addressed by follow up.

**Exhibit 7. AMP self-reported participant improvements at follow up**

- **94%** Asthma self-management knowledge
- **94%** Self-management skills
- **95%** Confidence in ability to manage asthma
- **77%** Controller medication adherence

Written asthma action plans were more of a challenge, with about half of participants (47%) not having a written asthma action plan at follow up (Exhibit 8).

**Exhibit 8. AMP participants’ action plans at follow up**

- 5% Unknown
- 47% No
- 48% Yes

The evaluation will continue to summarize information from the funded partner progress reports to monitor program progress and identify opportunities to support implementation, while also providing ongoing evaluation insights into AMP’s overall reach, interventions, and early outcomes.
Reflections and Next Steps

Over the past year, funded partners have shared stories and data with the evaluation team through interviews, convenings, and progress reports. This section of the report synthesizes this information and highlights key successes, challenges, and considerations for the AMP program in the coming year.

Successes

AMP funded partners, including supervising and home visitation staff, shared promising success stories about their implementation efforts. Funded partners are demonstrating that their approaches to reaching community members with asthma home visitation services are making a difference in the communities they are serving.

AMP is filling a gap in asthma service needs.

Funded partners shared that AMP is filling a gap in their community for asthma prevention and mitigation services. For funded partners with existing home visitation services for other chronic conditions, AMP allows them to expand their visitation programs to include asthma mitigation. Other funded partners shared that primary care providers often have limited time, and AMP helps participants get the needed follow up to reduce barriers to managing their asthma. For instance, a home visitor shared that after conducting a visit, “I detected that the doctor had prescribed a twice-daily medication, two puff. [The patient] was using one puff.” This important example demonstrates how dedicated home visits for asthma management offers an important avenue to address common reasons for poorly controlled asthma, in this case, medication adherence.

In addition, AMP provides wrap around services such as mitigation supplies, which some funded partners with longstanding asthma home visitation programs were previously unable to do. Some home visitation staff shared that these key programmatic elements are leading to positive outcomes in their clients, including increased awareness and understanding of environmental triggers, health education, and quality of life. A home visiting staff shared that, “Before, when we started the program, [the participant’s family] didn’t have a kitchen exhaust fan. So now they have a brand new one. Now it’s helping the little girl. The grandmother can cook at home, and that just makes me happy because we were actually able to do what we promised. I think that’s one of the things most organizations fail to do. They start something, but they don’t keep their word. That’s something we stand by. So that remediation was approved through the grant. We were happy to do what we could for them. I think they were pretty grateful.”

AMP partners have a strong network.

As previously mentioned, the network of AMP organizations continues to be a strength in the AMP model as well as an asset to AMP funded partners. For example, program supervisors were able to connect with other supervisors from more longstanding programs to gather information about their home visitation practices. Similarly, home visitors felt comfortable reaching out to other home visitors from different organizations to get information about forms being used, resources, and training materials that are available. These ongoing peer sharing
opportunities have continued to strengthen AMP programs within and across participating organizations.

**AMP partners are leveraging internal resources and relationships.**

Funded partner organizations leveraged existing programmatic resources within their organizations to build AMP. Many organizations that had existing connections with county health systems or internal databases of existing clients with need for asthma services were able to focus their initial outreach using these resources, which proved to be a useful outreach strategy. For example, one funded partner shared they had an existing list of clients with asthma; prior to AMP, however, they were not able to provide asthma services. Now, they could return to this list and begin offering AMP services. It is also important to note that all AMP funded partners were selected based on their strong community connections, which they have leveraged to strengthen initial AMP outreach and enrollment.

**AMP partners adapted during the pandemic.**

Finally, funded partners have adapted during the pandemic to best serve their community. All are providing at least some home visits virtually, which includes supporting participants’ technology needs and questions. While this does pose challenges, discussed below, home visitors shared that they have found unexpected benefits. For example, staff and participants have more options for meeting times, since virtual visits are less disruptive. One home visitor shared that there was a child whom they were trying to teach to use his asthma controller medication and, “we actually were able to Zoom in so we can see that he was taking his medication in the morning, just so that we know if he missed anything while he was taking it; then we would add, ‘Remember, don’t breathe. Hold your breath after you inhale deeply.’ We would do the same movements that he needed to do until he got it. I think that’s better because who wants us at their home at 8:00 in the morning?” Funded partners also shared that the use of technology has expanded professional development opportunities. They can attend more trainings since they do not have to factor in transportation, cost and time which makes trainings and professional development opportunities outside of their region more accessible.

**Challenges**

The main challenges funded partners experienced in their early implementation were related to the COVID-19 pandemic, which exacerbated both participant-level asthma care complications and required funded partners to completely rethink their program delivery. Challenges to care and asthma management experienced by participants included:

- **Restrictions on in-person services.** Instead of home and office visits, programs pivoted to virtual visits, phone calls, and porch drop-offs. While most adjusted to these methods, participants and program staff noted that there are limitations when connecting virtually. In some cases, potential participants are simply not interested in virtual services and decided not to join the program.

- **Limited outreach options.** In-person outreach for almost all funded programs was minimized or eliminated. Internal referrals also declined due to the lower number of clients seen across all healthcare and social services organizations. This led to challenges enrolling new participants for some funded partners.
• **Navigating systems of managed care.** AMP coordinators noted participant challenges in building trust with medical and government systems, and navigating care and resources, given the added COVID-19 safety concerns.

• **Navigating use of technology.** AMP home visitors shared that not all families have access to computers or the internet. In addition, computer literacy varies widely among clients. Home visitors are finding themselves playing a tech support role, which can take away from time to do asthma support.

• **Varied interest in asthma home visitation.** Participants continue to experience challenges related to asthma services both as a result of the effects of the COVID-19 pandemic as well as COVID-related changes in their daily lives. For example, many home visitors shared the challenge in helping clients prioritize their asthma when school, work, and social gatherings are all in flux.

In addition to these COVID specific challenges, home visiting staff shared that it can be hard to get clients to prioritize their asthma needs when they are balancing so many other aspects of their life such as employment and housing challenges. As one home visitor put it, "If you ask the parent, a mother who can’t put food on the table, they are not going to listen to me about the medication... We want to make sure that we cover those barriers to success, to make sure that we’re there as a resource.”

Another challenge is that some community members are hesitant to join the program out of fear and mistrust of programs. For example, individuals who are undocumented may hesitate to join due to the large amount of personal information collected by the program. Other potential participants are reluctant to join because they have prior experiences with programs that did not last very long or ended abruptly, presumably due to lack of funding.

**Matters for Consideration**

As AMP begins its second year, there are opportunities to strengthen the capacity and support system for funded partners as well as specific program components. In addition, some adaptations would be beneficial to support the six new funded partners. The considerations listed below are grouped into two categories: logistical and programmatic. Logistical considerations relate to improving training and technical support while programmatic relates to identifying strategies or making programmatic changes to better serve clients.

**Logistical Considerations**

• **Adapt the training format.** Funded partners shared that, overall, the trainings were great, but a number thought it would be more effective to at least have the first training in person. Funded partners acknowledged the limitations due to the pandemic, but hope as things improve, more in-person opportunities will prevail. They noted that by being in-person, it is easier to make connections and build relationships with the other funded partners.

• **Diversify the occurrence of meetings.** Funded partners mentioned that most trainings and all AMP discussions are scheduled in the mornings. Due to diverse scheduling needs, not all home visitation staff are able to
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attend. In the future, AMP staff may consider diversifying the meeting times to allow for increased participation.

- **Increase awareness of access to RAMP partners.** Some home visitation staff, including health educators reported not having direct access to RAMP. It may be beneficial for The Center to remind funded partner leadership that all staff are invited to attend RAMP meetings or reach out to RAMP staff via phone/email for technical assistance around asthma related interventions.

- **Create more opportunities to shadow.** For some home visitation staff, this is their first-time providing home visits. Given the change to virtual home visits, program supervisors and home visiting staff noted the importance of shadowing someone who has conducted a virtual visit before. Where possible, AMP should continue to facilitate coordination between agencies to support this practice.

**Programmatic Considerations**

- **Identify strategies to support enrollment.** Several funded partners faced challenges engaging and enrolling community members during COVID. Due to lack of in person outreach opportunities, funded partners are having particular difficulty recruiting participants who are disconnected from established programs and healthcare systems. The Center should consider facilitating a session to brainstorm emerging or best practices specific to community outreach especially virtual outreach.

- **Confirm or reiterate program eligibility criteria.** Some funded partners categorized participants as having well controlled asthma at enrollment. As eligible program participants should have moderate to severe or poorly controlled asthma, the Center should explore funded partners’ enrollment processes or continue to clarify patient eligibility requirements for funded partners.

- **Identify strategies to boost asthma action plans.** As mentioned previously (Exhibit 8), only about half of participants had an asthma action plan at the end of the program. Home visitors shared that this is a critical component to support asthma management. It will be important for The Center and funded partners to discuss/strategize how to educate providers about the importance of these plans to ensure this becomes routine procedure.

- **Identify strategies to retain participants for the full length of the program.** Where possible, funded partners should gather input about why clients are not available for follow up visits and/or unenrolling in services. Closely monitoring their input might help to reduce disparities among those who enroll compared to those who complete the program. Although it is early in the program and the number of participants who have completed all visits is small, currently the proportion of those identifying as white are completing the program at higher rates than those identifying as other race/ethnicities.

**Future Considerations for the Evaluation**

During the first year of AMP, the evaluation focused on the formative aspects including understanding the implementation drivers. We tracked funded partners’ ability to successfully launch programs using culturally and linguistically
appropriate services and supports, their commitment to health and racial equity, their training experience and exposure, their program delivery, and their data system and technical capacity. Moving forward, it will be important for funded partners to adapt these drivers as needed to strengthen their programs’ abilities to achieve the desired outcomes. Our evaluation will continue to monitor these drivers to inform implementation improvements as we simultaneously move to track outcomes (summative evaluation).

More specifically, data collection for the summative evaluation over the next year includes the following:

- Participant satisfaction survey;
- Funded partner progress reports and service tracking; and
- Analyses of healthcare utilization, health-related costs, and return on investment using Medi-Cal data.

The team will also begin planning follow up interviews and focus groups with the stakeholders engaged in year 1. In addition, the evaluation team will continue to provide the funded partners with evaluation technical assistance.

Throughout this work, evaluation efforts will continue to focus on partnering with The Center, supporting AMP funded partners, and collaborating with RAMP. We will share findings with all partners to ensure continuous learning and improvement of the AMP program.
Appendix

Exhibit 9.  Asthma Mitigation Project logic model*

Asthma Preventative Services Project Logic Model

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short-term outcomes</th>
<th>Intermediate outcomes</th>
<th>Longer-term outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants recruitment/referral to program</td>
<td># of participants enrolled in program</td>
<td>Improve knowledge of asthma and asthma self-management</td>
<td>Improved asthma control (e.g., decreased number of days/nights with asthma symptoms, decreased number of work/school days missed due to asthma)</td>
<td>Reduced asthma-related inpatient hospitalizations/ readmissions</td>
</tr>
<tr>
<td></td>
<td>Home environmental asthma trigger assessments</td>
<td># of in-home assessments for asthma triggers conducted</td>
<td>Improved skills/ self-efficacy in managing asthma</td>
<td></td>
<td>Reduced asthma-related emergency department visits</td>
</tr>
<tr>
<td></td>
<td>Asthma education</td>
<td># of educational visits conducted</td>
<td>Improved home environment</td>
<td></td>
<td>Reduced asthma-related costs</td>
</tr>
<tr>
<td></td>
<td>Home environmental trigger remediation</td>
<td># and type of education materials provided</td>
<td></td>
<td></td>
<td>Improved quality of life</td>
</tr>
<tr>
<td></td>
<td></td>
<td># and type of remediation actions (e.g., home repairs, cleaning products)</td>
<td></td>
<td></td>
<td>Increased life span</td>
</tr>
<tr>
<td></td>
<td></td>
<td># and type of referrals for trigger remediation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This logic model was developed by The Center prior to selection of AMP funded partners and may be further refined as the program progresses.
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