



Sustainable Financing for Asthma Education and Home Environmental Trigger Remediation: Lessons Learned from the Field

NOVEMBER 2017



Acknowledgements

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

- Peter Ashley, U.S. Housing and Urban Development
- Linda Ayala, Alameda Alliance for Health
- Judith Balmin, California Department of Public Health
- B.J. Ciesielski, New Mexico Community Health Worker Association
- John Dowling, Michigan Department of Health & Human Services
- Amelia Fay-Berquist, Esperanza Community Housing Corporation
- Alex Gallegos, New Mexico Department of Health
- Paul Garbe and program staff, U.S. Centers for Disease Control and Prevention
- Paul Haan, Healthy Homes Coalition of West Michigan
- Nancy Halpern Ibrahim, Esperanza Community Housing Corporation
- Anna Hamedani, L.A. Care Health Plan
- Kevin Hamilton, Central California Asthma Collaborative
- Claire Hayes Watson, Visionary Consulting Partners, LLC
- Melanie Hudson, California Asthma Financing Workgroup Coordinator/Facilitator, Contractor to U.S. Environmental Protection Agency
- Geri Jaramillo, New Mexico Department of Health
- Johanna Kichaven, L.A. Care Health Plan
- Katrin Kral, U.S. Environmental Protection Agency
- Celeste Lloyd, Michigan Community Health Worker Alliance
- Mariela Lopez, U.S. Environmental Protection Agency
- Karen Meyerson, PriorityHealth
- Kathleen Moseley, American Lung Association in New Mexico
- Amanda Reddy, National Center for Healthy Housing
- Sandra Rose, California Health and Wellness
- Brenda Rueda-Yamashita, Alameda County Public Health Department
- Elaine Sadocchi-Smith, L.A. Care Health Plan
- Mary Sue Schottenfels, CLEARCorps/Detroit
- Nicholas Sharp, New Mexico Department of Health
- Mary Shepherd, New Mexico Department of Health
- Daryl Smith, University of New Mexico Health Sciences Center
- Helene Smith, Gold Coast Health Plan
- Monica Stinson, Mississippi State Department of Health
- Eleanor Thornton, Visionary Consulting Partners, LLC
- Tisa Vorce, Michigan Department of Health & Human Services
- Diana Wilkerson, New Mexico Department of Health

RAMP extends great appreciation to our funders. This document was developed under a grant from the W.K. Kellogg Foundation. Portions of RAMP's work described in this document were supported by the W.K. Kellogg Foundation, The California Endowment, and under Cooperative Agreement XA-83575801 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by the EPA nor the other funders. The views expressed in this document are solely those of Regional Asthma Management & Prevention, a project of the Public Health Institute.

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EXECUTIVE SUMMARY

Sustainable Financing for Asthma Education and Home Environmental Trigger Remediation: Lessons Learned from the Field

Asthma is a common chronic condition affecting over 25 million people across the country. Unfortunately, those suffering the greatest asthma burden—low-income communities and communities of color—often lack access to the very things that will help keep their asthma under control. Asthma education and home environmental trigger remediation are two of the four vital components of the national clinical guidelines for the management of asthma, and are proven to improve health outcomes and reduce healthcare utilization costs, typically in a very short amount of time. Still, access to these services—particularly for low-income and minority patients for whom the asthma burden is high—is far too inconsistent and limited.

With the overall goal of ensuring that children and adults have access to the asthma-related services and systems they need to be healthy, advocates have long recognized the need for sustainable financing for asthma education and home environmental trigger assessment and remediation. In recent years, the promise of transformations to the health care system, including a greater emphasis on prevention, has provided more concrete opportunities to implement the wide variety of financing mechanisms needed to both sustain existing programs and bring these types of programs to scale as they deliver a comprehensive range of asthma services.

Building on this promise, public health, community, and government leaders across the nation have been supporting policy and program efforts while sharing lessons learned. Given the innovative nature of these efforts, and the continuously evolving political and economic climate, it's important to ensure that the growing body of knowledge across the field is documented and shared. With that aim in mind, this document shares lessons learned from Regional Asthma Management & Prevention (RAMP) based on advocacy efforts in California and our connections with stakeholders in select states across the country. It is our hope that sharing lessons learned and insights will contribute to a roadmap for success and stimulate efforts in other states.

Definitions of services and providers

Of the services based on national guidelines for the management of asthma that could greatly benefit from increased and more sustainable sources of financing, this paper focuses on two:

Asthma education: Delivered by a variety of professionals in a variety of settings, asthma education includes information about: basic asthma facts; proper use of medications; self-management techniques and self-monitoring skills; and actions to mitigate or control environmental exposures that exacerbate symptoms.

Home environmental trigger assessments and remediation: A home environmental trigger assessment includes professional home visitors using a standardized checklist to identify environmental asthma triggers most commonly found in homes. The home visitors then use the results of the assessment to inform educational messages and, in some cases, to guide trigger remediation. Some environmental triggers can be reduced through behavioral changes, while some require minor to moderate environmental remediation.

Particularly for people with poorly controlled asthma, studies have proven these asthma services reduce emergency department visits and hospitalizations, improve asthma control, decrease the frequency of symptoms, decrease work and school absenteeism, and improve quality of life.

Providers: Published literature and program-level information about asthma interventions demonstrate that asthma services improve health outcomes and increase cost savings when conducted by a variety of professionals, including both licensed and non-licensed providers. Examples include, but are not limited to, community health workers (CHWs), promotoras, certified asthma educators, lay asthma educators, social workers, respiratory therapists, healthy homes specialists, and nurses. Given the evidence, we maintain that financing for asthma education, home assessments and environmental trigger remediation should extend to a range of qualified professionals, even if they are not included in a state's licensure system.

Using a racial equity lens to guide the work

While anyone can have asthma, there are significant racial and ethnic disparities in asthma prevalence, morbidity (such as emergency department visits and hospitalizations), and mortality. An overarching theme guiding all of RAMP's work is our commitment to focus on the social and environmental inequities that contribute to asthma disparities, including substandard housing, limited access to care, and high levels of outdoor air pollution. Of the many factors contributing to the disparate impact of asthma on communities of color, housing is particularly potent. A long history of racist policies and practices has contributed to a disproportionate number of people of color living in substandard housing conditions that can cause or exacerbate asthma.

Inequities in housing access and quality, along with other social determinants of health such as inequitable burden of air pollution, must be addressed through policy change. Simultaneously, some improvements can and should be made by increasing access to home-based services (such as asthma education and environmental remediation) for inequitably impacted communities. Targeting Medicaid is one avenue for better addressing the negative impacts of substandard housing on health, as reaching the Medicaid population translates into reaching the racial and ethnic groups facing asthma disparities.

As important as it is to increase access to housing-related services for communities of color, it's also critical to consider who should provide these services. Research has shown that cultural familiarity and rapport can be a key determinant of effective education. That cultural familiarity and rapport can often be readily established with Community Health Workers or *promotoras*. While RAMP's efforts to increase access to asthma services can involve an array of providers, CHWs can play a particularly useful role in tackling racial and ethnic asthma disparities.

Current efforts

In California, RAMP began exploring advocacy opportunities for sustainable financing for asthma services in 2014, and later released *A Path Forward: Sustainable Financing for Asthma Education and Home Environmental Trigger Remediation in California*, outlining recommendations for the California Medicaid program,

Medicaid managed care organizations, foundations, hospital community benefit programs, social impact investors and others. We released this policy brief in conjunction with a summit in Los Angeles focused on the range of options available to secure sustainable financing for in-home asthma care services within California. Organized by U.S. Department of Housing and Urban Development and Los Angeles-based Esperanza Community Housing in partnership with the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention and many local organizations, the summit led to the development of the California Asthma Financing Workgroup. CAF is comprised of stakeholders from diverse sectors, and provides a venue to identify and advance policy and program opportunities, build the capacity of asthma programs, and gather information critical to advancing in-home asthma services. Against this background of networking and resource-sharing, RAMP and other stakeholders have spearheaded a variety of policy changes focused primarily on California's Medicaid population.

Of course, the qualities and characteristics of California's efforts to increase the sustainability of key asthma services—in particular, the emphasis on collaboration, resource-sharing, policy changes and capacity building—are not unique to California. With a grant from the W.K. Kellogg Foundation, RAMP sought connections in the Foundation's four priority places: Mississippi, New Orleans/Louisiana,¹ Michigan and New Mexico. Given the progress we have made in California, we wanted to see whether we could share lessons learned with and/or provide technical assistance to people pursuing similar efforts elsewhere. At the same time, we wanted to learn from them and disseminate their progress and lessons to a wide audience. The full paper provides a snap shot of each state's efforts.

Lessons learned

Integrating asthma-related prevention into the health care financing system will greatly benefit people with asthma—particularly those with poorly controlled asthma. Yet, it's a relatively new approach so there's much to be learned from the advocates working toward this goal. Below are summaries of insights gained through the experiences of RAMP and our partners in California, as well as colleagues in other states.

The importance of identifying and pursuing multiple policies and funding streams simultaneously

The value of pursuing multiple policies and funding streams simultaneously can't be overstated. The reality of categorical funding and other expenditure restrictions means it will take multiple sources of funds to fully cover the cost of in-home asthma services. Additionally, with any type of policy change effort, the outcome is uncertain. Finally, the effectiveness of a policy change may diminish over time due to broader changes in the health care sector. Pursuing multiple policies and funding sources simultaneously may require more effort, but it also increases the likelihood of success and the robustness of the services that can be provided to patients who would benefit from them.

Balancing top-down and bottom-up approaches

Early in the process of deciding the best approach to achieve financial sustainability for asthma education and home environmental assessments and remediation in any location, stakeholders will likely need to answer the question of whether it's best to pursue a top-down approach (by advocating with state agencies), a bottom-up approach (by which we mean using local policy and program wins to build the case for eventual state level changes), or both simultaneously. The balance between top-down and bottom-up approaches will vary by state for a variety of reasons.

- **Political Factors:** Some states have a long history of health care reform efforts at both the state and local levels, some may stake out a much more limited leadership role and instead promote innovation at the local level, while others are somewhere in the middle. It's also important to consider not just the political orientation to state-level health care reform but the scale of that reform. In some states, the sheer number of policies and programs being pursued in the context of health care reform increases the chances that there would be ways to integrate asthma services and other innovative chronic disease management strategies. Even where other states are less active on the health care reform front, some kind of health care changes are likely afoot in reflection of sector-wide efforts to control costs, improve outcomes and provide better care.
- **State Financial and Structural Factors:** The financial situation of the state's Medicaid program matters: while ultimately saving money, systematically supporting

asthma education and home environmental remediation requires up-front costs that may be prohibitive. Stakeholder efforts to advance various asthma financing solutions may also be challenged by agency staff's limited bandwidth or need to prioritize other issues. The state Medicaid program structure matters too; even when there are staff in place, there may be organizational issues making it difficult to enact state-level approaches, as described in the full paper.

- **Assessing the Managed Care Landscape:** Finding the balance between a top-down and bottom-up approach should take into account not only state factors but more local ones as well, including the landscape of managed care organizations that make up more and more of the nation's Medicaid system, regardless of the state. A high population state with many different managed care organizations may suggest a state-level approach and vice versa. Understanding the variation in practices with one plan across different parts of the state is also useful. When approaching and building relationships with health plans, it is also essential to understand what motivates or otherwise incentivizes their decisions.

The importance of developing partnerships and networks, and the role of funding to support them

Although it takes time, there is a value in building partnerships and networks to support advocacy for sustainable financing, regardless of state or setting. We've noted three clear themes related to the value of partnerships, including the usefulness of partnership infrastructure, diverse perspectives and expertise, and funding.

- **Partnership Infrastructure:** Simply put, infrastructure to keep partners connected, communicating, and collaboration improves efforts to increase the sustainability of financing for asthma services. Such infrastructure is likely to be a combination of in-person meetings—from larger summits to more focused workshops and planning sessions—regular conference calls and email communications. Providing partnership infrastructure, regardless of its form or formality, requires one or more organizations to step into some kind of leadership role to get things started and keep things going.
- **Diverse Perspectives and Expertise:** There is value in bringing diverse members together. That value rests in

understanding complicated health care systems and what's important to different stakeholders. Partnerships also help broker connections with decision-makers in Medicaid agencies and elsewhere. As stakeholders advance policy change efforts, those diverse perspectives also ensure that changes are crafted in ways that meets the needs of those with poorly controlled asthma.

- **Funding to Support Partnerships:** Developing and maintaining diverse partnerships takes time and resources. In many cases, the National Asthma Control Program is one important source of support for advancing collaboration. The absence of NACP funding, however, doesn't mean that this type of work can't move forward. If other organizations can contribute leadership to the process, success is not solely dependent upon grant programs like the NACP. Nevertheless, it underscores that these processes take time and resources and benefit significantly from financial support.

Making complex technical information accessible to advocates

Changing policies and systems to increase the financial sustainability for asthma education and home environmental trigger remediation is a multi-step, multi-faceted process. Any one potential opportunity may represent a steep learning curve even for seasoned stakeholders. Multiple pathways with their own demands and timelines add to the complexity. Given this dynamic web, advocates need resources and partners who can translate complex program, technical and policy information to make it more accessible to the field.

Determining whether to use a broad or disease-specific approach to advocacy efforts

The various pathways and opportunities to increase the financing for asthma services aren't always or even typically asthma-specific. That is, many financing mechanisms can address a variety of chronic diseases or health conditions as well. As such, asthma advocates need to weigh the strategic and tactical value of taking a broad or an asthma-specific approach to advocacy efforts. A more comprehensive, inclusive approach may provide broader public health benefits as well as more political power assuming a wide range of partners are involved, while a narrower, asthma-centric approach may provide a more straightforward path for policy change.

Navigating challenges related to non-licensed professionals

Across states and health care reform efforts, a common goal among stakeholders is enhancing and expanding the role that non-licensed professionals (NLPs) play in delivering better, more efficient health care services. Even with substantial enthusiasm for NLPs, there are significant challenges associated with expanding their use. At the core of debate rests the issue of qualifications, including education and skill standards by which a segment of the workforce can be assessed for organizational and quality assurance purposes, as well as supervision and workforce availability. Stakeholders can take different approaches to these issues depending upon state and local priorities and conditions.

Conclusion

In reflecting on the experiences in California, New Mexico, Michigan, Mississippi and New Orleans, as well as what we've learned from national partners, it's clear that there's not a single, universally applicable solution to the challenge of sustainable financing for prevention-oriented asthma services. Yet, progress across the multiple sites has led to the emergence of common themes, which hopefully provide useful insights and guidance to other advocates across the country. While the array of opportunities and diversity of approaches—both in terms of underlying strategies and tactics—may feel dizzying, it does mean there's likely a door somewhere that may be relatively easy to open.

One thing that is very clear to us is that asthma is a great starting point for the work of linking clinical care with more upstream prevention efforts. Not only does asthma provide a prime example of health disparities, but the strength of evidence behind well-established asthma interventions means that advocates have a strong starting point. With the ultimate goal of reducing racial and ethnic health disparities, our hope is that asthma will pave the way for other public health issues. This is a new area of work—and one that's in flux as the nation's health care system is poised for additional changes—so we hope to learn more as we make further progress in California, and to learn more from others across the country engaged in similar efforts.

Sustainable Financing for Asthma Education and Home Environmental Trigger Remediation: Lessons Learned from the Field

INTRODUCTION

Asthma is a common chronic condition affecting over 25 million people across the country. Unfortunately, those suffering the greatest asthma burden—low-income communities and communities of color—often lack access to the very things that will help keep their asthma under control. Asthma education and home environmental trigger remediation are two of the four vital components of the national clinical guidelines for the management of asthma, and are proven to improve health outcomes and reduce healthcare utilization costs, typically in a very short amount of time. Still, access to these services—particularly for low-income and minority patients for whom the asthma burden is high—is far too inconsistent and limited.

With the overall goal of ensuring that children and adults have access to the asthma-related services and systems they need to be healthy, advocates have long recognized the need for sustainable financing for asthma education and home environmental trigger assessment and remediation. In recent years, the promise of transformations to the health care system, including a greater emphasis on prevention, has provided more concrete opportunities to implement the wide variety of financing mechanisms needed to both sustain existing programs and bring these types of programs to scale as they deliver a comprehensive range of asthma services.

Building on this promise, public health and community leaders across the nation have been supporting policy and program efforts while sharing lessons learned. At the federal level, the U.S. Department of Housing and Urban Development (HUD) and the U.S. Environmental Protection Agency (EPA), in collaboration with the U.S. Department of Health and Human Services, have hosted a series of summits across the United States to explore opportunities for sustainable financing for in-home asthma care at the state and community levels.² The Federal Asthma Disparities Action Plan workgroup partners (HUD, EPA, the US Centers for Disease Control and Prevention, and the National Institutes of Health) continue to meet to discuss lessons learned from the asthma financing summits and the state-level efforts that emerged from each.

In the private sector, the Childhood Asthma Leadership Coalition (CALC) is a non-governmental complement to the Asthma Disparities Action Plan workgroup as the coalition pulls together a diverse range of stakeholders working on asthma financing to share resources, develop tools, and advance the issue for members and non-members alike. Other individual organizations have also provided useful information and tools for the field. For example, the American Lung Association has conducted ongoing analyses of Medicaid reimbursement related to guidelines-based care.³ Additionally, the National Center for Healthy Housing (NCHH) conducted stakeholder interviews and analyzed state approaches to financing healthy homes services, resulting in the development of a number of case studies. NCHH has also created a series of e-Learning modules to support stakeholders in these efforts.⁴

Given the innovative nature of these efforts, and the continuously evolving political and economic climate, it's important to ensure that the growing body of knowledge across the field is documented and shared. With that aim in mind, this document shares lessons learned from Regional Asthma Management & Prevention (RAMP) based on advocacy efforts in California and our connections with stakeholders in select states across the country. It is our hope that sharing successes and insights will contribute to a roadmap for success and stimulate efforts in other states.

Definitions of Services and Providers

Throughout this white paper we reference “asthma services” as well as a range of professionals that provide them. What follows is a quick summary of how we are defining these different terms.

What are the services?

The Guidelines for the Diagnosis and Management of Asthma (EPR-3), developed by the National Heart Lung and Blood Institute, describe four vital components of asthma management: 1) Assessment of disease severity and control; 2) Comprehensive pharmacologic therapy; 3) Patient education; and 4) Environmental control measures to avoid or eliminate factors that contribute to asthma onset and severity. Recognizing that the first two components are provided by licensed clinical providers and covered by all health insurers, when we refer to “asthma services” in this paper, we mean the latter two items. Research demonstrates these are the two components to which patients are least likely to have consistent access and the two that are most prevention-oriented. These are also two components that could greatly benefit from increased and more sustainable sources of financing.

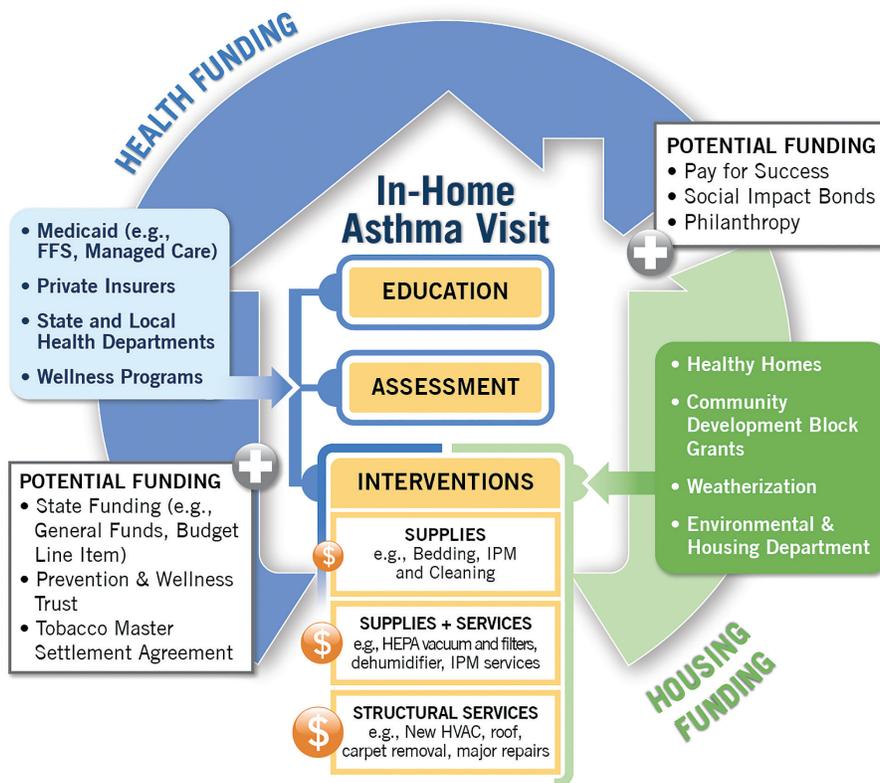
Asthma education: When we refer to asthma education, we use the definition provided by the National Asthma Education and Prevention Program (NAEPP). Delivered by a variety of professionals in a variety of settings, asthma education includes information about: basic asthma facts; proper use of medications; self-management techniques and self-monitoring skills; and actions to mitigate or control environmental exposures that exacerbate symptoms. As the NAEPP explains, “Asthma self-management education should be integrated into all aspects of asthma care, and it requires repetition and reinforcement.”

Home environmental trigger assessments: Asthma exacerbations are commonly triggered by exposure to allergens and irritants within the home. A home environmental trigger assessment includes professional home visitors using a standardized checklist to identify environmental asthma triggers most commonly found in homes. The home visitors then use the results of the assessment to inform educational messages and, in some cases, to guide trigger remediation.

Home environmental trigger remediation: Some environmental triggers can be reduced through behavioral changes, like eliminating smoking indoors or switching to asthma-safer cleaning products. Some trigger reductions, however, require more involved environmental remediation. Changes vary from minor efforts like providing allergen-impermeable covers for mattresses and pillows to moderate remediation efforts such as integrated pest management to major remediation efforts like carpet removal and replacement of ventilation systems.

Ideally, education, home assessments and trigger remediation should be available to all patients with asthma who would benefit from them. Particularly for people with poorly controlled asthma, studies have proven these services reduce emergency department visits and hospitalizations, improve asthma control, decrease the frequency of symptoms, decrease work and school absenteeism, and improve quality of life.

Funding this full range of asthma services, however, is easier said than done. The reality is that a wide array of different funding streams is likely necessary to cover all of them. The EPA developed an infographic (page 10), which illustrates how different sources of funds may be braided together to support comprehensive programs. (Some of the funding sources are described in this paper. Others can be found in Appendix A.) Because of the challenges inherent in blending together funding streams from multiple sources, many current home visiting programs provide just some of these services and/or rely on more comprehensive—but far less stable—grant funding.



Financing In-Home Asthma Care

U.S. Environmental Protection Agency

Who are the providers?

Published literature and program-level information about asthma interventions demonstrate that asthma services improve health outcomes and increase cost savings when conducted by a variety of professionals, including both licensed and non-licensed providers. Examples include, but are not limited to, community health workers (CHWs), *promotoras*, certified asthma educators, lay asthma educators, social workers, respiratory therapists, healthy homes specialists, and nurses. Some research suggests that professionals such as CHWs and *promotoras* may be

particularly effective in building trusting relationships with patients and their families. Given the evidence, we maintain that financing for asthma education, home assessments and environmental trigger remediation should extend to a range of qualified professionals, even if they are not included in a state’s licensure system. As such, this paper repeatedly references strategies to achieve reimbursement for “non-licensed professionals.” Of course, there are few “one size fits all” approaches; program and population priorities, as well as workforce availability, will greatly shape decisions related to provider selection.

Using a Racial Equity Lens to Guide the Work

While anyone can have asthma, there are significant racial and ethnic disparities in asthma prevalence, morbidity (such as emergency department visits and hospitalizations), and mortality. An overarching theme guiding all of RAMP's work is our commitment to focus on the social and environmental inequities that contribute to asthma disparities, including substandard housing, limited access to care, and high levels of outdoor air pollution.

Of the many factors contributing to the disparate impact of asthma on communities of color, housing is particularly potent. A long history of racist policies and practices has contributed to a disproportionate number of people of color living in substandard housing conditions that can cause or exacerbate asthma. This history ranges from post-Civil War policies and practices that created fewer land ownership opportunities for black Americans, to the deliberate creation of urban "ghettoes" with run-down houses during the Great Migration in the early 1900s, to redlining practices throughout much of the twentieth century that prevented African-Americans from acquiring homes. As stated in the book, *Evicted*, "Over three centuries of systematic dispossession from the land created a semi-permanent black rental class and an artificially high demand for inner-city apartments."ⁱ Case in point: in California 56.1% of African Americans and 51.3% of Latinos rent their homes in contrast to 25.3% of whites. This is significant because rental housing is more likely to be in substandard condition than owner-occupied housing. Since substandard housing conditions affect resident health, such conditions are a major driver behind the exacerbation of asthma disparities. A report from the National Low-Income Housing Coalition (NLIHC) estimated that 40% of asthma diagnoses in children under 16 years of age are associated with residential exposures where triggers such as dust, mold and pests, often result from substandard housing conditions.

Inequities in housing access and quality, along with other social determinants of health such as inequitable burden of air pollution, must be addressed through policy change. Simultaneously, some improvements can and should be made by increasing access to home-based services (such as asthma education and environmental remediation) for inequitably impacted communities. Targeting Medicaid is one avenue for better addressing the negative impacts of substandard housing on health, as reaching the Medicaid population translates into reaching the racial and ethnic groups facing asthma disparities. In 2013 in California, for example, 578.1 per 1,000 African American children were enrolled in the state's Medicaid program compared to 188.9 per 1,000 white children.

As important as it is to increase access to housing-related services for communities of color, it's also critical to consider who should provide these services. Research has shown that cultural familiarity and rapport can be a key determinant of effective education. That cultural familiarity and rapport can often be readily established with Community Health Workers or *promotoras*. As researchers Krieger et al noted, "Practical considerations have lead us to use CHWs [in the delivery of in-home asthma services] because they are well suited to work with low-income, ethnically diverse clients. CHWs have social and cultural connections to clients that facilitate the development of rapport and trust."ⁱⁱ Researchers Kim et al, share, "Interventions by [CHWs] appear to be effective when compared with alternatives... particularly when partnering with low-income, underserved, and racial and ethnic minority communities."ⁱⁱⁱ While RAMP's efforts to increase access to asthma services can involve an array of providers, CHWs can play a particularly useful role in tackling racial and ethnic asthma disparities.

i Desmond, Matthew. 2016. *Evicted: poverty and profit in the American city*.

ii Krieger, JW, Philby, ML, Brooks, MZ. Better Home Visits for Asthma Lessons Learned from the Seattle-King County Asthma Program. *American Journal of Preventive Medicine*. 2011;41(2S1):S48-S51 f

iii Kim, K et al. Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review. *American Journal of Public Health*. 2016 Apr;106(4):e3-e28.

A Snapshot of Current Efforts

California

California has a long and robust history of programs that provide asthma education and home environmental trigger remediation. Some of the country's first comprehensive asthma initiatives supported by foundations included California sites (e.g., Allies Against Asthma and the California Asthma Among the School Aged program) and the number of programs blossomed from there. However, most of these programs have had to rely on grant funding, which poses a significant challenge to sustaining such programs and the care they provide to vulnerable populations. Though these programs achieve successful outcomes for the patients they serve, sustaining and scaling them to serve far larger populations necessitates strategic advocacy efforts.

RAMP began exploring advocacy opportunities for sustainable financing for asthma services in 2014, and later released *A Path Forward: Sustainable Financing for Asthma Education and Home Environmental Trigger Remediation in California*,⁵ outlining recommendations for the California Medicaid program, Medicaid managed care organizations, foundations, hospital community benefit programs, social impact investors and others. We released this policy brief in conjunction with a summit in Los Angeles focused on the range of options available to secure sustainable financing for in-home asthma care services within California. The summit was organized by U.S. Department of Housing and Urban Development and Los Angeles-based Esperanza Community Housing in partnership with the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention and many local organizations. Out of that summit emerged the California Asthma Financing Workgroup (CAF). With leadership and facilitation from RAMP, Esperanza Community Housing, and the EPA, CAF is comprised of stakeholders from diverse sectors, and provides a venue to identify and advance policy and program opportunities, build the capacity of asthma programs, and gather information critical to advancing in-home asthma services. For example, CAF conducted a survey of existing asthma in-home visiting programs throughout California and then developed an infographic for use as a tool to advance this work locally and at the state level (See Appendix B).

RAMP has also spearheaded a range of policy changes within California, focused primarily on the Medicaid population. Medi-Cal, California's Medicaid system, has 13.5 million enrollees, having surged over five million between 2014–2017. The prevalence of asthma among Medi-Cal enrollees (16.2%) is higher than those not covered by Medi-Cal (13.6%), and Medi-Cal beneficiaries have higher urgent care utilization for asthma than Californians covered by other types of insurance. Given the sheer number of enrollees, and the disparate asthma impact, RAMP strategically chose to focus on policy changes within Medi-Cal. At the top of our list is Medicaid's Preventive Services Rule (PSR). Adopted in 2014 by the federal Centers for Medicare and Medicaid Services (CMS), the PSR allows state Medicaid programs to reimburse for preventive services provided by non-licensed professionals when recommended by a licensed professional. States must opt in to the PSR by submitting a State Plan Amendment (SPA) to CMS that details eligible services, provider qualifications and training requirements, etc. RAMP, along with partner organizations Children Now, California Pan-Ethnic Health Network, and other members of CAF, is working with state Medicaid program staff and the California legislature to implement the PSR to allow reimbursement to non-licensed professionals for the effective and efficient provision of asthma education and in-home environmental trigger assessments.⁶

RAMP has also advocated for asthma in the State's patient-centered medical Health Homes Program (HHP), which will provide increased care coordination and case management services for select Medicaid beneficiaries currently suffering and/or at-risk of multiple chronic conditions, including asthma. While there will be some variation in terms of how each county decides to implement its HHP, RAMP is looking for efficient ways to disseminate asthma best practices across the programs.

Another advocacy target is the Whole Person Care Pilots, part of California's Medicaid 1115 Waiver which "waives" various Medicaid rules in order to try new types of care delivery in hopes of improving health outcomes, providing better care, and lowering health care utilization costs. RAMP has encouraged local asthma programs to partner with other local stakeholders to include asthma home visits into county applications for Pilot program funding.

RAMP has also worked to improve performance measures to strengthen the incentive structure for health plans to cover asthma education and home environmental assessments and remediation. In early 2017, we asked California's Medicaid program to strengthen the asthma measure included in the External Accountability Set (EAS) for 2017. The EAS is a set of performance measures that the program selects for annual reporting by Medicaid Managed Care Plans. Each year, DHCS reviews the EAS measures and can revise the list. As part of its draft recommendations—and consistent with RAMP's request—DHCS will replace the current asthma measure, the Medication Management (MMA) measure, with the Asthma Medication Ratio (AMR) measure. Studies have indicated that the AMR is a better predictor of future asthma exacerbations than the MMA.

These activities to increase access to asthma services could not have happened without deep collaborative partnerships with a diverse array of organizations including asthma home visiting programs, county public health departments, health and social equity advocacy organizations, and others. As part of this constellation, the state government has played a key role too, with the California Department of Public Health's (CDPH) asthma program, California Breathing (CB), leading a range of efforts. For example, CB has funded a return on investment study to provide additional data in support of in-home asthma services. Additionally, CB developed offers a free, evidence-based training program (the Asthma Management Academy) for non-licensed asthma providers to ensure that any increase in demand for services can be met. Available in both English and Spanish, the Academy reflects the type of common collaboration happening within the state, as CDPH is rolling the program out in coordination with several community-based organizations. CDPH staff have also provided extensive technical assistance for a number of local community-based organizations, clinics and health plans interested in expanding their asthma focus by sharing learning tools and materials and assisting with program design. CDPH also has a staff member splitting her time with the Department of Health Care Services (DHCS runs the state Medicaid program), which helps facilitate connections between the Departments.

Concurrent with these state level efforts, numerous local organizations have been advocating with the Medicaid managed care organizations in their own communities; conducting research and/or evaluation activities to continue building the evidence base; advising the state-level

advocacy activities with their hands-on expertise; and participating in key advocacy opportunities, including meetings with DHCS staff.

One successful example is Asthma Start, the asthma in-home visiting program of the Alameda County Department of Public Health in the San Francisco Bay Area, that supports families of children with asthma by providing in-home patient education, environmental trigger assessments and basic remediation, and case management and referral services. The Asthma Start team—licensed social workers and other non-licensed professionals—tailors an action plan based on the needs of the families, and provides connections and collaborations with external partners like the County's healthy housing program, school and day care providers, and other social services. Asthma Start is sustained by a variety of funding sources, including its long-standing relationship with the Alameda Alliance for Health (the Alliance), a county Medicaid managed care organization. Asthma Start bills the Alliance for services provided to Alliance beneficiaries. Such support provides a key part of the program's sustainability and helps the Alliance provide efficient, effective care to its beneficiaries, reducing more costly interventions like hospitalizations and emergency department visits. One important note: the Alliance uses limited administrative dollars to support Asthma Start activities. Since managed care organizations cannot currently tap into their medical budget to pay for non-licensed providers, the support the Alameda Alliance provides is limited.

The Los Angeles area is also home to a partnership between an asthma in-home visiting program and a Medicaid managed care plan. Over five years ago, QueensCare Health Centers was providing health education and chronic disease management to patients when staff approached L.A. Care Health Plan, the nation's largest publicly operated health plan, about establishing a more formal partnership. As a result, QueensCare now provides up to three home visits and multiple educational phone calls to select L.A. Care beneficiaries with poorly controlled asthma. Services include a patient assessment and education, a home environmental trigger assessment and remediation support, and referrals to medical providers and outside social services. Funded as a special project out of L.A. Care's Disease Management Program, the plan provides a bundled payment to QueensCare for each member served on a per visit rate.

In addition to well-established programs leveraging long-standing relationships with local Medicaid managed care plans, new asthma programs are starting to emerge in California. For example, in Southern California, Gold Coast Health Plan—the only Medicaid managed care plan in Ventura County—recently implemented a pilot project with Ventura County Public Health to add an asthma component to the Department’s current home visiting programs. Under the supervision of licensed nurses, community health workers provide home visits, through which they conduct environmental assessments and manage triggers, provide asthma education, and deliver asthma-related supplies to assist high-risk Medicaid beneficiaries with poorly controlled asthma. Connecting Medicaid beneficiaries with their provider and educating beneficiaries on health system navigation are other key elements of the program. To maximize administrative efficiency, Gold Coast contracted with the Public Health Department to provide the service. Another managed care plan—California Health & Wellness (CH&W)—also recently added an asthma home visiting component to the services offered to members across the state. Community health workers employed by CH&W completed the state’s Asthma Management Academy training program and will support CH&W beneficiaries who have had asthma-related ED visits, hospitalizations, or frequent rescue inhaler use. The home visits, conducted by CH&W’s community health workers and respiratory therapists, are intended to address socio-economic barriers to accessing regular primary care provider visits, the importance of controller refills and adherence, ways to reduce home triggers, and other barriers to appropriate asthma care and management. The program will be evaluated at the one-year mark to assess patient outcomes, utilization, and cost savings. In Imperial County, CH&W, as the Local Initiative Health Plan, has helped the Local Health Authority create a Wellness Fund in support of various population health interventions; a portion of that Fund is supporting community-based asthma home visiting and education programs.

As California’s new and emerging asthma in-home visiting programs seek to diversify funding sources to provide longer-term sustainability, it’s perhaps no surprise that several are starting to explore the role that social impact financing might play in program sustainability. Currently two programs in California are exploring social impact financing: Asthma Start, mentioned above, and the Central California

Asthma Collaborative’s Asthma Impact Model (AIM), a “multi-component intervention program whose purpose is to improve the lives of those suffering with asthma by reducing triggers in the home and school setting as well as ensuring access to and proper use of, asthma medications and tools while facilitating regular visits to a health care provider.” In both programs, the social impact concept is similar, wherein private investment dollars support programs designed to save the payor (e.g., a managed care plan) money by reducing health care utilization costs. A portion of those savings, in turn, is returned to the original investor while another portion goes to the program to keep the services running. Both the Asthma Start and AIM social impact projects are still in their initial proof-of-concept stages.

Other States

With a grant from the W.K. Kellogg Foundation, RAMP sought connections in the Foundation’s four priority places: Mississippi, New Orleans/Louisiana,⁷ Michigan and New Mexico. Given the progress we made in California, we wanted to see whether we could share lessons learned with and/or provide technical assistance to people pursuing similar efforts elsewhere. At the same time, we wanted to learn from them and disseminate their progress and lessons to a wide audience. Below is a snap shot of what we learned.

Mississippi

Mississippi has a lengthy and diverse track record of state asthma efforts. Anchored by the Mississippi State Department of Health (MSDH), the American Lung Association (ALA) and the Asthma Coalition of Mississippi (ACM), and supported since the early 2000s by funding from the Centers for Disease Control and Prevention’s National Asthma Control Program (NACP), asthma stakeholders have articulated a broad vision for improving the quality of life among Mississippians by promoting education, prevention and asthma management throughout the state. Robust partnerships, including a coalition consisting of over 500 individuals representing more than 200 organizations, have resulted in a well-established infrastructure to move the work forward. They also have developed two formal state asthma plans (the last spanning 2011–2015). Priority objectives reflect the diversity of the partners and include activities related to advocacy and policy, community, data and surveillance, health care, school health and the environment.

Mississippi's progress stalled around 2014 when the state did not receive another NACP grant—a fact that underscores how critical the NACP has been to strong state efforts to address asthma. However, stakeholders are poised to regain momentum because in late 2016 the state was awarded a new NACP grant. Assuming state partners pick up somewhere close to where they left off, there are several key objectives and tasks from the most recent asthma state plan related to financing for asthma education and/or home trigger remediation. For example:

- Increase the number of asthma patients with asthma-related insurance coverage. Related tasks include clarifying asthma benefits coverage, Medicaid coverage information, and developing a model benefits package for essential asthma services.
- Increase the number of certified asthma educators. Activities include supporting Asthma Educator Institutes and developing a cost saving plan to reimburse for asthma education (the number of AE-Cs in Mississippi increased to 31 in 2014 from zero in 2009).
- Form avenues for people to cope with asthma in communities, including initiating a healthy homes training for neighborhood associations.
- Improve indoor air quality and increase understanding of asthma trigger exposures in home environments. Related tasks include providing resources and funding for allergen control resources for multi-unit housing and low-income populations.

These asthma efforts are taking place against a backdrop of various state health care reform activities. Managed care has eclipsed fee-for-service as the predominant delivery vehicle for state Medicaid services, and the state's managed care program—the Mississippi Coordinated Access Network, or MississippiCAN—is a “coordinated care program designed to improve access to services, improve quality of care, and improve efficiencies and cost predictability.” Two coordinated care organizations (CCOs) provide services for beneficiaries, and both CCOs provide chronic disease management support (one specifically targets asthma) and home health services. Mississippi opted not to expand Medicaid eligibility under the Affordable Care Act.

Mississippi has also moved forward with efforts to incorporate non-licensed professionals—specifically Community Health Workers—into its health care delivery system. MSDH and partners are developing a CHW certification program, and starting in 2015 Medicaid plans began covering CHW services under the auspices of “general education.” Additionally, the University of Southern Mississippi is home for the Center for Sustainable Health Outreach (CSHO), which supports “the role of community health workers as an essential component of sustainable community wellness.” CSHO provides support and technical assistance to CHWs and programs across a wide range of areas, including funding and sustainability and public policy development. In contrast, asthma stakeholders seem focused less on Community Health Workers and more on certified asthma educators when it comes to the non-licensed workforce for various asthma interventions such as patient education.

New Orleans, Louisiana

Asthma activities in Louisiana, generally, and the city of New Orleans, specifically, have ebbed and flowed. The most recent period of more intensive state-level activities occurred under the Louisiana Asthma Management and Prevention Program (LAMP), funded between 2009–2014 by the Centers for Disease Control and Prevention's National Asthma Control Program (NACP). Reflecting the NACP's approach, LAMP's efforts were broad and multifaceted. Examples of accomplishments include school districts achieving the state's asthma-friendly designation by training school personnel, providing students with asthma action plans, and conducting vehicle anti-idling campaigns. LAMP also trained hundreds of health care providers on asthma care and management best practices.

Published information on the LAMP program does not indicate much focus on increasing sustainability for asthma in-home education and trigger remediation. According to one interviewee, Medicaid's Preventive Services Rule—which would allow reimbursement for asthma education provided by a non-licensed professional when recommended by a licensed practitioner—was considered and discussed at length but ultimately not pursued due to anticipated political resistance. Once CDC funding ended, LAMP's comprehensive statewide approach trailed off considerably.

Apart from LAMP, one of the more substantial asthma interventions in New Orleans was Head-off Environmental Asthma in Louisiana (HEAL). HEAL was an evidence-based asthma intervention for children with moderate to severe asthma who lived in the Greater New Orleans area in the years following Hurricane Katrina (2006–2009). Funded under a public-private partnership between the National Institute of Environmental Health Sciences and the Merck Childhood Asthma Network (MCAN), HEAL examined the connection between the post Hurricane Katrina environment and childhood asthma outcomes. One arm of the study relied on asthma counselors—Master’s level staff trained using a standardized, guideline-based curriculum developed by Visionary Consulting Partners, LLC. These counselors conducted at least two home visits with families to provide intensive and individualized asthma management education so that families could effectively manage asthma on their own. The study demonstrated improved outcomes related to adherence and symptom reductions. The HEAL intervention also built capacity for sustained asthma support services in the city of New Orleans in a couple of ways. First, after HEAL all asthma counselors became certified asthma educators under the National Asthma Educator Certification Board. Second, the counselors continued their work under a second phase of HEAL at Xavier University of New Orleans’s College of Pharmacy’s Center for Minority Health and Health Disparities Research and Education.

Yet another program, Steps to a Healthier New Orleans, helped the city implement a chronic disease prevention and health promotion program targeting diabetes, obesity and asthma through environmental change, social marketing, community outreach and education strategies.

Despite sustainability challenges with LAMP and Steps to a Healthier New Orleans, two other education and home environment programs offer support for people with asthma in New Orleans and across Louisiana. Asthma HELP, available to Medicaid beneficiaries, is a “free, telephone-based pharmaceutical care program...providing asthma-related education. The program is staffed by licensed pharmacists who are certified by the National Asthma Educators Certification Board as asthma educators.” Services include patient assessment, education and assistance with provider relations. Additionally, the state runs a Healthy Homes and Lead Poisoning Prevention Program, which provides an integrated approach to

improving health hazards in the home, including asthma triggers. The Program is funded by the U.S. Centers for Disease Control and Prevention, federal Community Development Block Grant dollars and other sources.

In terms of more general health care reform efforts, Louisiana expanded its Medicaid program eligibility soon after the passage of the Affordable Care Act. Reflecting the fact that while elderly and disabled beneficiaries make up a minority of the Medicaid population but a majority of program expenditures, the state has embarked on a number of reform activities to strengthen home- and community-based services, such as housing stabilization supports, alternatives to institutional care, and rehabilitation services. In terms of non-licensed professionals—particularly community health workers—there are few if any efforts underway related to financing, certification or legislation. However, the Louisiana Community Health Outreach Network (LACHON) is an active association for community health and outreach workers. LACHON’s mission is “to support community health workers while advocating for improvements in community health.” The group convenes CHWs for peer support, offers professional development activities, and works to increase recognition for CHWs.

Michigan

Michigan’s commitment to addressing asthma is both extensive and notable given the number of state and local programs, initiatives, coalitions and policy efforts in place now and in the recent past. 2017 is the final year of the state’s current (and fourth) state strategic plan for asthma. The state’s Asthma Initiative of Michigan (AIM) was formed in 2000 to support and coordinate asthma efforts across the state; Michigan has received funding from the Centers for Disease Control and Prevention’s National Asthma Control Program since that time as well. Strengthened by the state’s Department of Health and Human Services (DHHS), an advisory committee, strategic partners, regional asthma coalitions and other stakeholders, AIM is focused on epidemiology and surveillance, environmental approaches, health systems and community-clinical linkages.

Supporting asthma education and home environmental trigger remediation is a key aspect of AIM’s asthma blueprint and an objective for many of AIM’s members. Strategies within the strategic plan, for instance, include establishing and maintaining in-home case management for

high-risk individuals; ensuring coordination and integration of asthma activities in healthy homes programs; and identifying and promoting community self-management resources. This considerable focus on connecting clinical care and community interventions in creative, sustainable ways is not surprising since Michigan has been a leader in this area for decades. Case in point: from 1996 to date, the Asthma Network of West Michigan (ANWM) has been providing in-home asthma education, case management and healthy home referrals, and is likely the first asthma coalition in the nation to receive reimbursement for its services from managed care plans. ANWM's model includes home visits for asthma education and an environmental assessment, case management and patient education, and any needed psycho-social support. Lead staff are case managers (registered nurses or registered respiratory therapists who are also certified asthma educators); their services are supplemented by community health workers and licensed clinical social workers for patient navigation and psychosocial assistance, respectively. In 2017, ANWM, formerly an independent non-profit corporation, integrated with a health system, Mercy Health Saint Mary's, but continues to serve the entire community under the hospital's Community Benefits program.

ANWM's well-developed model became known as MATCH—Managing Asthma Through Case Management in Homes. With the support of staff from ANWM, the state's asthma control program, and various managed care organizations, over the years MATCH spread to four other sites in different parts of the state, and there is interest in implementing the model in other sites as well. In some cases, MATCH programs are housed under a children-focused patient-centered health home model called CHAP, the Children's Healthcare Access Program. Each MATCH program has or is developing relationships with local Medicaid and commercial managed care organizations to procure reimbursement for its services. As in other states, any reimbursement provided covers only a portion of the services MATCH can provide. Funding from other sources such as grants, hospital community benefit programs and elsewhere are still essential. Stakeholders are also exploring newer models of funding, for example, the national Green and Healthy Homes Initiative (GHHI) may work with local partners in West Michigan to develop a social impact bond financing pilot.

In several sites, MATCH educational and environmental trigger assessment services are supplemented by more traditional healthy housing programs that can offer more substantial trigger remediation. For example, the Healthy Homes Coalition of West Michigan and ANWM worked closely together, while Detroit-based CLEARCorps, a healthy housing organization, partners with its local MATCH program.

These asthma developments seem to complement a variety of more general health care reform efforts in Michigan, including the expansion the Medicaid under the Affordable Care Act. Michigan is one of the few states with Republican control of the governorship and legislature that opted for expansion, and in doing so aimed to "to expand coverage for low-income adults under the ACA while introducing market-oriented reforms and limiting the Medicaid expansion's impact on [its] budget."

Another noteworthy development in the state is the implementation of an Affordable Care Act option to provide patient-centered medical health homes for Medicaid enrollees, a.k.a. the Health Homes Program. Focused on, among other things, beneficiaries with at least two chronic conditions, or one chronic condition and at-risk of having a second one, the program provides an enrollee with enhanced case management and care coordination services, including health promotion activities like patient education as well as referrals to community and social supports. Asthma is one of the qualifying chronic conditions. The program started on July 1, 2016, and may provide enhanced support for various asthma education efforts.

The composition of Michigan's asthma home-visiting workforce is also noteworthy for its consistency and emphasis on licensure. Generally speaking, MATCH programs use licensed staff (such as registered nurses or registered respiratory therapists) who are also certified asthma educators (AE-Cs). Where community health workers are used in these programs, they're typically in more limited patient navigation roles. As one interviewee put it, this approach is "in our DNA," starting with the initial development of ANWM's program in 1996. Built on a public health model, and with few other CHW programs to pull from at the time, ANWM decided using licensed staff with specialized asthma training was the right fit. This approach made it easier to meet the quality assurance needs of the managed care plans ANWM approached for program reimbursement.

The formality of the state's asthma workforce provides an interesting contrast to other efforts in Michigan to advance the increased use and integration of community health workers and other non-licensed professionals in the health care workforce. Michigan is the rare state that requires, as part of its contracting process, managed care organizations to maintain a CHW-to-enrollee ratio of at least one full-time CHW per 20,000 enrollees; CHW support is designed for enrollees with complex physical and behavioral conditions. CHWs are also integrated into the above-mentioned Health Homes Program to support the coordination of patient care and referrals, provide health education, and identify community resources among other efforts. The state is also home to the Michigan Community Health Worker Alliance (MICHWA), which promotes and sustains "the integration of community health workers into health and human services organizations throughout Michigan through coordinated changes in policy and workforce development." MICHWA was a leading advocate for the involvement of CHWs in the managed care organizations and the Health Homes Program.

New Mexico

Over many years, New Mexico has become home to increasingly formal and substantive asthma activities, including home visiting programs. For example, the American Lung Association of New Mexico conducts home visits for children with poorly controlled asthma. The visits are supported by Blue Cross/Blue Shield as part of its larger quality improvement initiative. Similarly, the New Mexico Asthma Control Program (NMACP) provided training for La Casa Family Health Center *promotoras* to conduct home visiting to families of children with persistent asthma in the southeast region where asthma hospitalization and emergency department visits among children were consistently higher than other regions.

New Mexico also has a state asthma coalition. Founded in 2000 with a grant from the Centers for Disease Control and Prevention, the NMACP has helped rally and coordinate an ever-growing set of stakeholders working on asthma. Those efforts culminated in 2010 in the formation of the New Mexico Council on Asthma (NMCOA). As part of its 2014–2019 strategic plan, *Breathing Easy in New Mexico: Addressing the Burden of Asthma through Action*, the NMCOA has four goals designed to lessen the burden of asthma and reduce asthma disparities. They include

coordinating data sharing; educating patients, families and communities; promoting school-based health reform; and increasing guidelines-based asthma education for providers. Some specific activities include supporting University of New Mexico school-based health centers to develop an asthma registry to assure center adherence to clinical guidelines; sponsoring hospital-based asthma self-management education sessions for patients with asthma; and collaborating with various groups to develop asthma action plans for consistent use among providers, schools and patients.

As part of the goal to increase provider education, the NMCOA is also focused on efforts to "advance reimbursement measures for certified asthma educators and other clinical staff to be a self-sustaining process." Progress was initially slow but has considerably accelerated recently, in part as a testament to NMCOA members' ability to shift strategies and tactics. For example, the state asthma program and the NMCOA initially focused on the state Medicaid program. Due to a downturn in oil and gas revenues, however, the state budget has shrunk, putting intense cost-pressure on the Medicaid agency and other state programs. As a result, Medicaid staff have had limited capacity to engage in new efforts, including asthma reimbursement. An added factor is structural: the NMACP is housed within the New Mexico Department of Health while Medicaid is within the state's Human Services Department, thus providing fewer opportunities for collaboration to occur organically.

Not to be deterred, the NMACP and the NMCOA have seen more progress while pursuing other strategies, including collaborating with "health insurance companies to increase reimbursement rates for asthma self-management education provided by certified asthma educators and other non-physician healthcare providers." As part of that collaboration, NMCOA conducted a comprehensive asthma reimbursement survey of managed care plans in the state (including home visits as well as a range of other asthma services). Members found that the size of the plans made getting answers from one person too difficult, so a follow-up survey focused on reimbursement related to asthma education, including codes and reimbursement rates. The survey, combined with claims data information from the state, yielded promising information: the state's Medicaid system includes billing codes for asthma education

(including education provided by non-licensed professionals), and there were records of managed care organizations reimbursing for such services. NMCOA members are working on disseminating the reimbursement codes through an infographic and other methods to all providers, clinics and community partners.

More generally, New Mexico is home to a variety of efforts to support and integrate non-licensed workforce into the health care sector to address a wide variety of patients' health and social needs. According to the New Mexico Department of Health (NMDH), CHWs have been a part of health care delivery in the state since the 1960s, with more widespread usage coming in the 1990s through maternal and child health programs. CHWs have also benefited from the support and advocacy of the New Mexico Community Health Worker Association, founded in 1995. One interviewee noted that CHWs have been a boon for a sparsely populated state as they can fill in gaps for home-bound or limited mobility clients.

In 2008 the state established the Office of Community Health Workers (OCHW)—one of only two states with such an office—within the NMDH in order to “reduce health inequalities for New Mexico’s diverse communities through increased access to high-quality, cost-effective, and integrated health care and social services.” In addition to promoting a strong CHW workforce through training and advocacy, the 2014 passage of the Community Health Workers Act created a voluntary, statewide certification program for CHWs. Administered through the OCHW, certification applicants complete a Department-approved training program covering core CHW competencies. Additional specialist certifications are also available; diabetes and substance abuse has been finalized and the asthma specialty is in development. For experienced CHWs, grandfathering is an available option.

CHWs are by policy integrated into Centennial Care—the state’s Medicaid program—to a degree that’s unusual compared to much of the rest of the nation. Contracts between managed care organizations and Centennial Care mandate that “MCOs encourage the use of CHWs for care coordination; require MCOs to describe the role of CHWs in providing patient education; and specifically include CHW services in the list of services covered under the state’s Medicaid benefit package.” CHW-related costs are considered administrative, not medical, in nature. Policy design allows flexibility for how CHWs are housed. For example, Molina and United Health Care employ CHWs directly. Additionally, some CHWs are supported outside of managed care organizations through other initiatives. The Community Health Worker Initiatives (CHWI) unit, part of the Health Science Center-Office for Community Health at the University of New Mexico, runs Community Access to Resources and Education—CARE NM. “Through contracts with Managed Care Organizations, [CHWI] employs twelve CHWs covering 13 of New Mexico’s 33 counties. The CHWs find and connect high-risk Medicaid Centennial Care enrollees from around NM with resources aimed at improving their health, reducing Emergency Department visits, hospitalizations, and drug costs. The CARE NM model has been adopted by Federally Qualified Health Centers across NM that receive their own contracts from Medicaid MCOs.” Other efforts are also underway. Another CHWI pilot uses CHWs to provide universal screening for social determinants of health at primary care centers, while another pilot screens for social determinants of health of targeted, high-utilizer patients enrolled in two Medicaid managed care plans. Finally, the Pathways program uses CHWs to identify and work with hard-to-reach residents of Bernalillo County to connect them to health and social services. This particular program is funded by UNM Hospital through funding received from a county mill levy (i.e., a property tax).

Lessons Learned

Integrating asthma-related prevention into the health care financing system will greatly benefit people with asthma—particularly those with poorly controlled asthma. Yet, it's a relatively new approach so there's much to be learned from the advocates working toward this goal. The experiences of RAMP and our partners in California, coupled with the experiences of colleagues in other states, have yielded the insights outlined below. This list will no doubt grow and change as we continue to advance this important work.

Identifying and pursuing multiple policies and funding streams simultaneously

The value of pursuing multiple policies and funding streams simultaneously can't be overstated (for an excellent visual see page 10). There are a couple reasons for this approach. First, the reality of categorical funding and other expenditure restrictions means it will take multiple sources of funds to fully cover the cost of in-home asthma services. Take the federal Preventive Services Rule: if a state adopts it, the PSR will only provide reimbursement for the asthma education and in-home environmental assessment (at most). In order to support remediation of environmental triggers, we will need to pursue other sources of funding from the housing, health care and private sector (for more background information on these sources, see Appendix A). Second, with any type of policy change effort, the outcome is uncertain. Stakeholders could methodically conduct all necessary activities in hopes of changing a policy, and any given policymaker may reject the policy change for reasons beyond the control of the stakeholders. Third, the effectiveness of a policy change may diminish over time due to broader changes in the health care sector. For example, policies grounded in the delivery of Medicaid services under a fee-for-service model may not translate well when states expand service delivery through managed care structures. In sum, pursuing multiple policies and funding sources simultaneously may require more effort, but it also increases the likelihood of success and the robustness of the services that can be provided to patients who would benefit from them.

Balancing top-down and bottom-up approaches

Early in the process of deciding the best approach to achieve financial sustainability for asthma education and home environmental assessments and remediation in any location, stakeholders will likely need to answer the question of whether it's best to pursue a top-down approach (by advocating with state agencies), a bottom-up approach (by which we mean using local policy and program wins to build the case for eventual state level changes), or both simultaneously. Certainly, the balance between top-down and bottom-up approaches will vary by state for a variety of reasons. In its analysis of state approaches to financing healthy homes services, the National Center for Healthy Housing (NCHH) observed that in larger states "policies need to strike a balance between achieving state-level progress while maintaining flexibility to allow for local innovation." As a case in point, NCHH noted that in New York (which has the 2nd highest number of Medicaid enrollees, behind California), the Delivery System Reform Incentive Payment Program is allowing for simultaneous testing of multiple models that build on local resources.

There are a number of reasons why approaches may vary. Across the nation, there are examples where managed care organizations have provided consistent leadership in reimbursing for asthma services. Unfortunately, there are also examples where a change of leadership or priorities at the plan caused the financial arrangement to end. This dynamic suggests the benefit of the top-down approach where statewide policy changes dictate how managed care plans provide and/or pay for asthma services. On the other hand, many state Medicaid agencies are strained by the administrative demands of health care reform and, as a

result, progress on new issues can be slow at best or non-existent at worst, which points to the value of a plan-by-plan approach. Additionally, proof of concept at the health plan level can also help influence state Medicaid policy and program decisions. Ultimately, what's essential is that stakeholders and advocates assess state dynamics in order to craft an informed, strategic approach.

Exploring our experience in California hopefully sheds light on these dynamics. RAMP landed on both, with an emphasis on state-level change. The main reason for this decision was the sheer size of the state, number of Medicaid beneficiaries, and subsequent number of managed care organizations. With limited exceptions, California has moved aggressively to a model of managed care organizations from fee for service. With over 10 million beneficiaries enrolled in Medicaid managed care plans, California's system is much larger than other states. Moreover, a distinguishing feature of California's Medicaid managed care landscape is that various managed care models emerged in different counties based on the historical role of the counties in the financing and delivery of care. With 58 counties in the state, a plan-by-plan bottom-up approach would be a very lengthy process. Furthermore, California policymakers have long been committed to aggressive health care reform efforts at the state level. As such, we determined that California would be a good place to try a top-down approach.

To start, we decided to push the state Medicaid program to adopt the Preventive Services Rule to allow reimbursement to non-licensed professionals for asthma education and home environmental trigger assessments when recommended by a licensed professional. If approved by the federal Centers for Medicare and Medicaid Services through a State Plan Amendment (SPA), the rule change would only directly affect fee for service payments. However, there's a helpful relationship between a state's State Plan and the services delivered by Medicaid managed care plan. Specifically, the State Plan forms the basis for medically necessary services provided under the auspices of managed care contracts. Managed care organizations would have the flexibility to use less expensive, qualified non-licensed professionals to deliver asthma education. Since managed care plans provide care for over three-fourths of all Medicaid beneficiaries in California, once the Preventive Services Rule is in place via a SPA, it becomes an indirect way to provide access to these services for all California Medicaid beneficiaries.

Simultaneously, RAMP also saw the need to work directly with local Medicaid managed care organizations (MCOs), given their unique expertise and experience in addressing asthma. Not only were our MCO partners critical in helping us think through the State Plan Amendment language, but we also knew that we'd need their support to enact the rule change as the state Medicaid agency asked for statutory authority—granted through state legislation—to provide the clear authority to submit a SPA. In pursuing the legislation, it's important to have as many different supporters as possible (and as few opponents as possible). Therefore, through presentations and one-on-one meetings, we talked with California Medicaid MCOs about the benefits of the rule change (e.g., providing them with more flexibility; getting greater value for health care dollars by supporting services that prevent costlier emergency room visits and hospitalizations; and improving health outcomes and well-being for their enrollees) in order to gain their support—or at least keep them from opposing. Ultimately the legislation passed with bipartisan, near unanimous support, but was vetoed by California's Governor. Still, the veto explicitly left the door open to administrative changes within the state's Medical system. As stakeholders pursue those changes, partnerships with MCOs will continue to be important.

Our connections with MCOs also helped to identify and support effective asthma service delivery models implemented by managed care plans at the local level. Such programs can serve as inspiration for different managed care plans seeking to better address asthma among their beneficiaries. Additionally, if the Preventive Services Rule change goes into place, Medicaid managed care organizations may want guidance on how to best implement the rule, such as workforce choices, program design, etc. California is a diverse state, and we want to respect the desire of plans to respond to local interests, needs, and circumstances. For example, one county may have an existing community-based organization that is already providing asthma in-home education as part of a grant and is ready to expand their services. In that case, it would probably make the most sense for the plan to contract with the community-based organization to provide services. In other counties, it may be more efficient for the services to be provided by Community Health Workers or other non-licensed professionals employed by a clinic or provider network or by staff of the Medicaid managed care plan itself.

While adopting the Preventive Services Rule would mark an exciting moment towards increasing access to asthma services for the people who need them the most, such an effort—like most policy change—takes a long time. In fact, a common challenge across states is that Medicaid agencies are strained by the demands of health care reform, so progress is slow. Simultaneously encouraging Medicaid managed care plans to pursue innovative ways to provide these services to their beneficiaries allows for incremental change while we work with our partners to achieve more system-wide policy wins.

Based on RAMP's work in California and discussions with four states, here are some other factors to consider when weighing the balance between a top-down vs. ground-up approach.

Political factors

The political winds within a state can't be ignored. Some states, like California, have a long history of health care reform efforts at both the state and local levels. Elsewhere, state governments may stake out a much more limited leadership role and instead promote innovation at the local level. For example, Mississippi decided not to pursue Medicaid expansion as permitted under the Affordable Care Act. Still others are somewhere in the middle: Michigan's progress related to asthma financing is very consistent with its general approach to health care reform. This approach, as noted in an article in the *New England Journal of Medicine*, links "Michigan's Medicaid expansion to market-oriented changes in this federal-state program [to create] a pragmatic pathway to link Republican and Democratic priorities for health care. The key Democratic goal of expanding Medicaid coverage to low-income adults will be implemented in tandem with Republican objectives to control the state's health care costs, increase the role of private health plans, and require some new Medicaid enrollees to contribute toward the costs of their care." In Michigan, innovations through pilot programs are preferred over a mandate approach. Understanding these types of political dynamics is an important step to crafting different approaches to improving financing.

It's also important to consider not just the political orientation to state-level health care reform but the scale of that reform. For example, deciding to engage in state-level policy change in California made sense in part because of the sheer number of policies and programs being pursued

in the context of health care reform, increasing the chances that there would be ways to integrate asthma services and other innovative chronic disease management strategies. (This has been the case in California, where reform efforts included the design of a Medicaid waiver which may support in-home trigger remediation, as well as the design of a patient-centered medical home model for Medicaid beneficiaries with complex chronic diseases such as asthma.) Even where other states are less active on the health care reform front, some kind of health care changes are likely afoot in reflection of sector-wide efforts to control costs, improve outcomes, and provide better care. For instance, Mississippi declined to expand under the ACA but has invested in a patient care coordination initiative that includes enhanced chronic disease care management. Regardless of the scale of reform efforts, the lesson is that there's typically *something* at the state-level that stakeholders can work to leverage.

State financial and structural factors

The financial situation of the state's Medicaid program matters: while ultimately saving money, systematically supporting asthma education and home environmental remediation requires up-front costs that may be prohibitive. For example, New Mexico's Medicaid program is "strapped for cash" due to a downturn in state oil and gas revenues, upon which the state budget depends. As a result, there's less political appetite for initiatives with an upfront cost, particularly when reimbursement rates are being cut. Furthermore, budget cuts have impacted agency staff so key positions have gone unfilled, which makes agency engagement harder. Stakeholder efforts to advance various asthma financing solutions may also be challenged by agency staff's limited bandwidth or need to prioritize other issues. Take California: DHCS staff running the state's Medicaid program have been exceptionally busy with addressing an array of changes affecting the state's Medicaid system which meant it was initially difficult to get their attention for asthma financing. We ultimately had a breakthrough because of the strength of our partnerships, a development we detail later in this paper.

The state Medicaid program structure matters too; even when there are staff in place, there may be organizational issues making it difficult to enact state-level approaches. For instance, New Mexico has a strong asthma program housed within the state's Department of Health, while its Medicaid program sits within its Human Services

Department. There's little institutional relationship between the two groups, so collaboration on state efforts is more challenging; stakeholders are still working to gain the participation of a state Medicaid representative in the state's Council on Asthma. As another example, as previously mentioned, in California, the Department of Public Health and the Department of Health Care Services are two separate departments under the California Health and Human Services Agency. While the departments are separate, a staff member splits her time between both departments, which helps facilitate information and connections about ongoing activities.

Understanding state financial and structural factors will also help to establish and build the relationships necessary to influence any financing policies. Stakeholders in multiple states have initiated contact by utilizing professional connections and networks. Where no connections exist, Medicaid agency medical directors may be good starting points. Agencies may also have regular public events at which relationships can be established. For example, California's Medicaid agency regularly hosts a Stakeholder Advisory Committee to discuss topical issues with a diverse set of health care partners.

Assessing the managed care landscape

Finding the balance between a top-down and bottom-up approach should take into account not only state factors but more local ones as well, including the landscape of managed care organizations that make up more and more of the nation's Medicaid system, regardless of the state. As mentioned above, given California's population size, the number of counties and the diversity of managed care plans serving different locations, a state-level approach makes sense. Conversely, that approach could be far less relevant in a state with a limited number of plans serving its Medicaid beneficiaries. Additionally, it's helpful to understand how managed care plans tend to operate in any given state. For example, Michigan reported that plans within the state can be quite different in terms of their level of support for asthma services: In one region, a plan proactively reached out to local asthma stakeholders to build better connections, while the other plans in the same service area did not. (The reasons, of course, are likely complicated and have to do with a mix of leadership, culture and beneficiary needs.) Adding to the challenge, a stakeholder in Michigan reported that a managed care plan contracting for asthma services in one location does not

mean that that same plan will do so in another part of the state, although this sometimes increases the likelihood of the health plan reimbursing other locations, based on its knowledge of and experiences with an existing location.

When approaching and building relationships with health plans, it is essential to understand what motivates or otherwise incentivizes their decisions. In California, we knew that health plans are motivated by the Healthcare Effectiveness Data and Information Set (HEDIS measures), as plans are required to report their measures to state and federal officials. This knowledge led us to advocate for changing the HEDIS measures which California health plans report to align the measures with asthma best practices. We also know that plans are often caught between two competing motivations. On the one hand, plans are clearly concerned about the financial bottom line and want to reduce utilization costs. On the other, a plan can also be concerned that aggressive cost savings provided through creative and cost-efficient interventions may result in the plan receiving less Medicaid funding from the state in future contract years. Additionally, other incentives or motivations are unique to the managed care organization. Some plans have proactively pursued the integration of Community Health Workers and other non-licensed professionals, paying for it by leveraging administrative dollars or working with in-house foundations. Other plans may not have that same focus, but may be very interested in "thinking outside the box" and getting creative with the delivery and financing of various services. Similarly, some representatives from health plans have been part of our networks (like the California Asthma Financing Workgroup), and their perspectives have been invaluable. Other health plans may not be interested in partnering on advocacy efforts, but we have still prioritized ways to seek their perspectives, through both one-on-one encounters and group opportunities, in order to inform policy change efforts. As for who to approach within a managed care organization, stakeholders across locations often rely on contacts within existing networks and collaboratives. When those don't exist, advocates have reached out to likely allies such as health plan medical directors or staff within health education departments.

To sum up, advocates should strategically consider the best balance between top-down and bottom-up approaches. In most cases, advocacy efforts targeting both will be necessary, but the balance may shift depending on a number of factors, and the ideal approach will vary from state-to-state.

Developing partnerships and networks, and the role of funding to support them

Although it takes time, there is a value in building partnerships and networks to support advocacy for sustainable financing, regardless of state or setting. We've noted three clear themes related to the value of partnerships, including the usefulness of partnership infrastructure, diverse perspectives and expertise, and funding.

Partnership infrastructure

Simply put, a strong partnership infrastructure improves efforts to increase the sustainability of financing for asthma services. In California, RAMP has long been committed to building networks and enhancing collaboration as essential for successful policy advocacy, and we have an extensive history of collaborating with organizations throughout California that are also committed to reducing the burden of asthma. For example, we lead statewide coordination of a network of asthma coalitions called Community Action to Fight Asthma and co-lead the California Healthy Housing Coalition. As such, many of the organizations that are now involved with the California Asthma Financing (CAF) Workgroup have collaborated with one another in the past. Still, there's often a need to create topic-specific spaces in which advocates can connect, and the California Forum on Sustainable In-Home Asthma Management, held in Los Angeles in September 2015, was critical for bringing people together specifically around this issue. The Los Angeles summit was the sixth in a series of summits supported by the U.S. Department of Housing and Urban Development (HUD) and the U.S. Environmental Protection Agency (EPA), in collaboration with the U.S. Department of Health and Human Services. Planned and coordinated locally by Esperanza Community Housing, the summit was also shaped by a diverse group of federal, state, and local agencies working to advance in-home asthma services in California. At the summit, participants identified a number of strategies to pursue at both the local and state levels, ranging from conducting an inventory of existing home visiting programs to identifying helpful changes to the state's Medicaid program. The next steps included follow-up conference calls, which resulted in the creation of the CAF Workgroup, which now includes over 125 people representing diverse organizations across the state. Combining federal support with strong local partners was a very helpful step toward elevating existing relationships and

collaborative efforts for needed program and policy change. Since then, CAF has provided critical partnership infrastructure to maximize stakeholder involvement.

The importance of partnership infrastructure was also underscored in our conversations with colleagues in the Kellogg Foundation's priority places. In all four cases, it was a state asthma coalition or collaborative effort that created the structure and impetus for bringing partners together. In both Michigan and New Mexico, statewide collaborative activities formally started in 2000 and continue to this day with support from the CDC's National Asthma Control Program (NACP). Meanwhile, in both Mississippi and New Orleans, statewide coalitions have grown or contracted in concert with variable funding. In Mississippi, robust partnerships, including a coalition—organized at both the state and regional levels, consisting of over 500 individuals representing more than 200 organizations—resulted in a well-established infrastructure to move the work forward. At one point, around 2015, Mississippi's progress stalled when the state did not receive another National Asthma Control Program grant, which had supported the coalition. Fortunately, in late 2016, the state received another NACP grant and is ramping up program activities. Similarly, in Louisiana, the most recent period of more intensive state-level activities occurred under the Louisiana Asthma Management and Prevention Program (LAMP), funded between 2009–2014 by the NACP. Reflecting the NACP's approach, LAMP's efforts were broad and multifaceted in both approach and partnerships. Once NACP funding ended, however, LAMP's comprehensive statewide approach trailed off considerably.

We should note that providing partnership infrastructure—regardless of its form or formality—requires one or more organizations to step into some kind of leadership role to get things started and keep things going. For example, where state health departments have grants from the CDC's NACP, those departments often facilitate formal coalitions or more informal collaborative efforts. In other cases, convening efforts are shared between a small number of different groups with the means and inclination to do so.

Diverse perspectives and expertise

The value of partnerships was also highlighted in the National Center for Healthy Housing report: "Several interviewees highlighted the importance of individual relationships and strategic relationships in securing coverage for home-based asthma or lead follow-up

services.” Indeed, we have already seen the value of bringing diverse members together. Members of the California Asthma Financing Workgroup include community-based asthma in-home visiting programs who can share their experiences first hand; both licensed and non-licensed asthma staff to help us understand the needs of a diverse workforce; Medicaid managed care organization representatives who can help us understand their unique challenges; members of state and local health departments who can provide data and speak as neutral experts; and state-level advocacy organizations experienced in drafting and advocating for legislation. One of CAF’s important accomplishments is the development of an infographic (see Appendix B) showcasing the array of asthma in-home visiting programs within the state. Based on a survey conducted by CAF, the results have been used to highlight the fact that there is a core base of programs that need scaling up so that more people with asthma can benefit from these types of services.

Partnerships also helped us overcome the challenge of engaging state Medicaid agency staff. It would be a drastic understatement to say agency staff are very busy addressing the array of changes affecting the Medicaid system. As such, it was initially difficult to get their attention given the wide range of issues they’re currently addressing. They were not able to attend the Los Angeles summit and were at first not responsive to our requests for meetings. Although RAMP wasn’t successful in getting the attention of DHCS staff, one of our partners at the St. John’s Well Child & Family Center did succeed—reinforcing the value of relationships and utilizing the contributions of different network members. During an unrelated meeting that included the DHCS Director, the Executive Director of St. John’s raised the issue of asthma and the opportunity to address the problem through the Preventive Services Rule. His pitch resulted in her requesting written follow-up and an in-person meeting with a broader group of stakeholders. This initial meeting was the start of our current partnership with DHCS to implement the rule.

The value and strength of these partnerships has not only helped us to collectively “get in the door” but also to ensure that policy change is crafted and moves forward in a way that meets the needs of those with poorly controlled asthma. Our work to implement the Preventive Services Rule is illustrative. The two key steps to implement the rule have been 1) to draft the State Plan Amendment (SPA) describing Asthma Preventive Services (the term used in the

Amendment to describe asthma education and home environmental assessments) and who is qualified to provide them, and 2) to pursue legislation that gives DHCS the authority to submit the SPA. Partners continue to contribute to these processes in an array of ways, reflecting their unique roles and perspectives. For example, in drafting the SPA, we relied heavily on the input of partners who manage or work for asthma in-home visiting programs. They shared information about things like: their training curricula (components and number of hours), their relationship with licensed providers, the number of home visits they provide, etc. These perspectives were critical to shaping the SPA language. These partners were also able to connect us with families who had benefited from the programs and could speak to the press or provide testimony during legislative hearings. On the other end of the spectrum, partners like Children Now and the California Pan Ethnic Health Network contributed their expertise about the legislative process. They provided insights on navigating through legislative committees, served as the point of contact with the bill author’s office, and helped prepare witnesses to testify, as just a few examples. Assisted by these partnerships, the legislation passed with bipartisan, near unanimous support. However, questioning the need for statutory changes given DHCS’s administrative ability to make changes to Medi-Cal, California’s Governor vetoed the legislation. Even with this setback, the range of partnerships from advocacy groups to direct providers has been critical to our progress on the Rule. Given stakeholders’ plans to refocus on administrative changes with DHCS, these partnerships will no doubt continue to be important.

Funding to support partnerships

These stories also highlight the importance of funding in support of partnerships and networks. Developing and maintaining diverse partnerships takes time and resources. In many cases, the NACP is one important source of support for advancing collaboration. The absence of NACP funding, however, doesn’t mean that this type of work can’t move forward. In California, the NACP grant increased the capacity of the California Department of Public Health to engage in asthma financing work and led to the development of the Asthma Management Academy, which is a training curriculum and program for lay health workers (which, it’s worth noting, is being implemented in partnership with several community-based organizations). Simultaneously, the leadership for the California Asthma Financing Workgroup advocacy was provided by non-profits

and the U.S. Environmental Protection Agency, which has provided support through consultants and staff. Other organizations involved in CAF have stepped up for particular activities, providing support as an in-kind contribution. California's experience illustrates that, if other organizations can contribute leadership to the process, success is not solely dependent upon grant programs like the NACP. Nevertheless, it underscores that these processes take time and resources and benefit significantly from financial support.

Making complex technical information accessible to advocates

Changing policies and systems to increase the financial sustainability for asthma education and home environmental trigger remediation is a multi-step, multi-faceted process. Any one potential opportunity may represent a steep learning curve even for seasoned stakeholders. Multiple pathways with their own demands and timelines add to the complexity. Given this dynamic web, advocates need resources and partners who can translate complex program, technical and policy information to make it more accessible to the field.

Take Michigan, for example: the Asthma Network of West Michigan's home visiting program (MATCH, or Managing Asthma Through Case Management in Homes) became a well-tested and well-established model that has spread to other parts of the state. Given the complexities of MATCH—including its staffing structure, in-home focus, and a complex mix of funding sources including Medicaid managed care organizations, among others—other sites would likely not have adopted the model without the committed “translation” support and expertise from multiple parties including staff from ANWM, Michigan's asthma control program, and a managed care organization. To spread the model further, MATCH stakeholders plan to release a white paper detailing the model in the Fall of 2017.

Within California, RAMP has often served as “translator,” taking the lead on researching various financing mechanisms—from the Health Homes Program to the Medicaid 1115 Waiver to the development of a State Plan Amendment for the Preventive Services rule—and then sharing relevant summaries and opportunities with other interested parties. Each mechanism required a significant amount of time to track: participating in stakeholder

meetings, reviewing draft policies and plans issued by the state, and building new areas of knowledge such as understanding Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes and their connections to Medicaid billing. Such activities not only improved our own understanding but helped us to better distill and translate key pieces of information for advocates across the state. That translation occurred through tactics such as the development and distribution of a policy brief, hosting webinars on specific topics (like the 1115 Waiver's Whole Person Care Pilot Projects), meeting with various subject matter experts, and providing regular updates through calls of the California Asthma Financing Workgroup and the Community Action to Fight Asthma Network, a statewide network of asthma coalitions.

Of course, where our knowledge was limited, we enthusiastically sought out more experienced advocates to share their perspectives. For example, we consulted with the national Childhood Asthma Leadership Coalition to better understand federal Medicaid rules; a policy director at a California foundation helped us better understand the state's Health Homes Program; Children Now and The Children's Partnership provided information about the federal Children's Health Insurance Program; and the National Health Law Program helped us better understand how the Preventive Services Rule was previously used for autism services in California so that we could apply the Rule to asthma. These examples underscore the fact that no one organization will have a monopoly on making complex technical or policy information more accessible to others. Indeed, RAMP's experience in California is a bit unique in terms of the depth by which RAMP has explored a wide range of policy options. It's probably more typical that a variety of stakeholders are needed to step forward to translate specific issues and then hand over the figurative baton when a new issue arises. This dynamic underscores the need to have forums in which such translation can happen, such as the federally-sponsored summits that have happened around the country. California benefits from the California Asthma Financing Workgroup, which has regular conference calls and occasional in-person meetings to facilitate information and strategy exchange. Similarly, the New Mexico Council on Asthma fulfills the same function for that state. In Michigan, the MATCH sites routinely connect to share approaches, brainstorm solutions to unexpected problems and refine the home visiting model.

Determining whether to use a broad or disease-specific approach to advocacy efforts

The various pathways and opportunities to increase the financing for asthma services aren't always or even typically asthma-specific. That is, many financing mechanisms can address a variety of chronic diseases or health conditions as well. Take the Preventive Services Rule (PSR): it allows Medicaid reimbursement for preventive services provided by non-licensed professionals; each state decides whether to implement the rule and if so, for which services/health issues. As such, asthma advocates need to weigh the strategic and tactical value of taking a broad or an asthma-specific approach to advocacy efforts. A more comprehensive, inclusive approach may provide broader public health benefits as well as more political power assuming a wide range of partners are involved, while a narrower, asthma-centric approach may provide a more straightforward path for policy change.

An example in California illuminates these dynamics: When the PSR was first made available to states, RAMP immediately began discussions with an array of public health and health care advocacy organizations representing a range of issues for which non-licensed professionals, including community health workers, have a substantial track record of success: mental health, early childhood development, lactation support, school health, etc. Each organization expressed an abundance of interest in pursuing a comprehensive adoption of the rule. However, after some collective research and a scan of the landscape we concluded that California's Medicaid agency would not be willing to consider a broad adoption of the PSR, but rather would use it as a tool in the service of specific health issue. The agency was already swamped with a host of policy and program changes related to the state's Medicaid expansion and development of the exchanges under the federal Affordable Care Act; adopting a broad PSR was beyond the agency's bandwidth. Per agency leadership, each specific health issue would have its own unique needs and complexities (e.g., defining services to be provided, the training and qualification of non-licensed professionals, etc.) so tackling multiple health issues simultaneously would be too complicated. As such, RAMP decided to ask the agency to submit a SPA to utilize the PSR specifically for Asthma Preventive Services. Our hope is that a few successful sample cases utilizing the PSR for specific services will ultimately lead to a broader application of the

Rule. A broader application of the rule is also important from a racial equity framework; the integration of culturally responsive approaches throughout the healthcare financing system and the promotion CHWs and *promotoras* in the workforce would both support racial equity goals.

Navigating non-licensed workforce decisions

Across states and health care reform efforts, a common goal among stakeholders is enhancing and expanding the role that non-licensed professionals (NLPs) and other front-line staff play in delivering better, more efficient health care services. This is certainly true of asthma, for which there is a robust body of evidence demonstrating NLPs as effective members of the care team in both the clinic and community. Still, even with substantial enthusiasm for NLPs, there are real and significant challenges associated with expanding their use. At the core of debate rests the issue of qualifications, including education and skill standards by which a segment of the workforce can be assessed for organizational and quality assurance purposes, as well as supervision and workforce availability.

Qualifications

These dynamics are particularly clear when it comes to Community Health Workers (CHWs). Per the American Public Health Association, "CHWs are frontline public health workers who are trusted members of and/or have an unusually close understanding of the community served. This trusting relationship enables CHWs to serve as a liaison, link, or intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. CHWs also build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy." Some states have moved to operationalize this or other CHW definitions to increase the use of CHWs in the health care sectors. Michigan, for instance, has a CHW certification program implemented in partnership with the Michigan Community Health Worker Association. In New Mexico, the state has just begun a CHW certification program for new CHWs and a grandfathering process for experienced CHWs. Efforts in other states have stalled or are non-existent: In Mississippi, an initiative to establish formal guidelines for CHW training

and certificate programs failed due to legislative opposition. The State Department of Health and other partners did create a definition but the Board of Health has not yet approved it for promotion across the state. Neither Louisiana nor California are currently engaged in the development of formal certification processes.⁸

This unevenness isn't surprising. As the National Center for Healthy Housing notes, states "must strike a difficult balance between requirements for education/training to assure competence and quality in the delivery of preventive health services, and the availability of a robust workforce." Some CHW advocates fear that creating rigorous requirements around the level of education or taking an exam would exclude a portion of current CHWs and potentially undermine the role of CHWs as leaders that emerge organically from within their communities. These types of concerns aren't limited to CHWs either. For example, Certified Asthma Educators (AE-Cs) represent another type of NLPs. The certification exam was created for AE-Cs, per the National Asthma Educator Certification Board, to "assess qualified health professionals' knowledge in asthma education," and demonstrate "that rigorous education and experience requirements have been met"—ultimately in the hopes that such certification will provide a level of standardization and quality assurance that payors like managed care organizations need in their staffing decisions. Some stakeholders, however, have concerns that this exam may unintentionally exclude many effective asthma educators. Critics fear the certification exam is too technical and lacks sufficient emphasis on cultural competence and interpersonal skills that are found to be an effective part of patient education.

In California, RAMP bumped quickly against the debate around the certification of CHWs and other NLPs as we started to work on the Preventive Services Rule and the challenges federal and state definitions create around provider types eligible for Medicaid reimbursement. While we recognize the value of engaging in these difficult discussions, we also believed that we could move forward with a SPA for Asthma Preventive Services without tackling the difficult issue of defining CHWs or choosing to craft the rule in a way that relied on only one type of NLP such as a Certified Asthma Educator. In addition to the tactical benefit of avoiding a vexing political issue, this approach is also inclusive of the diverse range of health providers (licensed and non-licensed) currently conducting asthma education and in-home assessments in California and beyond,

including CHWs, *promotoras*, AE-Cs, healthy homes specialists, social workers and others. As the PSR effort moved forward, we articulated a set of qualifications that needed to be met to conduct specified asthma services based on significant input from members of CAF, including representatives of the workforce providing the services. Those qualifications focus on training and practice related to education and home environments, and can be fulfilled by a range of professionals.

Supervision

One of the hallmarks of high quality asthma clinical management is the reliance on an effective care team, a well-coordinated group of professionals that effectively support patients and their families through a range of skills and services. A hallmark of a well-coordinated group, in turn, is effective supervision so that individual care team members have the guidance and support they need to provide quality care. This is particularly true when it comes to the use of non-licensed professionals in clinical care teams. Based on the design choices made by home visiting programs identified in the development of this paper, typically NLPs are supervised by licensed practitioners (e.g., registered nurses, physician assistants, nurse practitioners, medical doctors). In cases where the NLPs don't have licensed practitioners within their own organizational structure (for example, a community based organization that conducts home visits), a contractual arrangement can be made so that the NLPs have access to licensed practitioners and a pathway to ensure patient information flows to the clinical care team.

Workforce capacity and availability

When a state Medicaid agency considers adding new services or new providers eligible to conduct existing services, agency staff will need to know whether the capacity exists to offer these services across the entire state. With some exceptions, Medicaid agencies must abide by the concept of "statewide;" that is, the state's Medicaid plan must offer comparable coverage in all regions of a state. It would be illegal, under regular Medicaid rules, to offer a Medicaid-funded service to some individuals that are not offered to Medicaid recipients statewide (though sometimes states can get waivers). Therefore, it is useful for advocates to develop an understanding of workforce capacity in the state. As mentioned above, the California Asthma Financing Workgroup conducted an inventory of asthma home visiting programs, which included information about the types of providers that conduct those programs,

and then developed an infographic summarizing the information, which is useful for educating policymakers.

Stakeholders should be able to demonstrate that either there already exists a workforce with the capacity to conduct services across the state and/or there is a plan in place to build workforce capacity. This can be easier said than done. Some communities may not have an existing workforce of non-licensed professionals *because* policies don't currently exist to sustainably finance those positions. Similarly, policymakers might not want to pass policies unless workforce capacity already exists. One strength of the California approach to the Preventive Services Rule is that we built in flexibility with regard to who could become a Qualified Asthma Preventive Services provider. Thus, one community could utilize CHWs while another utilizes

Certified Asthma Educators and a third takes a different approach altogether. This could make it easier to achieve (and/or demonstrate to policymakers the ability to achieve) statewideness. Another approach would be to demonstrate a plan for building capacity across the state. For example, the California Department of Public Health offers the Asthma Management Academy free of charge. This would certainly accelerate the development of workforce capacity.

Advocates may also want to explore whether there are ways that states can still encourage or permit managed care plans to provide services even if they aren't available statewide. That is, states may be able to provide guidance clarifying what is possible for managed care plans to do given some amount of flexibility they may already have. This could be an interim step if statewideness cannot immediately be achieved.

Conclusion

In reflecting on the experiences in California, New Mexico, Michigan, Mississippi and New Orleans, as well as what we've learned from national partners, it's clear that there's not a single, universally applicable solution to the challenge of sustainable financing for prevention-oriented asthma services. Yet, progress across the multiple sites has led to the emergence of common themes, which hopefully provide useful insights and guidance to other advocates across the country. While the array of opportunities and diversity of approaches—both in terms of underlying strategies and tactics—may feel dizzying, it does mean there's likely a door somewhere that may be relatively easy to open.

One thing that is very clear to us is that asthma is a great starting point for the work of linking clinical care with more upstream prevention efforts. Not only is asthma a prime example of health disparities, but the strength of evidence behind well-established asthma interventions means that advocates have a strong starting point. With the ultimate goal of reducing racial and ethnic health disparities, our hope is that asthma will pave the way for other public health issues. This is a new area of work—and one that's in flux as the nation's health care system is poised for additional changes—so we hope to learn more as we make further progress in California, and to learn more from others across the country engaged in similar efforts.

Endnotes

- 1 The Foundation's priority place is New Orleans, but given the state-level nature of many of financing approaches, we also reached out to stakeholders working across the state.
- 2 To access summit materials visit: <http://www.asthmacommunitynetwork.org/resources/conferences>.
- 3 To view the analyses, visit: <http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/asthma-care-coverage/>.
- 4 To view the e-Learning platform and other financing resources, visit: <http://www.asthmacommunitynetwork.org/Financing>.
- 5 http://www.rampasthma.org/uploads/PHI_RAM_P_policybrief.pdf
- 6 For more information about this effort, see <http://www.rampasthma.org/archives/14381>.
- 7 The Foundation's priority place is New Orleans, but given the state-level nature of many of financing approaches, we also reached out to stakeholders working across the state.
- 8 For more information about Community Health Worker-related efforts, see the National Academy for State Health Policy (<http://www.nashp.org/state-community-health-worker-models/>) and the Association of State and Territorial Health Officials (<http://www.astho.org/Community-Health-Workers/>).

Appendix A—Financing Sources

Funding the full range of asthma services—including patient education and home environmental trigger assessments and remediation—requires multiple sources. Simply put, there is likely no one funding source, be it public or private, that stakeholders can turn to in order to cover a comprehensive set of necessary asthma services. Instead, the key to providing robust asthma services is the concept of “blended” or “braided” funding, where different funding streams are woven together. For a helpful graphic see page 10.

What this looks like in practice will vary depending upon available local, state and federal public and private dollars, as well as the capacity of stakeholders to pursue existing opportunities and create new ones. For example, an in-home asthma visiting program might launch with a grant from a community foundation. To improve its sustainability the program could partner with a local Medicaid managed care organization to provide asthma education delivered by Community Health Workers. To expand the types of services provided, the program could also take advantage of the availability of a county healthy housing program to tackle structural issues like mold remediation. Throughout this process, the program will likely need to stratify its services by adjusting the intervention intensity according to patient needs (i.e., a person with more poorly controlled asthma receives more frequent and/or more substantial interventions).

In order to scale up the home visiting program, stakeholders would need to work with state government leaders to secure general funds, or launch a “Pay for Success” social impact bond-style financing structure with private partners. Stakeholders would also want to keep an eye on opportunities on the horizon. For instance, in the near future, the federal Medicaid program will implement regulations

related to the “Medical Loss Ratio,” removing a barrier for managed care organization to count various quality improvement activities as a medical rather than administrative expense. Doing so could greatly expand a MCOs ability to support in-home asthma services.

Of course, the above hypothetical is but one route a program might take. For more information on the range of financing options, here are a few of the many excellent resources available online:

- The U.S. Environmental Protection Agency’s Asthma Community Network website covers topics such as Medicaid, health plan, social impact and housing financing. Learn more at: <http://www.asthmacommunitynetwork.org/node/16032>.
- The National Center for Healthy Housing offers many financing-related resources, including a chapter on the topic in its e-modules, *Building Systems to Sustain Home-Based Asthma Services* (see <http://elearning.nchh.org/courses/course/view.php?id=21>).
- For Medicaid-related options, the Childhood Asthma Leadership Coalition created a policy brief, *Pathways to Medicaid Reimbursement for Pediatric Asthma Services*, with short summaries of various options (see <http://www.childhoodasthma.org/resources/2016/5/27/pathways-to-medicaid-reimbursement-for-pediatric-asthma-services>). Similarly, Nemours published *Realizing the Promise of Medicaid Prevention and Population Health*, which takes an even deeper dive into Medicaid financing options (see <http://movinghealthcareupstream.org/innovations/pathways-through-medicaid-to-prevention>).

Appendix B—Snapshot of In-Home Asthma Care Services in California in 2016

SNAPSHOT OF IN-HOME ASTHMA CARE SERVICES IN CALIFORNIA IN 2016

What does a home visit look like?

WHO CONDUCTS HOME VISITS?

In more than **60%** of programs or two-thirds of programs, home visits are conducted by community health workers, promotores, or community health promoters.



Other home visitors include social workers, nurses, and other health and healthy homes educators.

WHAT ACTIVITIES ARE CONDUCTED DURING A HOME VISIT?

Most programs include elements of—

- In-home trigger assessment
- Client assessment (health, demographic)
- Asthma education and control
- Development of an asthma action and/or care plan
- Written forms and questionnaires covering home assessments and/or patient-level assessments



HOW MANY VISITS ARE CONDUCTED?

In nearly **60%** of programs, **1-4** visits per family/client are conducted (average: 3.25 visits).

Each visit lasts **1-2** hours.



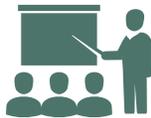
IS REMEDIATION CONDUCTED?

In about **65%** of homes, minor, moderate, or major remediation of asthma triggers is conducted.

That means that the majority of programs are going beyond asthma education or trigger identification, and helping residents improve living environments through remediation.

WHAT CURRICULUM IS USED TO TRAIN THE WORKFORCE?

Nearly **60%**



of programs develop their own curricula based on expert guidance and models, such as the American Lung Association, HUD, EPA, National Center for Healthy Housing, and National Asthma Educator Certification Board.

Some programs use existing curricula.

Currently, there is not a one-size-fits-all approach to training workforce but many, varied paths.

WHAT CURRICULUM IS USED TO EDUCATE PATIENTS?

2/3

of programs develop their own patient education based on expert guidance and models, including information from HUD, National Center for Healthy Housing, Kaiser, Alameda Alliance for Health, Esperanza Community Housing Corporation, Kresge Foundation, and the National Asthma Education and Prevention Program's Expert Panel Report 3 (EPR-3): Guidelines for the Diagnosis and Management of Asthma.

Of existing curricula, American Lung Association training is most used.

Nearly all are based on same core patient education components.



State-level policy changes to provide funding for in-home asthma care services, such as these depicted, will have a direct and significant impact on asthma management.

This Inventory of Asthma Home Visiting Programs was completed by the California Asthma Financing Workgroups



Regional Asthma Management & Prevention, a project of the Public Health Institute, aims to reduce the burden of asthma through a comprehensive approach, ranging from clinical management to environmental protection. We collaborate, coordinate, share resources, advocate, and promote policy change in order to reduce inequities, strengthen asthma prevention efforts, and improve management for all communities. For more information, visit: www.rampasthma.org.