Research Article

Medicaid Payment Innovations to Financially Sustain Comprehensive Childhood Asthma Management Programs at Federally Qualified Health Centers

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Abstract: Background. *One in 7 children in the United States is diagnosed with asthma, the leading cause of chronic childhood disease. Although a manageable condition when recommended medication regimens are followed and environmental control measures implemented, asthma remains the third most common reason for hospitalization among non-newborn hospital stays. As the primary health care home to a fifth of all low-income children who are especially vulnerable to asthma, federally qualified health centers play a critical role in providing comprehensive and preventive asthma care to their pediatric patients. Many health centers rely on the asthma education and counseling services of traditional and nontraditional providers, such as clinicians and community health workers, who may or may not be certified as asthma educators, as essential elements of asthma management and control. Asthma counselors are particularly valuable for patient home assessments and tailored education and counseling that are recommended components of evidence-based asthma care. Yet sustainable reimbursement for their services is a frequent challenge.* Methods. *We conducted an environmental scan of innovative approaches to securing adequate Medicaid reimbursement for asthma educator services provided as part of asthma management and control.* Results. *We identified a number of models at the individual health center, Medicaid health plan, and Medicaid state program level for securing sustainable reimbursement for asthma educators. Whereas state-based approaches are preferable to more incremental options at the health center and health plan level, local approaches may be more feasible for some health centers.* Conclusion. *Asthma educators provide essential, cost-effective services as part of childhood asthma care management. This analysis identifies creative solutions for health centers and other health care organizations to consider as mechanisms for sustaining the important services of these providers.*

Keywords: community health workers; certified asthma educators; asthma education; Medicaid; payment

As the leading cause of chronic childhood disease, asthma is diagnosed in 1 in 7 children, representing more than 10 million children in the United States.[1,2] Asthma is the second most expensive childhood condition to treat after mental disorders, accounting for $8 billion in direct medical care expenditures (vs $8.9 billion for mental disorders) in 2006.[3] Total annual spending is estimated at $56 billion for both adults and children.[4] Asthma was the third most common diagnosis for hospitalization among non-newborn pediatric patients[5] and the second most common cause of emergency department visits leading to hospitalizations in a 2005 sample of community hospitals in 23 states.[6] Although prevalent and costly, asthma can be successfully managed in primary care settings to prevent unnecessary utilization of inappropriate and expensive hospital services. Although most children, including children with asthma, receive care from primary

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care physicians and clinics, only half of children with special health care needs reported having a medical home,[7] which in a 2008 review of the evidence on the model was found to be associated with improved care for these children.[8] Medical homes, primary health care homes, or patient-centered medical homes represent a comprehensive approach to caring for children who have special needs such as asthma.[9] They are statutorily defined as

> a mode of care that includes (A) personal physicians; (B) whole person orientation; (C) coordinated and integrated care; (D) safe and high-quality care through evidence informed medicine, appropriate use of health information technology, and continuous quality improvements; (E) expanded access to care; and (F) payment that recognizes added value from additional components of patient-centered care.[10]

Federally qualified health centers (FQHCs), a type of provider defined by the Medicare and Medicaid statutes, which includes all organizations receiving grants under Section 330 of the Public Health Service Act, fulfill an essential role as the primary health care home for a fifth of all low-income children (37.5 million under 200% of the federal poverty level) nationally, the majority of whom have Medicaid coverage.[11] Poor and minority children are disproportionately affected by asthma (17% of poor children are diagnosed with asthma compared to 12% of nonpoor children; 21% of non-Hispanic black children and 16% of Hispanic children are diagnosed with asthma compared to 12% of non-Hispanic white children).[12] Aggregated health center survey data from 2002 reveal that nationally 1 in 5 health center pediatric patients was asthmatic.[13]

The scope of services provided by FQHCs is comprehensive and often includes health education as a standard of care. In one study, the authors found that

> visits to primary care physicians at community health centers were more likely to document health education compared with office-based practices, whereas diagnostic or screening services, drug mentions, and any non-medication treatment occurred at approximately the same proportion of visits for primary care providers in both type of settings

indicating that health centers are more likely to provide health education than other primary care providers. However, overall, the percentage was relatively low with less than half (44.8%) of health centers in the sample providing health education and asthma education representing only 1.1% of all health education visits.[14,15]

Recognizing the opportunity to improve care for their large constituency of pediatric and asthmatic patients, health centers have strived to follow the National Heart, Lung, and Blood Institute NAEPP guidelines for the diagnosis and management of asthma and in some cases have implemented evidence-based programs and interventions to address childhood asthma through different mechanisms (eg, health disparity reduction collaboratives sponsored by the Bureau of Primary Health Care, Environmental Protection Agency-funded asthma education programs). Health centers rely on traditional (eg, MDs, RNs, LPNs) and nontraditional providers (eg, community health workers [CHWs]) to provide asthma education and counseling to improve care, treatment, and management of the disease.[16] These providers can also become certified asthma educators (AE-Cs) once they fulfill the eligibility requirements and successfully pass the certification test.

The 2010 federal reform law includes provisions to encourage the employment of CHWs in communities in recognition of their role on the health team managing chronic disease and their integral membership in the health care workforce.[17] The American Public Health Association defines CHWs as

> frontline public health worker[s] who [are] trusted member[s] of, and/or ha[ve] an unusually close understanding of the community served. This trusting relationship enables CHW[s] to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds 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.[18]

In addition to provisions in the 2010 federal reform law, the Office of Management and Budget issued the 2010 Standard Occupational Classification (SOC) for the Department of Labor that established a unique classification for CHWs. Federal agencies use the SOC system to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.[19] According to the system's definitions, CHWs

> assist individuals and communities to adopt healthy behaviors, conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health, may provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, provide services such as first aid and blood pressure screening, and may collect data to help identify community health needs.[20]

Prior to this development, in 2003, the Institute of Medicine recommended that CHWs serve as members of health care teams to improve the health of underserved communities.[21] Finally, in the late 1990s, several states began to legislate and regulate the integration of CHWs into the health care workforce, with modest success.[17] More recently, a few states (eg, Massachusetts, Minnesota, also featured in this article) have supported expanded roles for CHWs and strengthened

their financial support.[17] With federal funding under health reform for Community Transformation Grants, provider reimbursement tied to quality outcomes, demonstration projects in the form of Medicaid Accountable Care Organizations (ACOs), including pediatric ACOs, bundled payment arrangements, and patient-centered medical homes, and a state Medicaid option to permit individuals with one or more chronic conditions (including asthma) to select a medical/health home (eg, a FQHC, a health team), state activity in this area may accelerate.

The evidence to date suggests that an expanded role for CHWs in asthma care management and control is warranted both from quality and cost perspectives. Childhood asthma interventions employing CHWs have been shown effective in reducing asthma symptoms, daytime activity limitations, and to some extent emergency department and urgent care use.[22,23] One study also documented improved patient knowledge and behavior.[24] In the same study, CHWs were matched to the population served on language, race, and ethnicity.[24] A synthesis of the literature reports that CHWs usually come from, live, or work in the same community as patients; are culturally sensitive or similar to patients; and often communicate in the primary language of patients or are bilingual.[22] One study conducted in post-Katrina New Orleans reported that CHWs had a high school–level education.[25,26] In all studies, CHWs receive additional training specific to asthma counseling.[22] Roles and responsibilities within the study-delineated asthma management protocols varied, but in the studies published in the scientific literature, CHWs provide patient education, tailored counseling, case management, and connections to community resources and supports.[17] In 2 studies, CHWs also assumed home-based tasks, such as environmental risk assessments, environmental remediation, and counseling and education on how to minimize exposure to environmental triggers in the home as well as to reinforce clinical education.[16,25,26] One study described the supervision model whereby CHWs met every other week with the principal investigator who also happened to be a physician.[16] In the post-Katrina New Orleans study, CHWs were closely trained and supervised by a AE-C, who used an ongoing, quality improvement model focused on content knowledge, skills, and practice.[25,26] In a nonstudy setting, CHWs may function individually and be based at a clinic, a community-based organization, or in a local public health department, or part of a multidisciplinary team, with supervision from a nurse or a physician. However, state provider licensing laws and individual organizational policies on minimum qualifications necessary for a given position can work to restrict the increased use and integration of CHWs into the health care workforce. In terms of costs, one study documented an incremental cost-effectiveness ratio of $56 to $57 (in 2007 US$) per asthma symptom–free day, indicating that the CHW-provided intervention achieved each additional symptom-free day for a net cost of $56 to $57.[27]

Despite the evidence base for asthma interventions provided by CHWs, the fairly common practice of employing CHWs in communities, and the federal and state policy push for integrating CHWs into the primary care team, sustainable reimbursement for CHWs working as asthma counselors is a frequent challenge.[28] As health centers work to make asthma programs sustainable, they must identify long-term payment solutions to cover enhanced asthma care. In the case of low-income children, Medicaid, the largest source of health care financing for health centers, is the logical source of sustainable funding.

The purpose of this article is 2-fold. First, it describes current Medicaid coverage, payment, and reimbursement policy for services provided by health centers to children who have asthma. Second, against this backdrop, it summarizes several state approaches to coverage, payment, and reimbursement for comprehensive CHW-provided asthma care adopted by a handful of states across the United States. It aims to synthesize and categorize these approaches into 2 main funding mechanisms, one that promotes bundled payment of comprehensive asthma management and another that pays providers, particularly AE-Cs, including CHWs who are AE-Cs, fee-for-service by allowing them to bill individually for their services. Since most practice innovations begin in communities, the article focuses on solutions currently available at the state level, which individual FQHCs and/or state primary care associations and other parties with an interest in this issue may want to consider as they seek to build sustainable evidence-based asthma programs at the state and local levels. This analysis concludes that creative solutions for sustaining the important services of CHWs exist but are not widely adopted and implemented. More research is needed to understand how Medicaid defines enhanced scope of service changes for FQHCs, the evidence and process necessary to make adjustments to payment levels, and why payers, particularly Medicaid, are not endorsing novel financing mechanisms in greater numbers to ensure better access to recommended comprehensive childhood asthma care.

Methods

The methods employed were those of a point-in-time environmental scan, which is an approach that "enables decision makers both to understand the external environment and the changes taking place that might impact their organization and to translate this understanding into the institution's planning and decision-making processes."[29] It involves the systematic collection of external information to detect trends and events, define opportunities or threats, and promote forward thinking about next steps and how to best position the organization within a potentially new and changing context.[30,31] An environmental policy scan focuses on the broadest macroenvironmental level and changes in politics and policies that might affect the organization directly or indirectly.[29]

Although there are few guidelines on how to conduct a scan, there are a number of models that have been outlined in the literature. To develop this article, we employed both formal and informal proactive searching techniques. We combined these searching techniques with conditioned viewing, which consists of an "assessment of the relevance of the information to the particular organization or organizations to which the scan is targeted," in our case FQHCs.[29] The specific sources of information we sought included the following: (*a*) published, peer-reviewed articles found via searches in PubMed and other searchable databases; (*b*) policy briefs, white papers, program reports, and other "grey" literature retrieved from select Web sites; (*c*) a sample of state Medicaid benefit coverage policy, provider manuals, fee-for-service schedules, managed care contracts, and other pertinent official documents directly available via the Internet; and (*d*) follow-up calls and/or face-to-face meetings with state officials and experts who could help inform our document review and provide insight into the most critical trends and developments that could affect FQHCs. Search terms for the database and "grey" literature scans included the following: Medicaid AND asthma; community health workers AND payment/Medicaid/reimbursement/managed care; community health workers AND asthma/chronic care. We did not set exclusion criteria a priori so as to cast a wide net on these relatively new policy developments.

According to various scholars who have written about environmental scanning, the structure of the scanning system does not need to be elaborate.[29] In our case, individual researchers were assigned to conduct subcomponents of this scan. The collection period began in the fall of 2011 and continued until June 2012. The review lasted roughly 12 weeks and was iterative until no further information could be gleaned from the available sources. Approximately 100 to 120 documents related to payment and billing and another 340 Medicaid and EPSDT state codes, managed care contracts, provider manuals, and federal case law related to coverage were reviewed by 3 different researchers. At least 18 calls were initiated with 10 completed. One face-to-face meeting was held in Washington, DC, with a representative from the National Association of Community Health Centers (NACHC) to further understand Medicaid reimbursement to FQHCs and how coverage and payment of comprehensive childhood asthma care might be enhanced under that system.

Morrison states that "there are no hard and fast rules that lead to 'correct' interpretations of the information collected via a scan;" rather, the scanners' or policy researchers' skills, abilities, experiences and judgments are critical to interpreting the data.[29] For this scan, we used a preliminary typology to search for relevant information based on our knowledge and experience in the field (ie, Medicaid reimbursement models for incorporating CHWs and other nontraditional providers in comprehensive chronic care) and also used themes and gaps that emerged from our analysis of the information once collected to develop a taxonomy of key innovative approaches that were pertinent to the question at hand. All of the information was synthesized and grouped by type of innovative payment approach (bundled vs FFS), level of intervention (health center or state or both), and means of change (legislative, administrative, both).

Results

In this section, we first describe current Medicaid coverage, payment, and reimbursement policy for services provided by health centers and potential financing arrangements for new or enhanced comprehensive childhood asthma services. Second, against this backdrop, we summarize current state Medicaid reimbursement approaches for CHW-provided asthma care adopted by a handful of states across the United States.

Current Medicaid FQHC Reimbursement System

FQHCs rely heavily on reimbursement from public health insurance programs, such as Medicaid, the Children's Health Insurance Program (CHIP), and Medicare. The largest source of public financing comes from Medicaid, which represents 39% of total revenue for FQHCs, on average.[32] This amount of funding is directly proportional to the percentage of patients FQHCs serve who have Medicaid coverage.[33] Health center patients are disproportionately covered by Medicaid (37% vs 16% of the general population).[33] The number of Medicaid patients is expected to continue to grow as health reform offers more coverage opportunities.[33]

Among pediatric asthma patients, Medicaid and CHIP are particularly important sources of revenue. In 2006, Medicaid was the second largest purchaser of pediatric asthma care, covering 34% of all asthma expenditures in the nation.[3] Anecdotal evidence indicates that as much as 70% of children treated at health centers for their asthma are covered by Medicaid, whether fee-for-service or managed care.

FQHC services are a mandatory Medicaid benefit. This means that state Medicaid programs must pay for the services FQHCs provide and that FQHC services are defined more broadly under Medicaid than under Medicare, allowing for coverage of services beyond the traditional Medicare core providers.[33] The Medicaid benefit may include other ambulatory services not provided by core providers that are offered by an FQHC and covered by the state's Medicaid plan (eg, dental care).[34]

In the case of children, the principal Medicaid benefit is known as the Early and Periodic Screening Diagnosis and Treatment (EPSDT) services benefit.[35] States are required to cover and pay for EPSDT, which provides Medicaid-covered children with access to a wide range of preventive, developmental, and therapeutic services reflecting the latest professional standard of care.[36] Furthermore, Medicaid has transformed over time to specifically support coverage of children with special health care needs (CSHCNs). These children are defined as higher users of care and thus include children with asthma diagnoses. The focus on CSHCNs is designed to preemptively ensure the provision of medically necessary care.[37]

Despite the broad and comprehensive Medicaid coverage federally required for children under EPSDT, most Medicaid

agencies do not recognize the full continuum of evidence-based and recommended asthma management services. Whereas in theory this should not happen for Medicaid-covered services for children since EPSDT requires states to cover all medically necessary services, our policy scan indicates that state Medicaid programs vary significantly in the asthma coverage provided. This variation may be explained in part by the fact that condition-based care entitles a child to medically necessary services that may not all be listed in a state Medicaid plan but are covered in full as long as they fall under broad benefit categories defined in federal law, and in part by a lack of awareness that most of the recommended asthma care services can be bundled as a definable package of services. Furthermore, we find that one needs to scratch below the surface of the broad conditions of coverage and comprehensive specification of benefits spelled out by each state Medicaid agency to examine how an agency translates coverage into reimbursement (ie, specific billing codes and payment procedures), and how it determines *who* is providing the service and *where* it is provided in order to be eligible for reimbursement. In all cases, providers must be licensed, registered, or certified in order to become eligible for reimbursement. The National Asthma Educator Certification Board (NAECB) manages the certification examination for asthma education and awards certification to successful candidates. To sit for the exam, individuals must be licensed or credentialed health care professionals, which include physicians (MD, DO), physician assistants (PA-C), nurse practitioners (NP), nurses (RN, LPN), respiratory therapists (RRT, CRT), pulmonary function technologists (CPFT, RPFT), pharmacists (RPh), social workers (CSW), health educators (CHES), physical therapists (PT), occupational therapists (OT), or must have provided a minimum of 1000 hours of professional asthma education and counseling.[38] Thus, a CHW is eligible to become certified as long as she/he has provided the minimum hours of education and counseling.

State Medicaid agencies have enormous discretion in making decisions that can either expand or restrict coverage and access to recommended and/or evidence-based care. The billable services and billing codes an individual agency recognizes, the services it determines as requiring prior authorization and the type and amount of paperwork it requires for processing the prior authorization, the settings it accredits for providing services, and the health care providers it credentials for purposes of reimbursement are key considerations affecting access.

At the same time, agencies are also constrained by the federally recognized billing codes they must use following the HIPAA standardization of codesets and by federal regulations that do not recognize CHWs as providers who can bill directly for reimbursement for the asthma education and counseling services they provide as part of asthma management from state Medicaid programs.[39] Furthermore, this area of provider recruitment, training, development, and recognition requires coordination with state health departments, other state agencies, and community-based organizations that employ CHWs and that typically have the authority or ability to control the supply, training, and certification of CHWs in a given state.

In addition, in states where Medicaid programs contract with Managed Care Organizations (MCOs), or health plans, there is high variability within a state in how state agencies translate coverage expectations from federal and state Medicaid law and policy into contractual expectations with health plans and how health plans understand and translate Medicaid contractual expectations into their own coverage policies as well as billing codes and reimbursement procedures.[40] This creates complex situations for providers, including health centers, which often contract with multiple MCOs in a given state and are faced with different rules and requirements from each health plan, even though Medicaid requirements in the case of children should apply as the minimum standard across the board.

Finally, to complicate things further, depending on the state in which they are located, health centers are subject to different types of reimbursement systems. Beginning in 2001, the traditional cost-based reimbursement system for FQHCs was replaced with a prospective payment system (PPS), establishing a Medicaid per visit payment rate floor. States were also allowed to adopt an alternative payment methodology (APM) in lieu of PPS, which should result in payments of at least the same level as under PPS.[41,42] As of 2011, of the 46 states reporting, 21 were using PPS, 12 APM, and 12 both, whereas one state, New Hampshire, had failed to implement either.[43] Each system has implications regarding the potential for adding services and thus improving the standard of care available at health centers. Under PPS, a health center may request that its annual allotment be adjusted to account for an enhanced scope of services or new types of services. Similarly, under APM, a health center may negotiate adjustments for the addition of services not provided in the past. In both cases, each state may have its own methodology and each health center negotiates its future allotments with its respective state Medicaid agency on a regular review schedule.

Regardless of the methodology used to set payment levels, Medicaid reimburses health centers on a per visit basis and states decide what services are included in a visit and how many visits per patient per day are reimbursable.[42] For example, a state may determine whether same day appointments with pediatricians and asthma counselors are considered a single visit or 2 separate visits and may further determine which services are incidental to a medical visit versus separate services altogether. According to NACHC, "Medicaid bundles payments to cover comprehensive services, including dental, mental health, and pharmacy, as well as programs that facilitate access to care and motivate healthy behaviors, such as care management, insurance enrollment assistance, and health education."[33] In addition, states remain responsible for making supplemental, "wrap-around" payments to health centers that subcontract with managed care plans if there is a gap between the payment received from the managed care plan for an enrollee and the payment level to which a health

center is entitled under PPS or APM. Health centers may have different accounting practices for different types of providers, however. Many use the recognized CPT billing codes and make determinations as to which providers should bill for which services and how they should be recorded in the medical record. Individually provided services are then "rolled-up" into a per visit rate.

Thus, it is important to review each state's payment methodology to understand how comprehensively asthma care services might be reimbursed and how to structure new or enhanced services to receive full payment. It is also important to understand how novel approaches might fit within existing rules and parameters.

Medicaid Payment Innovations for Supporting AE-Cs and CHWs in Comprehensive Asthma Care

Current state approaches fall into 2 main funding mechanisms: one that promotes bundled payment of comprehensive asthma management and the other that pays providers, specifically AE-Cs, including CHWs who are AE-Cs, fee-for-service by allowing them to bill individually for their services.

Medicaid Approaches to Bundle Payment of Asthma Services Provided at Health Centers

Several states have pursued changes to Medicaid that would promote bundled payment for comprehensive asthma care. These changes can occur legislatively, administratively, or both ways depending on state requirements. Health centers also have options to use existing reimbursement mechanisms as well as pursue new ones to seek bundled payment of services provided by CHWs and AE-Cs.

- *Adjustment of the Medicaid FQHC Payment Rate to Reflect a Change in Health Center Scope of Service.* If health centers would like to cover new providers such as CHWs or AE-Cs who are not clinicians, they may consider renegotiating the center's Medicaid payment rate to account for a "Change in Scope of Service."A change in scope of service is defined as a "change in the type, intensity, duration and/or amount of covered Medicaid services (covered under the Medicaid State Plan and approved by the Secretary of the Department of Health and Human Services)."[43,44] States differ in what services are covered under the Medicaid State Plan, but all states are required to cover a set of "primary health services," which include patient case management services that might be provided by CHWs. Medicaid "additional health services" covered by some states include environmental health services which would be relevant for home assessments used to identify asthma triggers as indicated in evidence-based asthma care programs.[35]

  States have different procedures for requesting a change in scope of services. Health centers pursuing a change in scope of service will want to be familiar with their Medicaid State Plan as well as the categories of required and additional services currently being provided by the health center. A change in scope of service differs from, but is easily confused with a "Scope of Project Modification." A health center's scope of project stipulates what the project budget may support, and specifically defines the services, sites, providers, target population and service area for which federal grants may be used, whereas a change in scope of service refers specifically to the health center's Medicaid prospective payment rates. Health centers may need to pursue scope of project modifications in addition to scope of service changes if adding a new service. Generally, health centers will need to define a qualifying event for scope of service change, such as the addition of asthma care management, and set out a proposed methodology for computing the new rate of payment.[35]

  If a state or health center–level change is not feasible or available to health centers, they may consider working with their Medicaid managed care organizations to negotiate reimbursement for expanded asthma care services. Most health center childhood asthma programs that have successfully secured funding for asthma care management and are documented in the literature have used some version of this approach.[45] This option aims to provide additional support for chronic care management by either adding specialized staff to the health center team to deliver an asthma management program or contracting with specialized community agencies.[46]
- *State Legislated Mandate to Develop a Bundled Payment Model.* The work of Boston Children's Hospital's Community Asthma Initiative (CAI) and its collaborators provides an exemplary model of a state-based approach to Medicaid reimbursement for asthma services that is being accomplished through legislative action informed by the successful demonstration of a strong business case from a community coalition. In 2010, CAI and its partners successfully advocated for a provision in the fiscal 2011 state budget that directs the Executive Office of Health and Human Services to develop a bundled payment model for high-risk pediatric patients enrolled in the Massachusetts Medicaid program.[47] The bundled payment would cover patient education, environmental assessment, mitigation of asthma triggers, and purchase of Durable Medical Equipment (DME). The impetus for this budget allocation comes from evidence of return on investment provided by pilot sites, such as CAI, who have implemented initiatives with cooperation from Medicaid health plans to provide comprehensive asthma services using CHWs. Among CAI program participants and their families, missed school days, missed work days, emergency department visits and hospitalizations, related to asthma, all declined significantly over the course of a year.[48] The bundled payment provision is still underway as the state works to develop an implementation plan, but it provides a compelling example of how a community coalition can work to influence payment for evidence-based asthma care.[49]

- *State Option to Implement Medicaid Health Homes.* Under the federal health reform law, states have a new option that became available January 1, 2011, to provide "health home" services for Medicaid beneficiaries with a minimum of 2 chronic conditions, one chronic condition and at risk for another, or one serious mental health condition. Using a State Plan Amendments (SPA), states may apply to establish health homes designed to be "person-centered systems of care that facilitate access to and coordination of the full array of primary and acute physical health services, behavioral health care, long-term community-based services and supports" for beneficiaries with chronic conditions.[50] States are incentivized to take up this new option through a temporary 90% federal match rate for health home services for the first 2 years. The Medicaid Health Home model expands on what many states have already begun developing through patient-centered medical home models, building linkages between providers and enhancing coordination and integration of medical and behavioral care to better serve patients with chronic illness. The model aims to balance improving health care quality, outcomes, and patient experience with reducing costs through more effective care. CMS has approved 8 state plan amendments for Health Homes in 6 states (Iowa, Missouri, New York, North Carolina, Oregon, and Rhode Island).[51] All the programs include a focus on asthma in addition to other chronic conditions and several are using teams with CHWs.[52]
- Medicaid Accountable Care Organizations. In addition to Medicaid Health Homes, the ACA also authorized a demonstration project for the creation of pediatric ACOs within Medicaid and/or the CHIP. Currently the demonstration program is unfunded, but at least 5 states have begun to plan and/or implement Medicaid ACO initiatives themselves.[53] While ACO models may vary, they typically include 3 key elements: "provider organizations as the base, accountability for patient outcomes and the potential for shared savings."[54] They are designed to encourage providers to work together and accept accountability for delivering coordinated care over time and across settings. Medicaid ACOs provide an additional option for bundling comprehensive asthma services across settings using practice guidelines and team-based arrangements that can include nontraditional providers such as CHWs. The Medicaid Pediatric ACOs are still in development, and the literature does not yet indicate which nontraditional providers have been included in the bundling arrangements.

Medicaid Approaches to Recognize Individual Payment of Asthma Services Provided by Community Health Workers and Asthma Educators

Several states have pursued changes to Medicaid that recognize CHW and non-CHW asthma educators as billable providers as long as they meet certain certification requirements. These changes can occur legislatively, administratively, or both ways depending on state requirements. Health centers also have options to use existing reimbursement mechanisms as well as pursue new ones to seek payment of individual services provided by certified CHW and non-CHW asthma educators.

- *Coverage and Payment of Asthma Chronic Care Management by Medicaid Managed Care Plans.* Most managed care organizations receive capitated payments from the state based on the number of enrollees covered. As long as the managed care organizations meet their contractual requirements and comply with regulatory terms, they generally have flexibility in how funds are allocated, including the ability to use state funds to directly employ CHWs or asthma educators.[48,55,56]

  Managed care organizations may also contract with community-based organizations to provide asthma services. Since 1999, Priority Health, a managed care organization in West Michigan, has partnered with a local asthma coalition, Asthma Network of West Michigan (ANWM), to provide case management services to Priority Health's managed Medicaid pediatric population with moderate to severe asthma on a fee-for-service basis.[52] ANWM uses nurses and respiratory therapists who are AE-Cs to provide home-based care to patients and their families. Visits are billed using the skilled nursing visit revenue code (Revenue Code 551). ANWM does not yet routinely use CHWs, but has augmented its care team with CHWs through its involvement in the local Medicaid patient-centered medical home pilot project, thus exploring the possibility of bundled payment for the comprehensive asthma care services it provides.[57]

  Some managed care organizations or other community-based organizations have negotiated with state Medicaid programs to establish billing codes that can be used to reimburse CHWs or AE-Cs either directly or through contracts with community organizations providing these services. Molina Health Care, Inc, a managed care organization in New Mexico, used this approach to establish a billing code for CHW services classified as "client support assistant services." Molina has used capitated contracts with local organizations, including health centers, over the last 5 years, to provide CHW services, including chronic disease management, for high-risk patients. The contracted organization uses the CHW billing code to invoice Molina for services.[54]

  The Minnesota health plan Medica implemented a similar arrangement to Molina to establish a billing code with the state Medicaid program for non–physician AE-Cs (CPT Code S9441). Beginning in 2004, Medica began reimbursing AE-Cs for asthma education classes or individual sessions provided in clinics, including health centers that employ AE-Cs.[58] Newly diagnosed patients are allowed 10 asthma education visits, whereas established patients are allowed 3, and the plan recommends pre- and postintervention testing to track outcomes.

- *Utilizing Existing Mechanisms for Reimbursement.* For health centers seeking reimbursement for asthma education provided by AE-Cs who are also credentialed clinical providers, a funding solution may be rather straightforward. Some asthma management programs have relied on existing billing codes that they have "activated" for their asthma educators.[59] For example, in the Kansas City Children's Asthma Management Program, which was initiated by Family Health Partners, a health maintenance organization created in 1997 to manage patients covered by Missouri Medicaid, respiratory therapists who are AE-Cs provide a series of didactic sessions for asthma patients. The program found that currently available CPT codes (99401 and 99402) could be used for educational sessions.[60] Prior to the program these codes had not been applied to respiratory therapists. Since respiratory therapists are already approved clinical providers under Missouri Medicaid, this is an easier solution than for CHWs.
- *State Plan Amendment.* Thus far, states have used a different approach to certify CHWs as billable providers than they have with AE-Cs. This is likely because CHWs are not usually considered credentialed health providers, and thus, a billing code needs to be created to reflect CHWs as providers. Minnesota provides the first example of successful use of a state-based approach for reimbursing CHWs, though similar legislation for CHWs is being considered in a number of other states. Currently, only Alaska and Minnesota recognize CHWs as billable providers for direct Medicaid reimbursement.[52,55] In 2007, a Minnesota state coalition used existing research showing return on investment for CHWs to make a financial case to the state legislature for reimbursing CHWs under Medicaid.[57] The coalition successfully persuaded the state legislature to approve direct hourly reimbursement for CHW services under Medicaid and the State Plan Amendment was approved by the Centers for Medicare and Medicaid Services in 2008.[17] Reimbursement for CHW services is tied to certification from the state's 14-credit CHW program.
- *Medicaid Waiver.* Medicaid waivers are another approach states may use to support integration of AE-Cs and CHWs within the Medicaid program. Waivers allow states to experiment with new programs and ideas on a limited basis.[58,61] Under §1115 of the Social Security Act, states may apply for demonstration grants to test different ways to deliver and pay for Medicaid coverage, which are not permissible under the regular provisions of the law unless explicitly waived by the federal government.[62] Waivers are approved for 5 years and states can then apply for 3-year renewals. Minnesota used this approach to obtain reimbursement for CHWs, who are generally not recognized as billable providers, prior to obtaining a state plan amendment to this effect.[63] A Medicaid waiver may be an appealing tool for states to obtain reimbursement for CHW or non-CHW AE-Cs. Since §1115 waivers are required to be budget neutral, states are able to try this approach without incurring additional costs. Some states have used waivers to establish disease management programs that include CHWs as part of the system of Medicaid providers and services.[58] States may add CHWs to established waiver programs at time of renewal.[58]

In summary, several mechanisms exist at the health center, managed care organization, and state level to establish reimbursement for comprehensive asthma care delivered by CHWs and AE-Cs (see Figure 1). At the individual FQHC level, reimbursement may be feasible through a scope of service change with the state Medicaid program or managed care organization. Additionally, existing CPT codes may be appropriate for reimbursement for asthma management services delivered by AE-Cs. Managed care organizations also have options for using CHWs and AE-Cs in comprehensive management, such as employing these providers directly, contracting with community organizations, such as FQHCs, to employ them, or negotiating with the state Medicaid program to establish individual provider rates and billing codes for CHWs and AE-Cs. Finally, at the state level, comprehensive asthma management programs may be established through state legislation, Medicaid Health Homes, Medicaid ACOs, State Plan Amendments, or 1115 Medicaid waivers. All solutions require some level of training and certification for CHWs and asthma educators and a billable code with a separate price if using an FFS approach (note that under a bundled approach it could be used to track utilization).

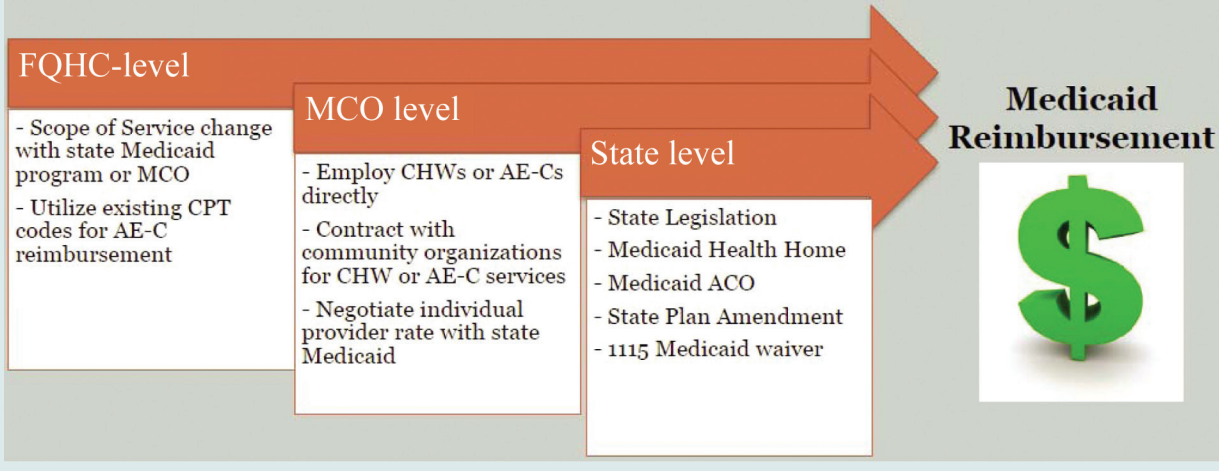
Limitations

While this policy scan provides an important inventory of approaches to securing Medicaid reimbursement for comprehensive asthma care management, it has several limitations. The scan relies on the authors' judgment and thus is subjective. Additionally, the scan relies on specific examples of individual health centers, managed care organizations, and states that are not representative of the general population. Finally, it used one main source of information, documents, which may not be up-to-date or reflect the realities of what is being implemented on the ground.

Conclusion

Overall, we find that Medicaid reimbursement (not coverage for children with EPSDT) for recommended and/or evidence-based asthma care is a major issue. Based on the state in which it operates, FQHCs may experience very different challenges as they seek reimbursement for asthma services related to the billing codes recognized, the services that require prior authorization and the related paperwork burden, the settings in which services can be provided, and the health care providers whose services the state program will reimburse. While coverage should not be an issue for children with EPSDT

Figure 1. Medicaid Reimbursement Mechanisms for CHWs and Asthma Educators at the FQHC, MCO, and State Levels



Source. Dower C, Knox M, Lindler V, O'Neil E. *Advancing Community Health Worker Practice and Utilization: The Focus on Financing*. San Francisco, CA: National Fund for Medical Education; 2006.

coverage, translating coverage into reimbursement remains an ongoing challenge.

Despite these challenges, this policy scan reveals that some examples exist to translate evidence-based interventions in asthma care management into sustainable financing. The reimbursement strategies fall into 2 primary categories: bundled payment versus fee-for-service. Bundled payment options allow for services provided by CHWs and AE-Cs to be incorporated in a larger "bundle" of asthma services for payment, whereas fee-for-service options identify mechanisms for recognizing CHWs and AE-Cs as billable providers. Health centers must assess which payment approaches are most feasible for their centers within their specific state Medicaid program context.

All of the options identified have advantages and disadvantages, which may be more or less important based on the specific context. For example, many health centers may first consider options they can pursue individually, such as a scope of service change through the state Medicaid program. The primary advantage of this approach is its use of an existing administrative mechanism, which avoids lengthy legislative or budget approval processes.[47] Health centers may have already gone through this process before for another service and, thus, may feel comfortable proceeding this way. Additionally, this mechanism could accommodate CHWs or asthma educators depending on the Medicaid State Plan.[48] The drawbacks to this approach include the potential to be denied this change in scope of service by the state Medicaid program, perhaps depending on current political considerations. This risk is exacerbated by the change policy, which requires that the health center begin covering the expanded services before the enhanced reimbursement is approved. Moreover, the process of requesting a change in scope of service requires significant effort on the part of the health center to develop an application and calculate the proposed change in reimbursement rate. Additionally, NACHC has noted that many states have not yet established a rate adjustment process or defined scope of services, which may inhibit an FQHC rate change via this route.[44] Hence, all of the approaches identified include challenges that may be placated or exacerbated by the particular state context.

Finally, this policy scan underscores the importance of evidence in establishing Medicaid reimbursement for comprehensive asthma care. Many of the strategies identified here begin small at the local level, working with a managed care organization or through a scope of service change to establish an evidence base and business case. Once data are available to show improved outcomes and reduced costs, advocates pursue options at the state level, taking legislative action in the case of Massachusetts and Minnesota, to establish sustainable Medicaid reimbursement mechanisms for comprehensive asthma care management.

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