



Public Comments Received as of June 24, 2013

Date: May 30, 2013

Submitted by: Christine Lyman, MSW, CHES, Maine CDC/DHHS

Comment:

This is an excellent summary. However, a gap is the absence of reference to the CHW system supported by the Indian Health Service: <http://www.ihs.gov/chr/ce>. While sovereign Tribes in New England are not large in comparison to Western states, the infrastructure for supporting CHWs linked to Tribal Health Centers (and Urban Tribal Health?) is available to and distinct from all the other systems mentioned. For inclusion, I would like to see how those systems can also be supported. In Maine, the Wabanaki Public Health District has been looking into how to use their inter-tribal health system to support those Community Health Representatives (CHRs) of individual tribes.

Again, a great summary, offers a potential opportunity to acknowledge not only the adult community health worker programs from the rich contributions made by college and school based (and sometimes community based) youth peer education programs, which also contribute to health promotion, albeit to more primary health risk behaviors such as tobacco, drug and alcohol, and sexual health risk behavior issues. While this is probably beyond the scope of this report, it's always nice to give them a tip o' the hat also...

Date: May 31, 2013

Submitted by: Laurie Stillman, MM, Chief Strategy Officer, Principal Investigator, New England Asthma Innovations Collaborative

Comment:

Thanks so much for sending me the *excellent* report produced by the ICER on CHWs.

The only concern I have is with the conclusion you made around home based asthma interventions modeling only the Krieger study—whose conclusion you were good enough to point out could be cost neutral over time. Equally important published studies have been put out by the Sinai Urban Health Institute at Sinai Healthy Systems on the ROI of these programs. They have a number of published studies demonstrating strong ROIs, including as recently in the Journal of Asthma, 2012

http://www.suhichicago.org/files/publications/margellos_pai%202_joa_2012.pdf.

I was reading some of their materials today for another project I'm doing. I would like to strongly recommend, as my public comment, that you delve into their numerous studies and supplement the Krieger studies in your CHW report.

Here they are: <http://www.suhichicago.org/reports-publications/asthma-management> . I think this would offer a more balanced view.

Many thanks for your consideration of this feedback.

Date: June 13, 2013

Submitted by: Alejandro Perez, Domestic Policy Intern, The Century Foundation

Comment:

Hello CEPAC,

I am a domestic policy intern at The Century Foundation. After reading the literature on community health workers, including the draft of your paper, I find that there doesn't seem to be a lot of analysis on job creation and access to care, two possible pros to using community health workers. There was a recent study in Health Affairs that addressed the question of patient navigation and access to care in the context of long-term care, but I haven't found much else. I plan to attend the conference and look forward to meeting some of you.

Best regards,

Alejandro Perez

Date: June 19, 2013

Submitted by: E. Lee Rosenthal, PhD, MS, MPH, Project on CHW Policy and Practice, University of Texas (UT) Institute for Health Policy, UT School of Public Health

Comment:

Dear authors,

Thank you for your report and acknowledgement of the contributions of the National Community Health Advisor Study (1998) in your recent Community Health Worker report. Related to that, I have a comment requesting an update in this report.

Please update the Perez reference from pg 8 in your report based on the Oct. of 2010 erratum published in the American Journal of Public Health, adding a reference which should have been included in the original article by Perez and Martinez. The reference is as follows:

Wiggins N, Borbon A. Core roles and competencies of community health advisors. In: Rosenthal EL, Wiggins N, Brownstein JN, et al. The Final Report of the National Community Health Advisor Study: Weaving the Future. Tucson: Mel and Enid Zuckerman College of Public Health, University of Arizona; 1998: 15-49.

Given this update, please update the citation for Rosenthal, Wiggins, and Brownstein et al to match this.

Rosenthal EL, Wiggins N, Brownstein JN, et al. The Final Report of the National Community Health Advisor Study: Weaving the Future. Tucson: Mel and Enid Zuckerman College of Public Health, University of Arizona; 1998

As you see fit, it may be helpful to include the link to the web-based version of the Study's summary report. Unfortunately, the full final report is not longer available.

The summary link is:

<http://crh.arizona.edu/sites/crh.arizona.edu/files/pdf/publications/CAHsummaryALL.pdf>

Date: June 19, 2013

Submitted by: Kolawole Bankole, MD, MS, OPlc, Access Project Director, Minority Health Program, Portland Public Health and Human Services, City of Portland

Comment:

City of Portland Minority Health Program

Responding with comments on CEPAC report on CHW initiative in Maine

Though Maine, unlike other New England States does not have a statewide CHW program initiative, there is a regional Southern Maine CHW initiative established by the City of Portland Public Health Division of the Health and Human Services Department, through its Minority Health Program. Below is a synopsis of the CHW initiative, called the Community Health Outreach Worker (CHOW) program.

1. History of CHOW Initiative in Portland, Maine

- Created CHOW initiative in late 2003 (first in Maine) and two FTE CHOWs were then employed in 2005 serving the Somali and Latino communities in Greater Portland.
- Sustainability has been depended on grant funding.
- The initiative fosters a community-clinical partnership involving communities, the Public Health Division, and clinical entities in Southern Maine. These clinical partners have included Maine Medical Center (through its International Clinic and Family Medicine Practice Clinic), Mercy Hospital (through its primary care centers), Portland Community Free Clinic, Sweetser, and the Opportunity Alliance. The CHOWs provide a complete package ensuring access to needed care while breaking barriers to these services both within and outside the clinical setting. These services include, but are not limited to, interpreting, scheduling for and reminding patients of appointments, cultural brokering for both patients and providers, and follow-up with patients.
- Our CHOW model presents a synchronicity of health promotion models:
 - CDCynergy Social Marketing Communication approaches
 - The Dayton Model
 - Comprehensive Care Model
 - Chronic Disease Self-Management Program
 - Strategic Prevention Framework (SPF-Table Talk Initiative), and
 - Health Policy Implementations

Summary: The CHOWs provide a comprehensive service that ensures a complete bridging of gaps between their community and the service provider to improve access to health care and social services.

2. Achievements and Impact

- Trailblazer and foundational CHW initiative in Maine. Replicated by other agencies and organization in Southern Maine, including Frannie Peabody Center, Community Counseling Center, Mutual Aid Organizations, and SCDM.
- Patient navigation (access to care) – Annual average of 500 client interventions, free care/uncompensated care for 200, MaineCare for 80.
- Improved provider satisfaction and patient-provider communication.

- Improved patient outcomes and satisfaction.
- Specific quality, policy interventions, and system influence: Implementation of a culturally appropriate hospital gown (sarong); dropping the requirement of a “Denial Letter” from undocumented clients by hospitals; improved approaches to community-based participatory research with enhanced community involvement and engagement; and improved service provider knowledge, attitude, and behaviors in providing culturally and linguistically appropriate services.
- Community outreach and brokering initiatives: Developed a network of CHOWs, both full-time and contract, with different tiers of involvement depending on community needs and usage. These CHOWs represent and work with the 13 largest ethnic language groups in Cumberland County, with the model approach of having 3 CHOWs per community or ethnic language group.
- Established Asthma (now Health) helplines in Somali and Spanish.
- Social determinants of health interventions: Latino soccer, farmers’ markets/WIC ethnic stores, Sugar-Sweetened Beverage Campaign, and multicultural health fairs.

3. City of Portland Training Curriculum

- Established a 35-hour CHOW /CHW training. Trained 31 CHOWs so far.
- The training is an adaptation of standardized CHW training curricula from Massachusetts and New York.
- Specialized training provided by clinical providers to further empower the CHOWs, including 28 CHOWs trained in Chronic Disease Self-Management, 7 as Table Talk Lay Leaders and Facilitators, and 3 trained as Lay Asthma Health Educators.

4. Challenges to Our CHOW Workforce Development

- Solely grant funded and services not reimbursable by health insurance means
- No statewide commitment
- CHOWs at cities and agencies are recent and scattered across the state
 - Portland Minority Health Program: 3.0 FTE and 12 contract CHOWs
 - Frannie Peabody Center, Portland: 2.0 FTE
 - Community Counseling Center, Portland: 2.0 FTE
 - Maine Migrant Health Program, Washington County: Promotores
 - Bangor Penquis Cap/Penobscot Community Health Center: Care Managers
 - United Somali Women of Maine, Lewiston
- Implementation of a training curriculum at colleges and universities is absent
- The workforce need for CHOWs is gradually increasing
- Technical support is uncoordinated
- Real appreciation for CHOWs’ work is increasing but still underappreciated

5. Regional Collaboration for Standardization and Partnership

- Established a collaboration and partnership with providers within the state and within New England.
- Member of the New England CHW Regional Coalition, with efforts including standardization of training and curriculum across the region.
- Partnered with academic institutions such as the University of Southern Maine and the University of New England to develop a student training curriculum that includes CHOWs as part of Interprofessional Practice Education. Currently implementing a HRSA-funded grant titled CHANNELS with UNE that focuses

on the CHOWs' work in improving access to quality and culturally and linguistically appropriate care, while helping to reduce costs incurred by the healthcare system.

6. Way Forward and State Involvements

- Standardization of CHOW curriculum across New England.
- Plan involvement of CHOWs in the implementation of the Affordable Care Act.
- Work on the reimbursement of CHOW services through major health insurance providers.
- Continue the empowerment of community members through specialized CHOW training and capacity building.
- Continue evaluation to quantify the impact of CHOWs' services on the triple aim: access, quality, and cost of providing services.
- Involve the State Office of Health Equity to move the CHOW initiative forward for statewide implementation.
- Consulting with agencies and organizations to implement the CHOW initiative in their regions of the State of Maine. Currently doing the same with the Healthy Androscoggin at the Cities of Lewiston and Auburn

Date: June 21, 2013

Submitted by: James Krieger, MD, MPH, Chief, Chronic Disease and Injury Prevention Section,
Public Health – Seattle and King County

Comment:

I am submitting more current information about the Seattle-King County CHW asthma home visit program. The latest publications you have cited are from 2005. Our CHWs carry an active caseload of 50 clients at any single point in time. Over the course of a year, they work with 120 clients. The cost per client for the complete package of services (including recruitment and enrollment costs, home visits, supplies provided to clients [vacuum, cleaning supplies, allergen-proof bedding covers, medicine box], office space, computer, phone, car, supervision, data support, clerical support) is currently \$1,400. We are completing a cost effectiveness analysis based on a recent randomized controlled trial of home visits by CHWs to children enrolled in Medicaid managed care plans. Preliminary results show an average incremental cost savings of \$391 per year (realized during the year of participation in the program). The home visits saved costs by reducing utilizations of health care services: average of \$870 per year difference in costs of hospitalizations between intervention and control group, \$20 per year in ED visits, \$166 in provider visits and \$42 in reliever medications. The intervention group had \$43 more per year in costs for controller medications \$1 per year for oral steroids, and \$1 per year for allergy medications. Symptom-free days per 2 weeks were 2.36 greater in the CHW group (4.64 days pre-post within the CHW group).

I suggest that you include the CDC Community Guide economic and effectiveness analysis of home visits.^{1, 2, 3} While some of the home visits were made by visitors who were not CHWs (e.g. were medical professionals, such as physicians, nurses, social workers, and respiratory therapists) many of the included studies used CHWs. In the 23 studies, home visits were made exclusively by CHWs (six studies), nurses (five studies), respiratory therapists (two studies), physicians (two studies), social workers (one study), housing officers (one study), environmental educators (one study), and trained sanitarians (one study). In four of the studies, mixed teams of CHWs and nurses (two studies), social worker, nurse, and respiratory therapist (one study), and research assistant and pest control professional (one study) conducted the home visits. The CHW studies are: Levy, Krieger 2005, Krieger 2008, Morgan, Nicholas, Parker, Primomo, Stout, and Thyne. The systematic review reports that 4/6 studies reporting on symptoms days were CHW studies and all showed reduction in symptom days. Similarly, 4/6 studies reporting on Juniper quality of life score were CHW studies and three of these showed improved quality of life in

¹ Crocker DD, Kinyota S, Dumitru GG, Ligon CB, Herman EJ, Ferdinands JM, Hopkins DP, Lawrence, BM, Sipe TA, Task Force on Community Preventive Services. Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review. *Am J Prev Med* 2011;41(2S1):S5-32.

2 Nurmagambetov TA, Barnett SBL, Jacob V, Chattopadhyay SK, Hopkins DP, Crocker DD, Dumitru GG, Kinyota S, Task Force on Community Preventive Services. Economic value of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a Community Guide systematic review. *Am J Prev Med* 2011;41(2S1):S33-47.

³ Guide to Community Preventive Services. Asthma Control: Home-Based Multi-Trigger, Multicomponent Environmental Interventions. <http://www.thecommunityguide.org/asthma/multicomponent.html>. Accessed 6/21/13.

the CHW intervention group. Among the 11 studies reporting on the proportion of children with acute care visits, seven were CHW studies and all showed a decrease in the proportion of children with acute care visits. Only two of the ten studies reporting on number of acute care visits per year involved CHWs.

The Community Guide economic analysis included 13 studies, of which five were CHWs. I suggest you review these findings as well.

I suggest that you include the Inner City Asthma Study.⁴ The home visitor in this study was a CHW (per discussion with study lead Herman Mitchell) and the study followed intervention and control groups for a year following the intervention and found that the intervention effect size was sustained over this year of additional follow-up.

I suggest that you include our article reporting on the Healthy Homes II study, which assessed the marginal benefit of *adding* CHW home visits to best-practice clinic-based asthma education provided by a nurse. This study showed the addition of CHW home visits resulted in increased symptom-free days and caretaker quality of life.⁵

⁴ Morgan WJ, Crain EF, Gruchalla RS, O'Connor GT, Kattan M, Evans R 3rd, Stout J, Malindzak G, Smartt E, Plaut M, Walter M, Vaughn B, Mitchell H; Inner-City Asthma Study Group. Results of a home-based environmental intervention among urban children with asthma. *N Engl J Med*. 2004 Sep 9;351(11):1068-80.

⁵ Krieger J, Takaro TK, Song L, Beaudet N, Edwards K. A randomized controlled trial of asthma self-management support comparing clinic-based nurses and in-home community health workers: the Seattle-King County Healthy Homes II Project. *Arch Pediatr Adolesc Med*. 2009 Feb;163(2):141-9.

Date: June 23, 2013

Submitted by: Carl H. Rush, MRP, Project on CHW Policy and Practice, University of Texas Institute for Health Policy

First, I would like to thank the Council for the opportunity to present during your June 3 conference call. You are tackling an extremely important topic which also has many potential pitfalls. I believe you have acknowledged that it is not possible to apply a global measure of effectiveness to community health workers, because they are a diverse workforce in terms of duties and work settings. I would remind the Council of my opening statement, in which I warned that CHWs are neither a "model" nor an "intervention," but rather a workforce.

It follows, then, that your comparative value question is still attempting to assess the "value" of CHWs as represented by one program model in which CHWs are employed, which is both an oversimplification and inevitably subjective, since there is no known objective means to select a "representative" program.

I further pointed out on June 3rd that there are a growing number of instances of employer organizations which have elected to integrate CHWs under their core budgets, which suggests strongly to me that the management of these organizations has made their own determination of the value of these workers. In the current challenging economic climate, both health plans and health care provider institutions are making hard-nosed financial calculations. Here in San Antonio, a prominent hospital employed CHWs under state pilot program, and kept them on the payroll until project funding ended. Shortly thereafter, the hospital initiated across the board staffing cuts, but the CEO personally intervened to protect the CHW positions. Even if these employers are unwilling to share their internal calculations, the fact that they have made these determinations is in my view also "evidence".

Your draft report dated May 24 is impressive piece of work, and it strikes me as somewhat ironic that several other organizations have been conducting similar reviews of the field in recent months quite independently. I know from personal experience how daunting a task it can be just to conduct a literature review on this field, with thousands of documents published over the last 30 years alone. Other reviews will be published soon by the Urban Institute, the National Governors Association, and the US Department of Health and Human Services. In my experience, the field is currently hampered by broad lack of understanding of CHWs by large numbers of stakeholders.

I have no major concerns overall about the emphasis of your draft report. However I do have some specific comments to offer:

- The last paragraph on page 4 suggests that CHWs are employed exclusively in the healthcare sector. Recent research has shown that the employment base is considerably broader, including community-based organizations, schools, housing agencies, and public health organizations of various types. The first paragraph on the top of page 5 limits the focus even further: in fact community health centers are only a small percentage of the employing organizations for community health workers.
- At the end of the first paragraph on page 8 you refer to "a wide spectrum of CHW services." In fact Medicaid reimbursement in Minnesota is limited to a single CPT code, and regulations restrict education services by CHWs to the use of established health education curricula. In the first sentence at the top of page 9, this statement misrepresents the language in the 2001 Texas legislation: first, the requirement

was modified by the language "to the extent possible," and in fact the State has not been enthusiastic in fulfillment of this requirement; second, the following sentence ties the state certification program to this bill, when in fact certification was made mandatory for CHWs who receive compensation by an entirely separate bill that same year. The report does mention a recent legislatively-mandated study in Texas, but it does not go on to describe the extensive engagement of CHWs in a more recent statewide Medicaid 1115 waiver program. In one project funded under this waiver, the local health department in San Antonio will hire a group of CHWs to work in one neighborhood essentially as community organizers.

- In the first paragraph on Rhode Island at the top of page 11, the last sentence misrepresents what has actually happened in that state. The statement is based on the response of one survey respondent, and I have verified with sources in Rhode Island that this is a misinterpretation and overstates the commitment of the Rhode Island Department of Health.
- At the bottom of page 12, the list of candidate measures is fairly appropriate, but I would point out an important limitation of systematic reviews in the context of your present decision. My extensive review of the literature has revealed that very few published studies even mention some of the considerations that you are considering in the context of "best practices," and a number of reviews have made pointed comments about the poor specification of interventions, the lack of documentation of the qualifications of the workers, and other factors that specialists in this field have come to regard as critical to the success of efforts employing CHWs. Your draft report acknowledges essentially the same point at the bottom of page 17. So it is at least possible, and I believe plausible, that many studies excluded from reviews, or found to be inconclusive or lacking significance, have performed poorly because of a lack of attention to these "best practices." Conventional research designs also seldom compare various dosage levels for CHW interventions, when other studies have shown that trust and relationship are essential to the CHWs impact; the timeframe of most studies is also very limited, while many of the new roles for CHWs involved ongoing engagement with patients over time.
- Table 2 at the top of page 19 is a key set of findings, although it corroborates the finding that few studies specify many of these details. My practical experience, and that of many of my colleagues, suggests that other variables are extremely important though they have not been studied. These include content and extent of CHW training, quality and appropriateness of job design, and the quality of supervision (including the availability of specialized training for supervisors of CHWs).
- The "budget impact analysis" on pages 23-27 is a useful logic model, but it illustrates the complexity and dilemmas of broad conclusions about a workforce such as CHWs. It is based on a fairly specific tertiary prevention model, which is not really relevant to CHW roles in community development or population-based primary prevention, and it does not reflect the trend toward CHW roles in broad purpose patient centered primary care teams, which may deal with a broad range of medical and non-medical needs.
- In the first full paragraph on page 30, the report states that "only one third of respondents paid for CHWs out of a core operating budget." I question the value judgment in the use of the word "only." In my experience, percentages have been much lower in the past.
- The ICER survey (beginning on page 30) illustrates the challenges of identifying and gaining participation from employers of CHWs. For the HRSA survey in 2006, conducted in collaboration with the University of Southern Mississippi, a team of graduate students took over a month using a snowball technique to identify candidate organizations. Then, as now, there are no directories or registries of organizations employing CHWs. Still, the small N suggests that the survey findings are not very robust.

- I think that the report's coverage of "perspectives on best practices" is as good a summary of issues in this field as I have seen. The points are stated clearly, and I would strongly suggest that interested parties in New England and nationally undertake research to validate these for their contribution to successful outcomes. I would regard it as particularly satisfying if the Council recommended such action.

I thank you for the opportunity to submit these comments, and I wish you a successful meeting on June 28.

Date: June 24, 2013

Submitted by: Lisa Renee Holderby-Fox, Executive Director, Massachusetts Association of Community Health Plans

Comment:

The Massachusetts Association of Community Health Workers (MACHW) wishes to submit the following comments on the Institute for Clinical and Economic Review's (ICER) recent draft report, Community Health Workers: a Review of Program Evolution, Evidence on Effectiveness and Value, and Status of Workforce Development in New England.

MACHW is the statewide professional association for community health workers (CHWs) and a national leader among CHW organizations. MACHW represents over 1200 CHWs and CHW supporters. While most of MACHW's members are in Massachusetts, the organization also has members throughout New England.

We are the oldest CHW statewide association in the New England region and the convening organization for the New England CHW Coalition, which began meeting over one year ago. The New England CHW Coalition is comprised of CHWs, employers, federal agencies, state and local health departments, CHW training entities and other stakeholders from around the region.

MACHW welcomes research and evaluation to improve the delivery of CHW services. We wish to ensure our communities receive the highest quality and the most appropriate services possible. Our role in this effort as well as the roles of other public health professionals should be evaluated and improved upon on a regular basis.

We recommend framing the discussion to reflect the added value CHW offer to health care, public health and human service teams rather than attempting to pull out the CHW intervention. We believe this gives the CHW workforce a level of scrutiny which is not expected of other health care and public health workforces.

We thank ICER, CEPAC and their leadership for their interest in CHWs. We look forward to reading the final report and submit the following comments in response to the draft report released on May 24th.

Section 1.1

The inclusion of CHWs working in community-based organizations appears to be lacking in this section. We understand the report is focused on CHWs employed in health care settings, however, there are many CHW employed by community-based organizations and feel they should have mention as well. Although this is mentioned on page 29 under the National Assessment, we suggest giving this important factor mention earlier in the report.

Section 1.2

Massachusetts:

Support for a more comprehensive approach for CHW programs and training began long before the creation of MACHW. The Massachusetts Department of Public Health has been supporting CHWs and CHW programs since the late 1960s. MDPH continues to be the largest single funder of CHWs today in the Commonwealth. The Boston Public Health Commission's (BPHC) Community Health Education Center (CHEC) was established in 1993 and has provided training to over 1600 CHWs in Massachusetts. Additionally, the Central Massachusetts Area Health

Education Center's (CMAHEC) Outreach Worker Training Institute (OWTI) established in 2001 has provided training opportunities throughout the state as well.

It may also be of importance to note in Section 1.2 that the CHW movement in Massachusetts coincided with the community health center movement. The first community health center in the nation was home to one of the first documented CHW program in Massachusetts with funding from the Economic Opportunity Act in the mid-sixties.

Section 2.2 Key Program Components and Correlation with Positive Outcomes

The CHW workforce like other public health and health care workforces should be financially compensated and augmented by volunteers. We are pleased the research supports this as a practice which increases the positive impact and success of programs.

We suggest caution when comparing the contributions of nurse managers to the contributions of CHWs. While both may conduct similar activities in some instances, they have complementary rather than competing roles in health teams. CHWs are often the first contact to the health care and public health systems for many communities. CHWs develop unique, trusting relationships with community members and often through shared life experiences. CHWs often serve as the bridge between communities and systems and spend a significant amount of time in the communities they serve. Often other members of the health team may be more restricted in activities they are able to conduct.

Section 3.2 Budget Impact Analysis

We appreciate the consideration of CHW salaries in the budget analysis section of the report. However, we suggest caution when using 40,000 as a yearly baseline CHW salary. We understand this number is based on the responses to the spring 2013 online employer survey, whose respondents were self selecting. A 2005 MDPH report, CHWs Essential to Improving Health in Massachusetts the median salary for CHWs was reported to be \$23,000 per year. Reported CHW salaries in the more recent 2009 report, stated over one third of CHW salaries were below 30,000 per year, full-time. In light of the MA report, \$40,000 per year may not be an accurate reflection of salaries across the New England region. We do however believe that the base salary of \$40,000 to be a more appropriate salary for CHWs. MACHW and our partners seek sustainable funding for CHWs which may also support an increase in salaries for CHWs across the region.

National Assessment

Section 4.1

The statement regarding the Special Interest Group of the American Public Health Association (APHA) is incorrect. There is no longer a CHW Special Interest Group (SPIG) at the APHA; in 2009 the CHW SPIG became the CHW Section. While APHA is the one national opportunity currently for CHWs and supporters to meet, it is not a place where the CHW organizations across the nation specifically convene. Additionally, CHW organizations do not register with the CHW Section. Organizations supply the CHW Section with updated information to be included in the quarterly newsletter and on the Section webpage.

Section 4.2

We believe it may be worth mentioning that most programs serving Native American populations are community health representative (CHR) programs. These CHR programs are funded through Indian Health Services and each

community decides if a portion of its health funding will be utilized to support CHR. Additional information on CHR programs may be found at <http://www.ihs.gov/chr>.

Also of importance regarding reported CHW activities may be the termination of Outreach and Enrollment Grants formally provided to community-based organizations and health centers by the Massachusetts Executive Office of Health and Human Services. This funding source ended in December 2011 and had funded CHWs throughout Massachusetts to conduct outreach and enrollment activities for publically funded programs. This funding assisted CHWs and others to enroll MA residents in health care insurance program as Massachusetts implemented its individual mandate for health care insurance coverage. The loss of this funding may have had a large effect on the reported activities from MA respondents.

MACHW hopes the suggestions to the draft report previously mentioned are helpful as ICER makes their final report available and the members of CEPAC deliberate. We believe CHWs are vital members of the health care, public health and human services workforces. CHWs bring added value to improved patient and community services on many levels. This has been documented in several studies and reports many were utilized for the draft report.

We look forward to working with our colleagues across New England and the nation to ensure the capacity of the CHW workforce and our programs are maximized to work towards the elimination of health disparities, the promotion of health equity and improving health outcomes for communities across New England. CHWs are not the answer to all of the health care, public health and human services woes. The CHW workforce enhances current efforts and brings unique perspectives to improve the delivery and utilization of health care services.

MACHW would like to thank ICER and the members of CEPAC for taking a closer look at the New England CHW workforce and our contributions to health care.

Date: June 24, 2013

Submitted by: Theresa Hope Mason, PhD, Independent Public Health Policy Consultant

Comment:

To: ICER and to Members of the New England Comparative Effectiveness Public Advisory Council

RE: Comments on Draft Report: Community Health Workers A Review of Program Evolution, Evidence on Effectiveness and Value, and Status of Workforce Development in New England

My expertise in this area is based on the following:

1) Over fifteen years as a qualitative researcher (my M.A. and Ph.D. are in social-cultural anthropology) as part of public health intervention evaluation teams. I was on staff at the University of Illinois, Chicago School of Public Health, Abt Associates Inc., and the Center for Social Policy, McCormack Institute for Public Affairs, University of Massachusetts Boston. My role on the evaluation teams was often to focus on understanding how interventions were effective or ineffective by interviewing targeted individuals and community members of health promotion and service integration initiatives around the country. I also commonly interviewed community health workers as they were frontline and often core to the intervention's success through outreach, education, and support of clients/patients. In one project, in Baltimore, I accompanied CHWs into public housing developments conducting outreach and HIV prevention and education, including referrals for substance abuse treatment and other social and health services. I was the ethnographer evaluator who observed CHWs in action as well as interviewed targeted community members over a two and a half year period.

2) I have more recently reviewed outcome research related to interventions that include community health workers—as part of my work on staff at the Massachusetts Public Health Association, and later as a consultant to the Massachusetts Department of Public Health Asthma Prevention and Control Program.

3) I also conducted a needs assessment for the Massachusetts Department of Public Health (MDPH) Asthma Program last year which focused on interviewing community health workers trained in the department's asthma intervention home visiting intervention, the directors and staff of the major CHW training centers in Massachusetts, the direct (usually nurse but also physician) supervisors of CHWs at sites where the MDPH READY Study was implemented (Racial and Ethnic Asthma Disparities in Youth), and health plan staff affiliated with the study or engaged with hiring or covering the work of community health workers. The needs assessment was concerned with identifying promising practices for implementing the CHW pediatric asthma intervention. MDPH's READY Study, as with the Krieger and other models to which it is related has shown significant positive impacts on health status as well as reductions in patient ER use and hospitalization.

I commend the team at the Institute for Clinical and Economic Review (ICER) for their solid and thoughtful work in the report on the community health worker field for the New England Comparative Effectiveness Public Advisory Council (CEPAC), the draft submitted on May 24, 2013. This is a challenging topic to squeeze into what is normally a bio-medical framework of drug and medical intervention studies. Community health workers (CHWs) are a workforce that brings the orientation and experience of public health to teams, whether they are pursuing primary prevention, secondary prevention and chronic disease self-management support, or care coordination or education work as part of clinical teams. Given that health reform is focused on broadening the framework of "sick care" to that of promoting and preserving health, the bio-medical framework common to literature reviews will be required to adapt methodologically to assess how interventions affect social determinants of health.

This review, by assessing contributions to and best practices of community health workers in effective health teams and positive outcomes, is a contribution to the new data demands such a paradigm shift in health interventions requires.

I think the approach taken by ICER was wise: to build on outcome data patterns identified from selected studies of interventions that include community health workers by triangulating with multiple additional kinds of data. As the authors acknowledge—and most experts and reviewers of outcome studies for interventions that include community health workers do as well—the studies themselves rarely include sufficient information concerning details of training and other aspects of the intervention to assess aspects of the CHW role that have contributed to (or reduced) its effectiveness.

I have only one specific suggestion and one broader point I think are important for the members of the council to consider in reading and assessing what can be learned from the report for policy purposes.

1) A specific point is to note that the definition of CHWs used by the review team and quoted on page 11 of the report is overly narrow and is not a definition that is widely used. A better and more influential, increasingly pervasive definition is that of the American Public Health Association which is easily located online. I recommend that definition be added in the report some place where it can be clearly seen.

2) The broader point is related to a comment on page 12 of the report as well. In describing the kinds of studies included in the literature search the authors say that they included studies that (among other features) “allowed for the effect of the CHW intervention to be isolated.”

This phrasing of the goal of the review—to isolate the effect of the CHW intervention—is telling. It strikes me the isolation of the singular aspect of an intervention that affects outcomes by focusing on a single member of a team—or a single type of staff—is based on an assumption that one *can* meaningfully isolate one staff member of a team to assess what was effective about an intervention. This assumption may be influenced by drug or other narrow medical interventions commonly studied. Isolation of a single element is not as useful in assessing interventions that are more complex, such as those aiming to change behavior. Those who have worked closely with or studied CHWs in their work—as I have—generally agree: if CHWs are not well integrated into a team, if all team members are not well oriented to the distinct roles that CHWs and others play, and if supervision of CHWs is not adequate and informed by an understanding of their work, the intervention is weakened, and most likely so is its effectiveness.

In other words, CHWs themselves do not constitute an intervention; they are a workforce with specific skills and orientations. They cannot create good health or cost outcomes on their own and should not be evaluated in isolation from the structure and functioning of the team with which they work. The report’s inclusion of interviews with regional and policy experts on intervention best practices with CHW staff contributes a great deal in helping to fill in this gap in the outcome literature. This review strategy is to be highly commended and should help future reviewers of similar literature—not to mention researchers studying such interventions—widen their data gathering lens.

A related point is that the studies cited in the ICER report would be far more informative for understanding contributions of CHWs to health intervention teams if they were grouped by the level of challenge offered by the behavior change goal. Another approach that would be informative would be to assess the appropriateness of a given intervention design for achieving meaningful behavior change of the kind required for x condition (based on other research that may or may not include CHWs as part of interventions).

To take an example from the ICER CHW report, interventions that include CHWs working with drug addicts or ‘users’ are included under two categories in the report literature discussion: a) maternal child health and development (p17) and b) ‘other conditions’ (p 15). Given the extreme challenges of behavior change for those addicted to drugs, particularly low income or otherwise marginalized populations, interventions aimed at behavior change-related outcomes of any kind should not be lumped but rather separated out from other categories of intervention. Their inclusion along with the implication that CHWs failed in these interventions (rather than there was a mismatch between intervention design and intensity for the condition or population targeted) should be discussed in the context of what research has shown generally is required to make change in such situations—and usually achievement of such goals requires a great deal of time at a minimum. Likewise, any intervention aiming to change people’s weight or BMI should be discussed in a similar context of what is known about the time and complexity of achieving such outcomes.

Research reviews of intervention outcomes that include CHWs as part of the intervention team do not address such intervention match or design issues in general. This is not a critique aimed solely at the ICER CEPAC report on CHWs. I offer it as a suggestion for consideration in all research and research reviews of behavior change interventions, those that include CHWs and those that do not.

The section 2.2 on pages 17 and 18 of the report which begin a process of identifying “Key Program Components and Correlation with Positive Outcomes” is an exciting beginning for identifying best practices as they relate to positive program outcomes. Given the limited number of studies included and the additional limitations of studies and reviews I have discussed above (and the authors themselves acknowledge), the key program components strike me as meaningful based on my own research and experience. Clearly they are not conclusive but point in the right direction for policy makers, providers, and health payers to take into account when making decisions about promoting, implementing, and covering interventions that include CHWs as part of teams. Added to the section based on expert interviews, the report is on the right track.

There is a great deal of research underway at the moment which can help to refine understanding of other key components and how they are related to successful outcomes. Not all of this research is outcome research. To take one example, the Asthma CHW Infrastructure Needs Assessment I recently completed for the MDPH focused in-depth on the kinds of training, skills assessment, and team integration approaches that are optimal for CHWs as part of asthma home visiting team interventions linked to primary care. Once it is publicly available it should serve as a resource in those areas of best practices. Many of the CMS Innovation grants—including the Dual Eligible Demonstration programs—include CHWs and should produce research that is attentive to a range of best practices regarding CHWs as part of intervention teams.

Finally, I would like to comment on one of the ‘key program components’ associated with positive outcomes on page 17—specifically, the provision of patient financial incentives. This kind of provision is commonly accorded participants in public health intervention studies with ‘difficult to reach’ or marginalized populations. It is a safeguard to assure that the money spent by the funding agency or organization on the research is not wasted due to low levels of participation, given that such studies often are not part of an ongoing service provision with established relationships with patients or clients. When the latter is in place these sorts of incentives are not necessary; the relationships established, in large part due to the CHW’s work, and to the work of the entire team, are incentive enough. Also important is the consistent availability of the service and care. This kind of incentive, alas, is necessary when interventions are grant funded and come and go with regularity. Once CHWs and the interventions with which they work are covered by health payers and well integrated into the health system, the need for such incentives based on short-term research interventions, will disappear.

Thank you for the opportunity to comment on the very good ICER report to CEPAC on community health workers.

Date: June 24, 2013

Submitted by: Tursynbek Nurmaganbetov, MS, PhD, Senior Science Fellow, Centers for Disease Control and Prevention

The CEPAC report provides a review of the effectiveness and budget impact analysis of interventions that involve community health workers (CHWs). The only source that the authors of the report used in the budget impact analysis of asthma intervention was Krieger's study (1). Unfortunately, the evidence of applicability of the Krieger's study to the case of New England Medicaid children with persistent asthma is not fully presented in this draft report.

First, Krieger's study only includes children ages between 4 and 12 and not all children under the age of 18 years. Second, the report states that the prevalence of persistent asthma in this group is 12.7% but the reference (Smith, 2005) is not listed in the bibliography. Third, the report does not specifically describe what definition of persistent asthma is used, because again the reference is missing in the bibliography.

In the comments below I discuss the evidence that using CHWs in asthma control programs target children with asthma in low income families can be cost-effective intervention compared to no intervention or low-intensive asthma interventions.

CHWs can be an effective force to help with asthma control particularly in low income families (2;3). Efficiency of asthma interventions can vary primarily depending on: qualifications of CHW, number of visits by CHW to the families with asthmatic child, amount of work CHW should perform during visit, and on the number of children with asthma assigned to one CHW (caseload)(1;4). Asthma attacks can be caused by triggers that are commonly found in many homes. Therefore, educating families about controlling asthma through keeping homes triggers-free is important. When these interventions include home visits performed by CHWs (4-7), the intervention can become cost effective.

Home visits with the purpose of educating about asthma and removing asthma triggers can significantly increase health outcomes within 6 and 12 months when it is performed by trained qualified workers. Because home visits involve a quality of instruction similar to individual training, they provide better educational attainment for children with asthma and therefore these children are more likely to retain these skills for several years following the end of the intervention. In turn the obtained knowledge generates more sustainable health outcome benefits for the years to come. CHW programs were shown to be cost-effective also for other chronic diseases such as cardiovascular disease and diabetes (8-10).

An important pillar of CHW program is a transfer of health care costs from costly health care providers such as physicians and nurses to less costly CHWs. The incremental cost of training of CHWs requires significantly less resources compared even to nursing programs. The combination of multiple year health benefits with some health care cost transferring to less expensive providers has an evidence of providing cost-effective interventions involving CHWs for children with persistent asthma in low income families.

References

- 1) Krieger JW, Takaro TK, Song L, Weaver M. The Seattle-King County Healthy Homes Project: a randomized, controlled trial of a community health worker intervention to decrease exposure to indoor asthma triggers. *Am J Public Health* 2005; 95(4):652-9
- 2) Crocker DD, Kinyota S, Dumitru GG, Ligon CB, Herman EJ, Ferdinands JM et al. Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review. *Am J Prev Med* 2011; 41(2 Suppl 1):S5-32.
- 3) Postma J, Karr C, Kieckhefer G. Community health workers and environmental interventions for children with asthma: a systematic review. *J Asthma* 2009; 46(6):564-76.

- 4) Nurmagambetov TA, Barnett SB, Jacob V, Chattopadhyay SK, Hopkins DP, Crocker DD et al. Economic value of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity a community guide systematic review. *Am J Prev Med* 2011; 41(2 Suppl 1):S33-S47.
- 5) Cloutier MM, Grosse SD, Wakefield DB, Nurmagambetov TA, Brown CM. The economic impact of an urban asthma management program. *Am J Manag Care* 2009; 15(6):345-51.
- 6) Kattan M, Stearns SC, Crain EF, Stout JW, Gergen PJ, Evans R, III et al. Cost-effectiveness of a home-based environmental intervention for inner-city children with asthma. *J Allergy Clin Immunol* 2005; 116(5):1058-63.
- 7) Sullivan SD, Weiss KB, Lynn H, Mitchell H, Kattan M, Gergen PJ et al. The cost-effectiveness of an inner-city asthma intervention for children. *J Allergy Clin Immunol* 2002; 110(4):576-81.
- 8) Allen JK, Dennison Himmelfarb CR, Szanton SL, Frick KD. Cost-effectiveness of Nurse Practitioner/Community Health Worker Care to Reduce Cardiovascular Health Disparities. *J Cardiovasc Nurs* 2013.
- 9) Brown HS, III, Wilson KJ, Pagan JA, Arcari CM, Martinez M, Smith K et al. Cost-effectiveness analysis of a community health worker intervention for low-income Hispanic adults with diabetes. *Prev Chronic Dis* 2012; 9:E140.
- 10) Floyd K, Skeva J, Nyirenda T, Gausi F, Salaniponi F. Cost and cost-effectiveness of increased community and primary care facility involvement in tuberculosis care in Lilongwe District, Malawi. *Int J Tuberc Lung Dis* 2003; 7(9 Suppl 1):S29-S37.

The comments are my personal opinion and they do not necessarily represent the view of the Centers for Disease Control and Prevention.

Date: June 24, 2013

Submitted by: Ashley Wennerstrom, PhD, MPH, Instructor of Clinical Medicine, Director, Louisiana Community Health Worker Training Institute, Tulane University School of Medicine

Comment:

Dear committee members,

I am delighted to submit the following comments on behalf of the Community Health Worker Section of the American Public Health Association (APHA). The Section represents over 300 CHWs and their allies through the U.S. It is the only national organization that currently represents the voices of CHWs and their collaborators who have expertise in supporting CHWS.

The Section is delighted that CEPAC is discussing the value of CHWs for improving health outcomes and reducing health care costs. We are pleased that the CEPAC report includes insights provided by CHWs. However, we believe that some of the language used in CEPAC documents is inconsistent with APHA policy on CHWs. We are also concerned that the report may not adequately take into account the complex state of existing science regarding CHWs. We appreciate CEPAC's willingness to consider the concerns outlined below:

Research: APHA policy #20091 acknowledges that "a lack of common standards for research studies concerning CHWs has meant that research findings are often difficult to compare and replicate." As the CEPAC literature review shows, CHWs result in significant improvements in clinical outcome, but these improvements are not uniform among studies. This is for two reasons. First, CHWs work with so many different health and social issues and in so many settings (including many non-health care settings), that proving universal improvement is difficult. Second, outcomes assessments may not consider the full range of community health outcomes that a CHW can produce. Outcomes assessments are limited both by funders interested in one particular disease state, and by the constraints of research design requiring one primary outcome. A core element of CHWs is in community-building and empowerment, even while addressing a particular health condition such as diabetes, HIV, or cancer screening.

For example, a diabetic patient supported by a CHW may not have a clinically significant improvement in his diabetes markers, but the CHW may connect the patient to a support network and as a result he becomes employed. The patient's family then benefits from additional economic resources and more information on how to prevent diabetes amongst themselves. The community benefits from the patient's economic and civic participation. Such community-level outcomes are difficult to measure in the short term. They have not been commonly studied in the United States but the pathway from CHW to community-level change has been shown clearly in other countries and cited as the reason for superior health outcomes in other OECD countries. We challenge CEPAC to consider that currently available research may not evaluate the full range of impacts CHWs can produce, particularly because of the limited time frame for evaluation of such efforts and sole reliance on proximal, clinical data points.

Furthermore, we encourage CEPAC to consider that we are placing an undue burden of proof on CHWs. To our knowledge, other health professionals—even those who deal exclusively with patient care—are not expected to achieve clinical improvement to justify the basic existence of their positions. Instead of asking whether CHWs are efficacious at improving clinical outcomes, we should be asking "What components of CHW programs are most effective in achieving our goals and how can these programs be replicated?"

Targeted intervention: The Questions for Deliberation document contains a question about the potential value of individualized patient interaction. This question is unnecessary. APHA policy #20091 recognizes that a fundamental CHW role is building capacity of the individual being served. As such, tailored education and support are an inherent component of CHW work. Intervention components must be kept broad to allow CHWs to support individual clients' needs.

Training: The Questions for Deliberation document equates two very different models of training (competency-based vs. health condition-specific). Competency-based training, which equips CHWs with a variety of skills, is generally recognized as a best-practice among the field. APHA policy #20091 states that "completion of a standardized training program allows employers the knowledge that a job candidate has a basic level of qualification." It further states that "a clearly defined and structured educational training program would also validate the role of the CHW and enhance the credibility of the position." Given that APHA policy recognizes that competency-based education is mutually beneficial for employers and CHWs, we encourage CEPAC reframe its question in terms of competency-based education.

Thank you very much for the opportunity to participate in this important discussion about the CHW workforce. This brief letter serves only as an overview of our general concerns. We encourage the panel to review carefully the more specific comments provided by Mr. Carl Rush. He is considered by our section to be the leading expert in the CHW field. Members of our section will also be at the meeting to explain these ideas in further detail.

Date: June 24, 2013

Submitted by: Durrell Fox, New England CHW Coalition

Comment:

I thank the ICER-CEPAC for choosing to focus on Community Health Workers (CHWs) during your public meeting on June 28, 2013. I have seen ebbs and flow in CHW research, financing and “awareness” over my 23 years as a paid CHW and 2013-2014 looks like another banner year/cycle for our workforce. I submit the comments below as an individual CHW who is an active, founding member of the Massachusetts Association of CHWs, a member of the New England CHW Coalition and as member and past chair of the American Public Health Association CHW Section.

My comments are in the areas of:

- General statement about CHWs as primary prevention and care practitioners who are public health and healthcare professionals
- Request for CEPAC members to provide CHWs with a high value ranking
- Specific feedback on sections of the report

CHW is a term that has only been in use for a less than two decades but the CHW workforce, identified by over 200 job titles in this country, has been performing similar core roles for over a century in this country and internationally. Since 2000 CHWs have been supported officially by many group through policy resolutions, policy statements and report recommendations including the Institutes of Medicine, American Association of Diabetes Educators, National Rural Health Association, American Public Health Association (and some of its affiliates) and the National Heart Lung and Blood Institute just to name a few. CHWs are mentioned and supported in critical roles in the Patient Protection Affordable Care Act (also in several state level health reform legislation), the HHS National Partnership for Action to Eliminate Health Disparities (also in several state level health equity/health disparities initiatives and legislation) and in the National HIV/AIDS Strategy.

CHWs may be one of the most unique workforces you have reviewed interventions of as we have many interventions under our core roles and competencies that are related to health and healthcare that are able to meet your criteria/protocol for review and we also have many aspects/components of our scope of service that could not be adequately vetted by your process including:

- CHW role as primary prevention practitioners who provide public health and health education to clients and communities in order to prevent illness/injury or in harm reduction to reduce the impact of illness/injury while working to eliminate it. CHWs are employing sound public health theories as part of their scope practice helping clients move through the stages of change and understanding problem risk behavior theories so we can work with clients and communities to address behaviors that put them and their families/communities at risk. By doing this we help clients avoid damaging, costly illness and injury which is of high value to clients, their communities and this country!
- CHWs role in non healthcare specific activities to help address issues related to the social determinates of health by building individual and community capacity to solve their own problems and achieve personal and community wellness. CHWs are located at healthcare and non healthcare related locations like housing, legal and educational organizations where CHWs integrate public health/population health

strategies while working with clients related to non health care related needs. CHWs are more effective related to health outcomes when we are able to meet the hierarchy of needs of a client or community related to the social determinates of health again a role that is of high value to clients, their communities and this country!

- CHWs role in reducing stress on individuals, families and communities is also a high value in reducing the damaging effects and costs of constant high stress levels, as depicted in the film series, Unnatural Causes.

CHWs have allegiances and relationships with and in the communities we serve which helps to foster trust which is paramount to the success of CHWs on positive “outcomes” for the individuals, families and communities we serve. Because of the nature of the work of CHWs it has been sometimes hard to document scientific evidence of our efficacy and effectiveness but the body of this type of evidence has grown exponentially over the last decade, some of this evidence was reflected in your list of 143 references but some was not included based on your protocols/process for review. I know others from local, regional and national CHW groups have responded to your report and some have offered additional or newer references for your review. I’m hoping the CEPAC/Council members can consider this and vote for a “high value” ranking.

For most of my tenure as a CHW I have been a member of a HIV clinical care team at a comprehensive Adolescent HIV program called the Boston HAPPENS Program at Children’s Hospital Boston. During my 20 years as a CHW at Children’s I had many and sometimes multiple titles including HIV case manager, HIV Counselor, youth peer education program director, community liaison, and outreach & services coordinator. For the duration of that time I felt like a valued, respected member of the care team who contributed to several positive outcomes including retention in care, input into medical treatment regiment to assist with adherence along with assisting with food, housing and health insurance related issues on a regular basis. Many members of the care team felt having a CHW on the team made an impact on clinical outcomes like reduction in STIs, viral control or suppression, engagement in mental health services and reduction of risks for other illnesses. Unfortunately we don’t have a lot of scientific evidence but I know firsthand, qualitatively, that there are thousands of CHWs who have similar stories across this country. Some of the literature you received did note positive outcomes when CHWs were part of a care team.

One message I would like to send to the Council is that although a lot of the literature reviewed by your group focused on measuring CHW interventions related to specific diseases and conditions, to be most effective CHWs need to have a strong core training foundation focused on the core competencies and supported by training in specific health promotion and disease areas. Although some of us in Massachusetts and other states have advocated for more “generalist” CHW models for years the funding for most CHW FTEs continues to be soft, cyclical, disease specific/categorical funding that does not fully appreciate or support the most effect, holistic approaches to care and wellness for individuals, families and communities. Although I was supported by HIV funding for over 20 years I had to learn of diabetes, asthma, cancer, hepatitis, obesity and many other health and social conditions faced by my clients.

Section by section feedback

- **Background page 4 – I would note the background behind the CHW definition used by the US Dept of Labor SOC (from APHA Policy #20091)**

In 2006, anticipating the U.S. Department of Labor 2010 Standard Occupation Classification revision, a request for a Community Health Worker classification was submitted by the CHW Special Primary

Interest Group (SPIG) of APHA to the Bureau of Labor Statistics. The CHW SPIG submitted the following CHW definition:

Community Health Workers (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/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

- **Background page 4 – The second to last sentence on the page** incorrectly states that CHWs are not involved in care coordination activities, there are many CHWs that are engaged and who actually lead care coordination including HIV medical case managers.
- **Section 1.2 Evolution page 5 – The second paragraph** does not mention that CHWs were also part of the Community Health Center (CHCs) movement with “outreach workers” from the community working at one of the first CHCs, Geigher-Gibson CHC in Dorchester, MA back in the early 60’s. CHWs continue to be primarily grant funded staffers at many CHCs across the country
- **Section 1.2 Evolution page 5 – The final paragraph** does not take note that in the early 90’s CHW training programs were also at locations other than CHCs including CHEC Boston which is part of the Boston Public Health Commission and HealthWorks at City College of San Francisco. Other CHW training programs were developed during the 90’s at other public health, community based organizations and colleges/universities.
- **Section 1.2 Evolution page 5 – Massachusetts first paragraph** does not capture the grassroots movement in the 90’s where CHWs and our allies/partners organized and coordinated efforts with training programs and employers including during CHEC luncheons, MA Dept of Public Health (their CHW Taskforce and Ounce of Prevention Conference) and MA Public Health Association meetings to name a few. Also there were several other policy initiatives and bills that included CHWs in MA before Ch. 58 of the Acts of 2006 our health reform legislation that included CHWs in Outreach and Enrollment grants (section 104) as well as the section you cited that was related to the 2009 CHW report to the legislature (section 110) which followed a previous CHW report back in 2003. Through policy initiatives CHWs also were able to receive some funding support through language in our state’s 1115 Medicaid waiver.
- **Section 1.2 Evolution – 1.3 CHW status in other New England States** - I will look for CHWs and out allies in partners to add comments on specifics in other states, based on my work over the years in other states I feel there are relevant activities/milestones missing. We formed the New England CHW Coalition last year and we have begun to share activities and create close connections across all six states that will lead to stronger CHW workforce development, training, financing and sustainability in this region.
- **Section 2 – 2.1 Summary of the Evidence** – I don’t fully understand the formula for rating study quality but feel, as stated on the second to last sentence on page 12 by excluding studies that focus solely on improvements in patient knowledge or satisfaction misses some of the “value added” nature of CHWs as improved health and public health knowledge, although not always directly correlated with appropriate behaviors/use of the knowledge, improved knowledge does contribute to improved outcomes due to more informed decision making and engagement in care/wellness. Also patient satisfaction can also contribute to better retention in care. I also felt there is more, current literature available related to

CHWs role in chronic disease management so hoping others who have responded have sent that kind of info, I have been copied on a few responses so saw a few examples...

- **Section 2.2** – I think this section has some merits and can help add to the literature but limited by sample of studies used to develop conclusions in the section
- **Section 3. Economic Impact** – As stated earlier I think the conclusions fit the selected studies but miss some other key data that could better capture more of the scope of the economic impact of CHWs
- **Section 4 Policy Expert Perspectives, section 4.1 and 4.2** – Does reflect a solid view of some of the national surveys and assessments but I know the Center for Disease Control and the former Center for Sustainable Health Outreach both published CHW national listings and data that was not referenced in this section. There was also no mention of the CHW National Education Collaborative assessment of CHW training curricula (the CHW-NEC was based at the University of Arizona funded for 3 years through FIPSE grant).
- **Section 4.3 #3 starting on page 37** – Does not mention other CHW training programs that have been held up as models of “promising practices” highlighted by the CHW-NEC including the Outreach Worker Training Institute, currently based at the Central Mass AHEC in Worcester which is a model for CHW role in training leadership and faculty development.

Date: June 24, 2013

Submitted by: Asthma Regional Council of New England, Health Resources in Action

Re: Comments to the New England Comparative Effectiveness Public Advisory Council (CEPAC) regarding draft report, entitled “Community Health Workers: A Review of Program Evolution, Evidence on Effectiveness and Value, and Status of Workforce Development in New England”, developed by: The Institute for Clinical and Economic Review for CEPAC.

Dear NE CEPAC,

The Asthma Regional Council of New England (ARC), along with the individuals and institutions signed below, respectfully submit the following comments regarding the draft report, entitled “*Community Health Workers: A Review of Program Evolution, Evidence on Effectiveness and Value, and Status of Workforce Development in New England*”, developed by the Institute for Clinical and Economic Review (ICER) for the Comparative Effectiveness Public Advisory Council (CEPAC). We applaud CEPAC’s decision to focus on the effectiveness and value of CHW programs, and ICER’s report documenting the importance and value of Community Health Workers.

Our comments are specifically related to CHW programs focused on asthma management, and more specifically the provision of home-based patient self management education and environmental assessment services. Attached is background information on the prevalence and impact of asthma, as well as recommended best practice, etc. which may be helpful in your deliberations. ARC and HRiA are members of the New England Community Health Worker’s Coalition, and support our colleagues’ comments about CHW programs broadly.

Our Comments/Recommendations: The ICER report captures the positive impact of CHW programs on health outcomes and quality of life for their patients, including children with asthma, resulting in lower utilization of emergency healthcare. However, we are concerned about the budget impact analysis in respect to CHW asthma programs—particularly as is noted in the report—financially sustaining CHW initiatives is one of the most significant challenges faced by organizations engaged in CHW interventions. We offer the following comments:

1) The budget analysis for asthma in the report is based on extrapolations from the cost data in the Seattle study (Kreiger, 2005). We encourage CEPAC to look at the below two recent studies which focus on asthma intervention programs delivered by a CHW and CHW/nurse that also include a cost analysis, as well as findings from the *Community Guide Systematic Review*.

- *A Cost Analysis for a Community-Based Case Management Intervention Program for Pediatric Asthma* (Bhaumik, et al, 2013) <http://www.ncbi.nlm.nih.gov/pubmed/23311526>. **Objective.** Evaluate the costs and benefits of the Boston Children’s Hospital Community Asthma Initiative (CAI) program through reduction of Emergency Department (ED) visits and hospitalizations and quality of life (QOL) for patients and their families due to reduced missed school days and work days. **Methods.** Cost–benefit analysis was used to determine an adjusted Return on Investment (ROI) for all 102 patients enrolled in the CAI program in the calendar year 2006 after controlling for changes in a comparable population without CAI intervention. A societal ROI (SROI) was also computed by including additional indirect benefits due to reduced missed school days for patients and work days for caregivers. **Results.** Adjusted cost savings from fewer ED visits and hospitalizations resulted in an adjusted ROI of 1.33 (adjusted NetPresent Value, (NPV) of savings=\$83,863) during the first 3 years after controlling for factors other than the CAI intervention. When benefits due to reduced missed school days and missed work days were added to adjusted cost savings, the

SROI increased to 1.85 (Societal NPV of savings= \$215,100). *Conclusions.* Multidisciplinary, coordinated disease management programs offer the opportunity to prevent costly complications and hospitalizations for chronic diseases, while improving QOL for patients and families. This cost analysis supports the business case for the provision of proactive community based asthma services that are traditionally not reimbursed by the fee-for-service health care system. (Note this program was a Nurse/CHW model, but still showed cost savings).

- Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention Sinai Urban Health Institute* (Margellos- Anast, et al, 2012)
http://www.suhichicago.org/files/publications/margellos_pai%20joa_2012.pdf. *Objectives.* Asthma affects 25–30% of children living in certain disadvantaged Chicago neighborhoods, a rate twice the national prevalence (13%). Children living in poor, minority communities tend to rely heavily on the emergency department (ED) for asthma care and are unlikely to be properly medicated or educated on asthma self-management. A pilot project implemented and evaluated a community health worker (CHW) model for its effectiveness in reducing asthma morbidity and improving the quality of life among African-American children living in disadvantaged Chicago neighborhoods. *Methods.* Trained CHWs from targeted communities provided individualized asthma education during three to four home visits over 6 months. The CHWs also served as liaisons between families and the medical system. Seventy children were enrolled into the pilot phase between 15 November 2004 and 15 July 2005, of which 96% were insured by Medicaid and 54% lived with a smoker. Prior to starting, the study was approved by an institutional review board. Data on 50 children (71.4%) who completed the entire 12-month evaluation phase were analyzed using a before and after study design. *Results.* Findings indicate improved asthma control. Specifically, symptom frequency was reduced by 35% and urgent health resource utilization by 75% between the pre- and post-intervention periods. Parental quality of life also improved by a level that was both clinically and statistically significant. Other important outcomes included improved asthma-related knowledge, decreased exposure to asthma triggers, and improved medical management. The intervention was also shown to be cost-effective, resulting in an estimated \$5.58 saved per dollar spent on the intervention.
- Effectiveness of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community Guide Systematic Review* (Crocker, et al, 2011)
<http://www.thecommunityguide.org/asthma/supportingmaterials/Asthma%20Evidence%20review.pdf> Intervention components focus on reducing exposures to a range of asthma triggers (allergens and irritants) through environmental assessment, education, and remediation. *Evidence acquisition:* A systematic review was conducted to evaluate the evidence on effectiveness of home-based, multi- trigger, multicomponent interventions with an environmental focus to improve asthma-related morbidity outcomes. The literature search identified over 10,800 citations. Of these, 23 studies met intervention and quality criteria for inclusion in the final analysis. Though these 23 studies included home visits made exclusively by CHWs, nurses, respiratory therapists, physicians, housing officers, environmental educators, and trained sanitarians. *Evidence synthesis:* In the 20 studies targeting children and adolescents, the number of days with asthma symptoms (symptom-days) was reduced by 0.8 days per 2 weeks, which is equivalent to 21.0 symptom-days per year (range of values: reduction of 0.6 to 2.3 days per year); school days missed were reduced by 12.3 days per year (range of values: reduction of 3.4 to 31.2 days per year); and the number of asthma acute care visits were reduced by 0.57 visits per year (interquartile interval: reduction of 0.33 to 1.71 visits per year). Only three studies reported outcomes among adults with asthma, finding inconsistent results. *Conclusions:* Home-based, multi-trigger, multicomponent interventions with an environmental focus are effective in improving overall quality of life and productivity in children and adolescents with asthma. The effectiveness of these interventions in adults is inconclusive due to the small number of studies and inconsistent results. Additional studies are needed to (1) evaluate the effectiveness of these

interventions in adults and (2) determine the individual contributions of the various intervention components. (Am J Prev Med 2011;41(2S1):S5–S32)

2) The ICER budget analysis is based on providing home based services to all children with *persistent* asthma receiving Medicaid in New England. However, many children with persistent asthma do not need these services. Services should be targeted to children with not-well or poorly controlled asthma, a smaller subset of the population.

3) Supplies for home environmental asthma trigger control (e.g., HEPA vacuums, pillow and mattress casings) should be considered as part of a treatment plan (or as we advocate, Durable Medical Equipment) as opposed to participant incentives.

4) Boston’s CAI study (Bhaumik, 2013) provides more recent data from the New England region, and demonstrates the following:

- Lower ED visit and Hospitalization costs post-intervention than Seattle (incremental program cost per patient are similar; CAI also adjusts for other factors that may lower the observed cost among the intervention group by using a comparison population that received no such intervention.
- Budget neutrality if a period of two years after the intervention is taken into account; CAI found the net benefit to carry over into the third year, resulting in budget savings over a three year period.
- Additionally, the CAI program results in other Quality of Life Improvements for patients and their families – including a reduction in missed school days and work days following the same trend as reduction in ED and hospitalizations found in the study.

5) It is important to take into account societal benefits (or the Social Return on investment (SROI)) – for at least those patients with Medicaid since this is a publically funded program—including, but not limited to fewer missed work and school days benefiting not just the patient but employers and schools. It is also important to view benefits from the patient perspective—quality adjusted life years. At ARC’s Annual Meeting on June 13th, Stephen Cha, MD, MHS, Center for Medicaid and CHIP Services, Centers for Medicare and Medicaid Services, US Department of Health and Human Services commented that we can’t rely only on cost-benefit analysis but we need to implement cost effectiveness analysis as well.

We also ask that you consider the comments submitted by James Krieger, MD, Seattle King County Public Health Department and Tursynbek Nurmagambetov, PhD, U.S. Centers for Disease Control and Prevention.

HRiA is a nonprofit organization dedicated to promoting public health and advancing medical research, in partnership with federal and state government agencies, academic and research institutions, nonprofits, and communities throughout the country. ARC is a coalition of nearly 75 public agencies, private organizations and researchers across New England working to tackle environmental and clinical aspects of pediatric and adult asthma; ARC is a program of HRiA but was founded by the Region I office of DHHS, HUD and the EPA in a multi-sector initiative to address asthma disparities in our region.

ARC and the University of Massachusetts Lowell have produced several business cases and white papers describing the cost effectiveness of the non-clinical components of evidence-based asthma management. The most relevant publication, *“Investing in Best Practices for Asthma: A Business Case”*

(<http://asthmaregionalcouncil.org/uploads/Asthma%20Management/Investing%20in%20Best%20Practices%20fo%20Asthma-A%20Business%20Case%20%20August%202010%20Update.pdf>) cites research and on-the-ground models demonstrating that comprehensive asthma management programs, often CHW programs, are either cost- effective or offer a return-on-investment. It also provides guidance about how to classify patients and target non- clinical interventions

appropriately according to risk-level. Finally, it demonstrates that comprehensive asthma management can help people with asthma live healthy active lives, unimpeded by persistent breathing difficulties, trips to the emergency department or hospital, and missed school and workdays.

If you have questions, please contact Stacey Chacker, ARC Director at schacker@hria.org or 617-279-2240 ext. 536.

Thank you for your consideration.



Organizations

Boston Children's Hospital, MA
Boston Public Health Commission, MA
National Center for Healthy Housing

Individuals

Andrew Balder, MD, Baystate Mason Square Neighborhood Health Center, MA
Elizabeth McQuaid, PhD, Community Asthma Programs, RI Hospital/Hasbro Children's Hospital, Brown Medical School
Matthew Sadof, MD, Baystate Children's Hospital, MA Megan
Sandel MD, MPH, Boston Medical Center, MA Veronica
Mansfield, NP, A-EC, CT

Background on Asthma

1. Asthma has nearly doubled in the U.S. over the last few decades, with approximately 9.1% of children and 8.3% of adults with current asthma, and health disparities are acute. Asthma compromises the health and quality of life, and places a heavy financial burden on those with the disease, as well as an enormous strain on the health care system. Data from an August 2011 published report demonstrates that:

- Asthma symptoms in 70% of adults are considered to be “not well” or “very poorly” controlled, as defined by NHLBI’s best practices put forward by its National Asthma Education and Prevention Program (NAEPP) EPR-3, *Guidelines for the Diagnosis and Management of Asthma*ⁱ and a study conducted by ARC found similar results for children;
- Twenty percent of adults with current asthma reported that it limited their usual daily activities to a moderate or great extent. The impact is greater among low income adults;ⁱⁱ
- Asthma disparities are evident. People of color have significantly higher hospitalization rates than non- Hispanic whites.ⁱⁱⁱ

2. Asthma is one of the most costly chronic diseases. Proper asthma management has the potential to save at least 25% of total asthma costs—or close to \$5 billion nation-wide annually—by controlling symptoms, which in turn reduces usage of urgent care health services. Among pediatric hospitalizations that could be prevented,

asthma is responsible for the highest costs^{iv}. Furthermore, comprehensive asthma management has the potential to reduce “indirect” costs associated with absenteeism and presenteeism (low productivity) at work and at school.^{v, vi, vii} - According to the Centers for Disease Control and Prevention, Asthma costs the nation \$54 billion/year.

3. There are national guidelines for best practices in comprehensive asthma management. NAEPP outlines four vital components of effective asthma management: 1) use of objective measures of lung function to assess disease severity and control; 2) comprehensive pharmacologic therapy to reverse and prevent airway inflammation and constriction, and to manage asthma exacerbations; 3) patient education that fosters a partnership among the patient, family, and clinicians; and 4) environmental control measures to avoid or eliminate asthma triggers that contribute to asthma onset and severity.^{viii} While patients inconsistently receive proactive assessments of their lung function and symptoms in the clinic or properly use medications, relatively fewer patients have access to items “3” and “4” of asthma best practices: patient self-management education and control of environmental triggers. Part of the reason is a lack of capacity to deliver these essential components in the community, which is partially a result of sporadic and insufficient insurance reimbursements for these critical services.

4. There is a strong evidence base showing improvements in the health of children with poorly controlled asthma when primary and specialist clinical care is supplemented by home-based asthma education and environmental supports. Published reviews by the NAEPP (2007) and the CDC’s Task Force on Community Preventive Services (2008), along with evidence from innovative asthma management programs around the country show that these interventions— including in-depth asthma education, home environmental assessments, and mitigation of exposures that trigger asthma—can markedly improve patients’ quality of life, and often decrease urgent medical encounters at a reasonable cost. (Bibliography attached) When these interventions are targeted to high-risk patients, they may result in net cost savings to health payers who invest in them, as well as significant savings to other systems by diminishing or eliminating missed work and school days due to uncontrolled asthma. More specifically, the CDC found that “the combination of minor to moderate environmental remediation with an educational component provides good value for the money invested based on improvements in symptom-free days, savings from averted costs of asthma care, and improvement in productivity”^{ix} with evidence of:

- Return on Investment ranging from \$5.30 to \$14.00 for every dollar invested;
- Cost-effectiveness, as measured by costs per symptom-free day gained ranging from \$12.00 to \$57.00 (lower if indirect costs were included).^x

Because there have been few studies on adults, the CDC Task Force limited its conclusions to children and adolescents, although some research has shown improvements in adults resulting from home-based environmental interventions.^{xi, xii} Other benefits include reductions in health disparities, as well as improvements in quality of life and in co-morbidities such as depression, anxiety and obesity.

Why these non-clinical care components are important to effective asthma management strategies:

- *Importance of Asthma Education:* Asthma is a complicated disease. Many patients require multiple prescriptions as well as equipment to administer medications that keep their asthma under control and mitigate symptoms during an asthma attack. People with asthma must make their own decisions about when to use long-term control and quick relief medications, based on their symptoms and lung function. They must also take steps to reduce their exposure to environmental triggers that exacerbate their disease. Because of these complexities, people with asthma need proactive education and follow-up, typically via multiple sessions involving demonstration, practice, and reinforcement of information and proper techniques in their real-life living situations. In dozens of studies, asthma education sessions delivered in the home and/or workplace settings have helped patients overcome key

factors in poorly managed asthma, including low expectations for controlling their disease, confusion over using different kinds of medications, misuse of medical equipment.^{xiii}

- **Importance of Home-Based Environmental Interventions:** A distinguishing characteristic of asthma is the importance of environmental exposures in exacerbating symptoms and, in some cases, contributing to the initial onset of the disease. Reducing exposure to environmental triggers can often make the difference between living productively with asthma and being severely impeded by symptoms. A variety of environmental factors associated with asthma are commonly found in homes of people from all socio-economic backgrounds, but sub-standard home environments— more frequently occupied by low-income people—are particularly problematic. Typically, dust mites, cockroaches, mold, as well as dog and cat dander are the environmental allergens of most concern. Specific irritants also can exacerbate symptoms, including environmental tobacco smoke, cleaning chemicals, scents and fragrances, as well as nitrogen oxide from home heating appliances.^{xiv}

5. There is a critical lack of reimbursements by health payers for home-based preventative asthma care and a lack of knowledge about their cost and health benefits. ARC conducted a survey of 25 public and private payers across New England and found that payers often fail to align their reimbursements with evidence based practices. For community based care, significantly fewer than half of them reimburse for targeted care in the homes of people with uncontrolled asthma. Many even fail to reimburse for asthma education in the clinical setting.

6. A variety of providers of asthma education and environmental services have been shown to be cost effective. Based on ARC's insurance survey, there is little consistency as to the the types of providers that will be recognized for reimbursement by public and private insurers for home based services. Many will allow nurses, but not Respiratory Therapists, including those certified as Asthma Educators. Almost none will reimburse for the culturally competent care of Community Health Workers, whose cost effectiveness in providing home-based asthma care has been shown through multiple published studies.^{xv}

ⁱ Nguyen, Kimberly, et al *Factors Associated with Asthma Control Among Adults in five New England States 2006-2007*, Journal of Asthma, Vol 48, No 6, Pages 581-589, Aug 2011.

ⁱⁱ Ibid.

ⁱⁱⁱ Ibid.

^{iv} Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project. *Statistical Brief #72*. April 2009. Available at: www.hcup-us.ahrq.gov/reports/statbriefs/sb72.jsp. Accessed April 22, 2010.

^v Goetzel RZ, et al. "Health, Absence, Disability, and Presenteeism Cost Estimates of Certain Physical and Mental Health Conditions Affecting U.S. Employers," *Journal of Occupational and Environmental Medicine*. 2004;46:398-412.

^{vi} U.S. Department of Health and Human Services, National Heart, Lung and Blood Institute, National Asthma Education and Prevention Program. Expert Panel Report 3: *Guidelines for the Diagnosis and Management of Asthma*, 2007.

^{vii} Hoppin P, et al. *Asthma: A Business Case for Employers and Health Care Purchasers*. Lowell Center for Sustainable Production and Asthma Regional Council of New England. February 2010. Available at: www.sustainableproduction.org. Accessed: March 24, 2010.

^{viii} U.S. Department of Health and Human Services, National Heart, Lung and Blood Institute, National Asthma Education and Prevention Program, *Supra* note 7.

- ^{ix} Nurmagambetov T, et al. *Economic Evaluation of Home-Based Environmental Interventions to Reduce Asthma Morbidity*. December 2, 2009. Webinar sponsored by EPA's Communities in Action for Asthma Friendly Environments, "Economic Evaluation of Home-based Environmental Interventions." Available at: http://www.asthmacommunitynetwork.org/webinars/PresentationFiles/Final_Economics_of_home_based_CDC_Dec_3_2009.pdf. Accessed: December 21, 2009.
- ^x Ibid.
- ^{xi} Jowers JR, et al. "Disease Management Program Improves Asthma Outcomes," *The American Journal of Managed Care*. 2000;6(5):585-592.
- ^{xii} Nurmagambetov T, et al. *Supra* note 12.
- ^{xiii} U.S. Department of Health and Human Services, National Heart, Lung and Blood Institute, National Asthma Education and Prevention Program, *Supra* note 7.
- ^{xiv} Brett M, et al. *The Role of Pest Control in Effective Asthma Management: A Business Case*. Boston Public Health Commission (Produced by the Asthma Regional Council of New England). 2009.
- ^{xv} Krieger J, et al. "A Randomized Controlled Trial of Asthma Self-Management Support Comparing Clinic-Based Nurses and In-Home Community Health Workers", *Archives of Pediatric and Adolescent Medicine*. 2009; 163(2): 141-149.

Other sources:

- a) Investing in Best Practices for Asthma: A Business Case August 2010 Update. ARC and University of Massachusetts/Lowell
<http://asthmaregionalcouncil.org/uploads/Asthma%20Management/Investing%20in%20Best%20Practices%20fo%20Asthma-A%20Business%20Case%20%20August%202010%20Update.pdf>
- b) "Asthma: A Business Case for Employers and Health Care Purchasers" and its companion "Insurance Coverage for Asthma, A Value and Quality Checklist for Purchasers of Health Care".
http://asthmaregionalcouncil.org/uploads/documents/hria_asthma_report.pdf
http://asthmaregionalcouncil.org/uploads/Asthma%20Management/Insurance_Check_Sheet_Employers_2010.pdf
- c) Employers Bolster Medication Adherence Initiatives
<http://www.workforce.com/section/02/feature/27/27/68/index.html>

Bibliography from the American Journal of Preventive Medicine:

Article Title	Author(s)	Source
Recommendations from the Task Force on Community Preventive Services to Decrease Asthma Morbidity Through Home-Based, Multi-Trigger, Multicomponent Interventions	Task Force on Community Preventive Services	American Journal of Preventive Medicine – August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S1-S4, DOI: 10.1016/j.amepre.2011.04.011)
Effectiveness of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community	Deidre D. Crocker, Stella Kinyota, Gema G. Dumitru, Colin B. Ligon, Elizabeth J. Herman, Jill M. Ferdinands, David P. Hopkins, Briana M. Lawrence, Theresa A. Sipe, Task	American Journal of Preventive Medicine – August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S5-S32, DOI: 10.1016/j.amepre.2011.05.012)

Guide Systematic Review	Force on Community Preventive Services	
Economic Value of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community Guide Systematic Review	Tursynbek A. Nurmagambetov, Sarah Beth L. Barnett, Verughese Jacob, Sajal K. Chattopadhyay, David P. Hopkins, Deidre D. Crocker, Gema G. Dumitru, Stella Kinyota, Task Force on Community Preventive Services	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S33-S47, DOI: 10.1016/j.amepre.2011.05.011)
Better Home Visits for Asthma: Lessons Learned from the Seattle–King County Asthma Program	James W. Krieger, Miriam L. Philby, Marissa Z. Brooks	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S48-S51, DOI: 10.1016/j.amepre.2011.05.010)
Evaluating Home-Based, Multicomponent, Multi-Trigger Interventions: Your Results May Vary	Maureen A. Wilce, Paul L. Garbe	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S52-S54, DOI: 10.1016/j.amepre.2011.05.009)
Inner-City Environments and Mitigation of Cockroach Allergen	Michelle L. Sever, Päivi M. Salo, Amber K. Haynes, Darryl C. Zeldin	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S55-S56, DOI: 10.1016/j.amepre.2011.05.007)
Asthma and Social Justice: How to Get Remediation Done	Johnna S. Murphy, Megan T. Sandel	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S57-S58, DOI: 10.1016/j.amepre.2011.05.006)
The Economic Value of Home Asthma Interventions	Adam J. Atherly	American Journal of Preventive Medicine - August 2011 (Vol. 41, Issue 2, Supplement 1, Pages S59-S61, DOI: 10.1016/j.amepre.2011.05.008)

Date: June 28, 2013

Submitted by: Meredith Ferraro, Southwestern Area Health Education Center

In Connecticut as of March 2013, there is now a Community Health Worker Association of CT. We are proud to say that there is a tremendous amount of interest to promote the CHW workforce and provide representation, direction and promotion of the CHW public health workforce.

It is also important to include the functions of CHWs in other contexts: CHW roles in community development or population-based primary prevention, and the trend toward CHW roles in broad purpose patient centered primary care teams, which may deal with a broad range of medical and non-medical needs. These are important considerations when looking at payment models for the future, and within the ACA.

Date: July 11, 2013

Submitted by: Asthma Regional Council of New England, Health Resources in Action

July 11, 2013

Re: Additional Comments to the New England Comparative Effectiveness Public Advisory Council (CEPAC)

Dear New England CEPAC,

The Asthma Regional Council of New England (ARC) again applauds CEPAC's decision to focus on the effectiveness and value of Community Health Workers (CHWs), and the attention that you are drawing to this important workforce. We appreciate the complexity of deliberating this "systems approach" and the efforts that the Institute for Clinical and Economic Review and CEPAC continue to dedicate to this subject matter.

It is within this context that ARC offers additional comments, supplementing those submitted on June 24th. The comments are meant to provide additional information regarding questions posed by CEPAC at the June 28th meeting; we hope that they will be helpful as you continue to deliberate this important topic. Again, our comments are focused on asthma management, specifically the provision of home-based patient self-management education and environmental assessment services.

ARC/HRiA and our partners have a vested interest in CEPAC's recommendations. As you are aware, the Center for Medicare and Medicaid Innovation (CMMI) granted Health Resources in Action (HRiA)/ARC a Health Care Innovation Challenge award to support the "New England Asthma Innovation Collaborative" (NEAIC) in July 2012. NEAIC is a multi-state, multi-sector partnership that includes health care providers, payers, and policy makers aimed at creating an innovative *Asthma Marketplace in New England* that will increase the *supply and demand* for high-quality, cost-effective health care services delivered to Medicaid children with severe asthma; the use of CHWs is a core component of this program (please see attached NEAIC abstract). Some of our comments are based on experiences which we have garnered through research on CHW programs and via NEAIC.

Our Comments/Recommendations:

1. CHW Asthma Home Visiting generally consists of a "suite of visits". The number of visits varies, but in many programs, including NEAIC, three home visits are made (on average) over a 3 to 6 month period. The time needed for a home visit depends on what is being accomplished. The first visit is typically the longest and may take up to two hours if asthma education, review of medications and an environmental assessment are all being conducted. This may differ from generalist program where a CHW provides case management and home visiting on an ongoing basis.
2. CHW Caseload for Asthma Home Visiting: In his comments, Dr. Jim Krieger wrote, "Our CHWs carry an active caseload of 50 clients at any single point in time. Over the course of a year, they work with 120 clients (per CHW)" (for a model with an average of 3 visits). In a follow-up phone conversation with June Robinson, MPH, Community Health Worker Unit Manager working with Dr. Krieger at the Seattle & King County Public Health Department, she shared the following:
 - They had two full-time CHWs for their Asthma Program. Each CHW was able to make an average of ten home visits per week. However, it is important to note several program components that allowed the CHWs to achieve this caseload:

- The CHWs worked with a full-time Program Administrator, full-time Program Manager, and part-time nurse (.2-.3 FTE for supervision and clinical support), and were not responsible for recruitment or initial enrollment. This allowed the CHWs to focus their time on only home visiting.
- The Program had an ongoing pipeline of patients enrolled, which reduced lag time.
- The Seattle King County program has strong institutional support and good supervision, both of which are crucial to implementing a successful CHW program.

As a result, we believe that it is important that a caseload of 120 patients per CHW per year for an asthma home visiting program not be held up as a standard, as institutions vary staffing patterns, recruitment, and support. Many CHWs are involved in case management, care coordination, and data gathering/recording outside of home visits. Additionally, part-time CHWs may not have the same capacity, proportionally, due to less flexibility for scheduling home visits.

3. Environmental Remediation Supplies: As CEPAC recognized at the June 28th meeting, while supplies may serve as incentives to families to participate in a home visiting program, they really are part of a treatment plan – assisting families to reduce environmental asthma triggers in the home. Supplies provided vary by program, but most published asthma home visiting programs that we are aware of include supplies as part of the studied intervention. Dr. Krieger stated that their program expends an average of \$300 per patient family. NEAIC provides \$350 worth of supplies per patient family. Please see attached NEAIC Supply List, which includes both required and suggested supplies, based on those provided by a variety of existing programs.
4. CHW Asthma Home Visiting programs implemented as a part of studies or evaluations have higher costs than solely an intervention, due to the need acquire IRB approval, consenting patients, collecting and analyzing data and administrative reporting, etc.
5. CHW training: As noted by CEPAC, training for CHWs is essential. We thought it would be helpful to share the training that NEAIC, via our subcontractors, provides for the CHWs involved in our partnership.
 - Core Competency Training for CHWs, provided by the Central Massachusetts Area Health Education Center Outreach Worker Training Institute (48-Hour Core Competency Certificate Course). Training focused on developing the following skills: communication, assessment, cultural responsiveness, documentation, organization, and advocacy.
 - Asthma Home Visiting Training for CHWs, developed by the MA Department of Public Health (MDPH) and Boston Public Health Commission Community Health Education Center (BPHC CHEC) and owned by MDPH. The 4-day (24-hour) asthma home visiting training includes understanding of environmental asthma triggers, how to conduct an environmental assessment, review of asthma medications, data collection and quality control, and motivational interviewing techniques.
 - CHW Supervisor Training: Developed by the MDPH and BPHC CHEC and owned by MDPH. The purpose of this 1.5-day (9-hour) training is to equip clinical and program staff with supervision strategies and ideas on how to support CHWs in their unique role. It also provides training in motivational interviewing.
 - Additional training for supervisors in environmental asthma triggers and home visiting.
 - Ongoing support and education for CHWs and for supervisors provided by the Massachusetts Association of CHWs.
6. Benefits to the patient and value: When a parent/guardian and/or patient learns about asthma and has the knowledge and tools to address the environmental asthma triggers in the home, it is likely that other family members will benefit from the intervention, as opposed to just the patient for whom the home visiting was prescribed.

We look forward to working with you as we continue our efforts to increase capacity and promote sustainability of high-quality, cost-effective health care services delivered to Medicaid children with severe asthma, including the use of CHWs. If you have questions, please contact Stacey Chacker, ARC Director at schacker@hria.org or 617-279-2240 ext. 536.

Thank you for your consideration, and congratulations on your excellent work.

Sincerely,

A handwritten signature in black ink that reads "Stacey Chacker". The signature is written in a cursive, flowing style.

Stacey Chacker
Director, Asthma Regional Council of New England
Health Resources in Action

List of Public Attendees

June 28, 2013

Portland, ME

1. Marisol Amaya, BS, MPH, Assistant Director, La Alianza Hispana, Inc.
2. Mercy Anampiu, CHW/MBA, Health Promotion and Education Manager, Lowell Community Health Center
3. Kolawole Bankole, MD, Access Project Director/Minority Health Program Coordinator, City of Portland, HHSD, Minority Health Program
4. Nancy Beaulieu, PhD, Consultant, NDB Consulting
5. Heidi Behforouz, MD, Associate Physician, Brigham and Women's Hospital
6. Jim Braddick, MEd, Maine Center for Disease Control
7. Vance Brown, MD, Chief Medical Officer, MaineHealth
8. Graciela Cadena, Spectrum Health Center/Michigan CHW Network
9. Dolores Calaf BA, MA, Ed.D. Candidate, Director of Programs, La Alianza Hispana Inc.
10. Joanne Calista, Executive Director, Central MA AHEC
11. Jessica Cates, Public Health Advisor, New England, DHHS
12. Stacey Chacker, Director, Asthma Regional Council of New England, Health Resources in Action, Inc.
13. Allison Colbert, Senior Manager, Avalere Health
14. James Corbett, M.Div., J.D., Vice President of Community Health & Ethics, Steward Health Care System LLC
15. Grace Damio, MS, CD/N, Director of Research and Service Initiatives, Hispanic Health Council
16. Jatin Dave, MD, MPH, Medical Director, Tufts Health Plan
17. Deb Deatrck, MPH, Senior Vice President, Community Health, MaineHealth
18. Durrell Fox, BS, Founding Member, Community Health Worker, Massachusetts Association of Community Health Workers
19. Alejandro Galeano-Molina, Project Shine, P.S.R Program Coordinator, East Boston Neighborhood Health Center
20. Kathleen Gans-Brangs, PhD, Senior Director, Healthcare Policy, Medical Affairs, AstraZeneca LP
21. Barbara Ginley, MPH, Executive Director, Maine Migrant Health Program
22. Paolo Gomes, Steward Health System, LLC
23. Christine Gordon, Project Coordinator -Asthma Regional Council of New England, Health Resources in Action
24. Laura Gottfried, Chief Program Officer, Portland Community Health Center
25. Trevor Hanbridge, MA, LCMHC Community Health Worker, Springfield Health Center
26. Peggy Haynes, MPA, Director, Eldercare Services, MaineHealth
27. Gail Hirsch, MEd, Director, Office of CHW, Dept. of Health, Office of CHW
28. Lisa Renee Holderby-Fox, Executive Director, Massachusetts Association Community Health Workers
29. Jeffrey Holmstrom, D.O., Medical Director, Anthem Blue Cross Blue Shield of Maine
30. Kim Humphrey, Project Coordinator, Maine Primary Care Association
31. Maggie Kelley, Director, Care Management, Quality Maine Community Health Options
32. Lisa Letourneau, MD, MPH, Executive Director, Maine Quality Counts

33. Doris Lotz, MD, Medicaid Medical Director, New Hampshire Department of Health and Human Services
34. Ameila Lundkvist, Intern, Maine Center for Disease Control / DHHS
35. Elizabeth Marcuse, Intern, MCD Public Health
36. Terry Mason, M.A., Ph.D., Public Health Policy Consultant, Massachusetts Department of Public Health
37. Becca Matusovich, MPPM, Cumberland District Public Health Liaison, Maine Center for Disease Control and Prevention/DHHS
38. William McQuade, DSc, MPH, Senior Health Policy Analyst, Rhode Island Executive Office of Health and Human Services
39. Jazmin Miranda-Smith, Southern NH AHEC
40. Nimo Mohamed, DD Swan Consulting
41. Jennifer Morton, DNP, MPH, Professor, Director CHANNELS UNE
42. Laura Nasuti, MPH, Epidemiologist, Massachusetts Department of Public Health
43. Robert Nierman, M.D., Medical Director for Value-Based Clinical Policy and Programs, Tufts Health Plan
44. Sheila Och, MPH, Deputy Director, Lowell Community Health Center
45. Alejandro Perez, M.P.H. candidate, Domestic Policy Intern, The Century Foundation
46. Kate Perkins, MPA, Director, MCD Public Health
47. Shonna Poulin Gutierrez, MAOM, CHES Public Health Educator, Maine CDC
48. Jake Rich, Project SHINE, Community Health Educator, East Boston Neighborhood Center
49. Abdulkerim Said, Executive Director, New Mainers Public Health Initiative
50. Tatiane Santos, MPH, Regional Manager - Patient Advocacy, Abbvie
51. Jeffrey Simmos, MD, Medical Director, Behavioral Health, Blue Cross Blue Shield of MA
52. Roger Snow, MD, MPH, Deputy Medical Director, MassHealth (Office of Medicaid)
53. Kaitlyn St. Amand, BS, Program Coordinator, Southern NH Area Health Education Center
54. Lisa Tapert, MPH, Consultant, Self employed
55. Jay Tulchin, Bowdoin University
56. Joel Weissman, PhD, Brigham and Women's Hospital
57. Debra Wigand, MEd, MCHES, Director, Division of Population Health, Maine CDC
58. Julie Wu, Oregon Health Authority
59. Carol Zechman, LCSW, Director-Access To Care Program CarePartners/MedAccess
60. Caroline Zimmerman, MPP, Director of Health Initiatives, Maine Primary Care Association