

Community Health Workers

Public Meeting – June 28, 2013

Agenda

- Introductions (10-10:15)
- Evidence presentation, Q&A (10:15-11:15)
- Public comment, discussion (11:15-12:15)
- Lunch (12:15-1:00)
- CEPAC deliberation and votes on evidence (1:00-1:45)
- Roundtable, comment and approval of best practices recommendations (1:45-3:50)
- Closing Remarks (3:50-4:00)



New England CEPAC

- Funding
 - Agency for Healthcare Research and Quality
- Goal
 - To improve the application of evidence to guide practice and policy in New England
- Structure
 - Independent clinicians, scientific review experts, and public representatives from all six New England states



New England CEPAC, cont.

- CEPAC recommendations designed to support aligned efforts to improve the application of evidence to:
 - Practice
 - Patient/clinician education
 - Quality improvement efforts
 - Clinical guideline development
 - Policy
 - Coverage and reimbursement
 - Medical management policies
 - Benefit design



What is a

Community Health Worker (CHW)?

- Bureau of Labor Statistics (2012):
 - Assist individuals and communities to adopt healthy behaviors.
 - Conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health.
 - May provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening.
 - May collect data to help identify community health needs.
 - Excludes Health Educators.



CHW Definition (cont.)

- American Public Health Association:
 - A frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.
 - A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy.



QUESTIONS FOR DELIBERATION



Votes on Effectiveness

For each question, rank the likely contribution that each component of a CHW program has for improved health outcomes.

- **1** = **Not at all likely** to contribute to improved health outcomes
- **2** = **Unlikely** to contribute to improved health outcomes
- 3 = Somewhat likely to contribute to improved health outcomes
- 4 = Likely to contribute to improved health outcomes
- 5 = Highly likely to contribute to improved health outcomes



1. Training

40+ hours focused on development of core competencies and/or specialized, condition-specific curriculum.

- 1. Not at all likely
- 2. Unlikely
- 3. Somewhat likely
- 4. Likely
- 5. Highly likely



2. In-Person Home Visits

CHW interaction includes in-person visits in the patient's home or own environment.

- 1. Not at all likely
- 2. Unlikely
- 3. Somewhat likely
- 4. Likely
- 5. Highly likely



3. Length of CHW Visit

CHW in-person interaction is at least 60 minutes in duration.

- 1. Not at all likely
- 2. Unlikely
- 3. Somewhat likely
- 4. Likely
- 5. Highly likely



4. Patient Participation Incentives

CHW interaction includes incentives (e.g. gift cards, cash rewards, free transportation, etc.) for participating or completing program.

- 1. Not at all likely
- 2. Unlikely
- 3. Somewhat likely
- 4. Likely
- 5. Highly likely



5. Matching

CHWs are matched to patients by a shared community, ethnicity/race, or disease/condition.

- 1. Not at all likely
- 2. Unlikely
- 3. Somewhat likely
- 4. Likely
- 5. Highly likely



Votes on Value

1. Does the budget impact analysis of the Asthma CHW program (Krieger, 2005) suggest that a community health worker program with these outcomes and costs represents:

- 1. high value;
- 2. reasonable value; or
- 3. low value?



Votes on Value

2. Does the budget impact analysis of the High Resource Utilization program (Johnson, 2012) suggest that a community health worker program with these outcomes and costs represents:

- 1. high value;
- 2. reasonable value; or
- 3. low value?



EVIDENCE PRESENTATION



Outline

- CHW Status in New England
 - ICER survey data
- Evidence on effectiveness of CHW programs
 - Program components associated with success
- Economic impact of CHWs
- Potential budgetary impact of CHWs in New England



CHW STATUS IN NEW ENGLAND



CHW Status in New England

- Massachusetts
 - Professional association for CHWs established in 2000; very active on local and national levels
 - 2009: comprehensive report on CHW status and needs
 - 2012: CHW board of certification established to develop training and certification requirements
 - Global payment reform legislation includes formal CHW role



CHW Status in New England

- Rhode Island
 - Established CHW professional association
 - Training modules and conferences developed by professional association
 - Formal training or certification not yet required
 - State Department of Health recognizes CHWs as part of healthcare teams in new initiatives and funding opportunities



CHW Status in New England

Other States

- New professional association in CT, still pending in other states
- No formal requirements for certification or training
- Local efforts to organize and deploy CHWs, through:
 - Patient-centered medical homes (PCMHs)
 - Federally-qualified health centers (FQHCs)
 - Area health education centers (AHECs)
 - Other community-based organizations and agencies

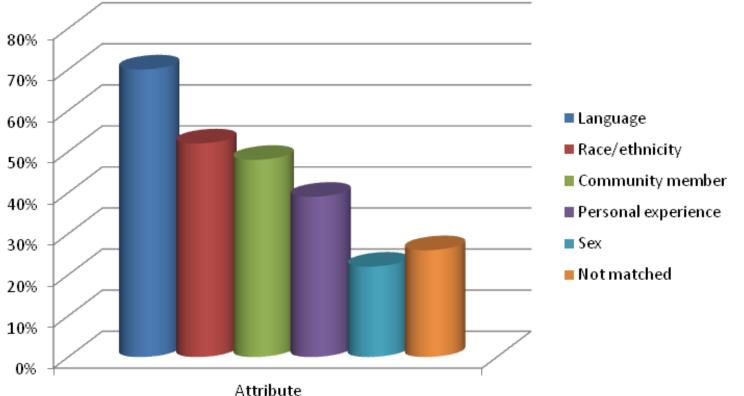


ICER Survey

- 23 respondents (of 184 invited) to 25-item instrument
- 40% from MA
- Two-thirds from provider organizations (hospitals, health centers, integrated health systems)
- Most organizations recruited CHWs through advertisements or posting at community centers
- Most CHW programs based on existing intervention models
 - e.g. PACT, CCSF Capacitation Center



CHW Workforce: Matching Attributes





CHW Programs: Individuals Served

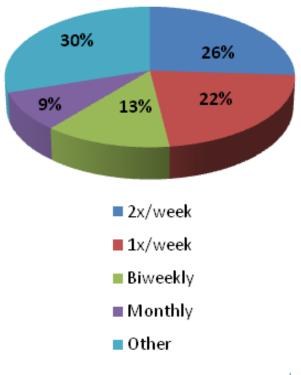
Type of Individual Served	Percentage of Programs	
Racial and ethnic minorities	83%	
Specific diseases or conditions	83%	
Pregnant women	74%	
Older adults or seniors	74%	
Individuals with disabilities	70%	
Infants and children	70%	
Adolescents	65%	
Homeless individuals	61%	
Individuals with substance abuse disorders	61%	
Income eligible individuals	57%	
Refugees	57%	
Migrant workers	35%	
Military/veterans	35%	
Rural populations	26%	

CHW Programs: Visit Length & Frequency

9%
41%
50%
50%
<0%
<30 min
31-60 min
>60 min

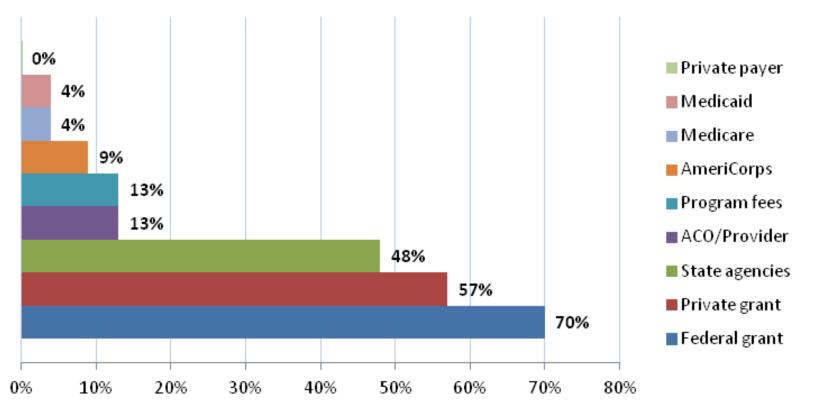
Figure 6a: Length

Figure 6b: Frequency





CHW Programs: Funding





CHW PROGRAM EFFECTIVENESS



Effectiveness of CHW Programs

- Review of studies from 2009 AHRQ review* and updated ICER literature search
- 46 good- or fair-quality studies identified from combined reviews that focused on "clinical" outcomes
- Major foci: chronic disease management, cancer screening, maternal/child health



*Viswanathan M et al. AHRQ Evidence Report #181.

Effectiveness of CHW Programs: Chronic Disease

Clinical Area	# Studies	# Positive Studies	Outcome Examples
Diabetes	8	6	Improved HbA1c, dietary changes
Asthma	3	3	Reduced use of urgent care, fewer activity limitations
Hypertension	3	1	Increase in appointments kept; no differences in clinical parameters
Multiple CV Risks	2	2	Improved blood pressure; no changes in other parameters
Other Diseases	6	3	Improved HIV viral load, better adherence to TB care, reduced use of ED; no differences in back pain measures, STDs, preventive care for healthy women



Effectiveness of CHW Programs: Cancer Screening

Clinical Area	# Studies	# Positive Studies	Outcome Examples
Breast	6	3	Improved adherence to mammography and self-exam
Cervical	6	6	Increased annual Pap smear rates, % ever receiving Pap smear
Colorectal	1	1	Increase in 6-month rates of colonoscopy
Multiple	2	0	No differences in screening rates for breast, cervical, colorectal cancer

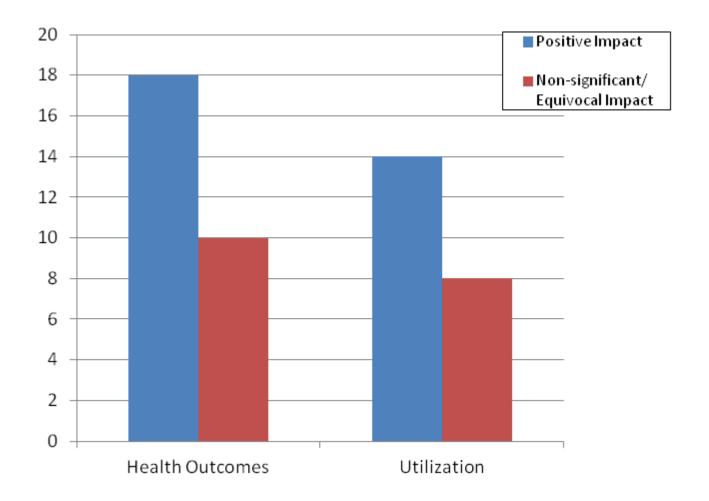


Effectiveness of CHW Programs: Maternal/Child Health

Clinical Area	# Studies	# Positive Studies	Outcome Examples
Pregnancy	2	2	Better metabolic control in women w/PKU, better adherence to prenatal visit schedule
Child immunizations	2	1	Improved rates of adherence to scheduled vaccinations
Child development & mother-child interactions	5	2	Improved motor development in children, maternal mental health



Positive Impact of CHWs





Positive Impact of CHWs

	Element Present (% of studies)	Element Absent (% of studies)
CHW paid salary/stipend (n=22)	95%	5%
CHW matched to patient (n=28)		
By Community By Ethnicity/Race By Disease State/Condition	96%	4%
Formalized training (n=27)	67%	33%
Patient financial incentives (n=17)	100%	0%
Method of patient interaction		
Weekly Meetings (n=18)	44%	56%
In-person Home Visits (n=26)	73%	27%
Phone Calls (n=27)	48%	52%
Group Sessions (n=27)	33%	67%
Visit/Session Length ≥ 1 hour (n=18)	72%	28%
> 5 sessions (n=24)	50%	50%

Policy Comparator

- Evaluation of Medicare disease management and care coordination demonstration projects*
- Characteristics of cost-saving interventions similar to those reported in positive CHW studies:
 - At least monthly face-to-face contact with patient
 - Regular contact between care coordinators and physicians
 - Training in behavior-change and motivational techniques



*Brown RS et al. Health Affairs 2012;31(6):1156-66.

ECONOMIC IMPACT OF CHW PROGRAMS



Published Evidence

- 14 studies from combined literature review evaluated economic impact of CHW interventions
- Majority of studies reported net cost savings (i.e., cost offsets > program expenses)
 - Exceptions: studies focused on screening or medication adherence
- Many study reports lacked detail on program component costs



Budget Impact Analyses

- Exploratory, population-based analysis to estimate regional impact of CHW programs
- Disease-specific and general examples chosen
- Based on published data from *specific* studies with sufficient cost detail reported
 - Program expenses (e.g., salaries, supplies, overhead, etc.)
 - Cost offsets (e.g., urgent care services)

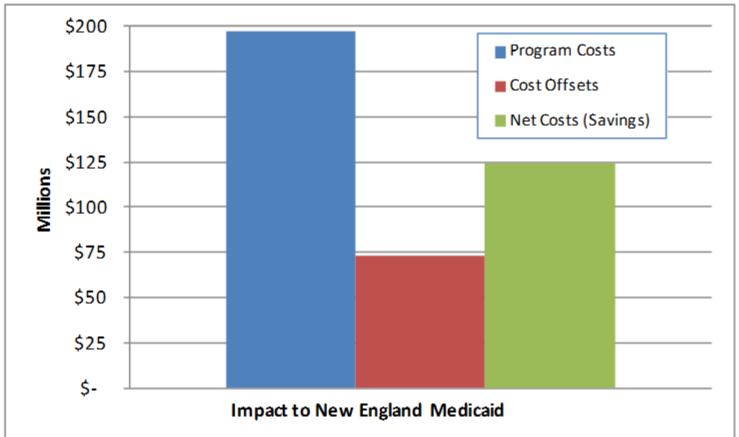


Budget Impact Analysis: Asthma

- Based on data from Seattle-King County intervention (Krieger, 2005*):
 - RCT comparing intensive CHW interaction (in-home assessment, multiple visits, mitigation resources) vs. single CHW visit and limited education
 - Statistically-significant reduction in use of ED/urgent care
- Model inputs:
 - Perspective: ACO/PCMH
 - ~150,000 Medicaid children with persistent asthma in NE
 - Program cost: \$1,300 per participant (includes incentive)
 - Caseload: 71 patients per CHW
 - Program savings: \$480 per participant in first year
- ³⁸ *Krieger JW et al. Am J Public Health 2005;95(4):652-9.



Budget Impact Analysis: Asthma



Program becomes cost-neutral after third year if annual utilization decreases persist and after first year if caseload increased to 192 patients per CHW

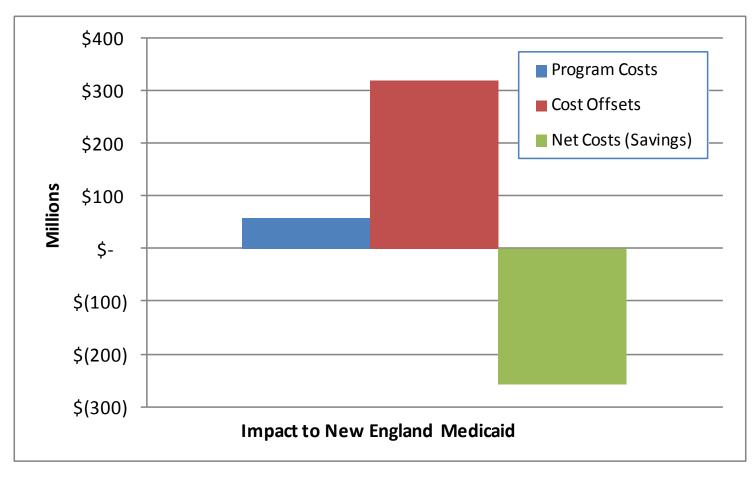


Budget Impact Analysis: High Risk

- Based on data from New Mexico managed Medicaid intervention (Johnson, 2012*):
 - Cohort study comparing high utilizers (≥3 ED visits in 3 mo) receiving CHW visits, appointment support/reminders, etc. vs. high utilizers receiving no intervention
 - Statistically-significant reductions in use of ED/hospital and prescription drugs
- Model inputs:
 - Perspective: Medicaid
 - ~105,000 Medicaid adults with "high utilization"
 - Program cost: \$559 per participant
 - Caseload: 115 patients per CHW
 - Program savings: \$3,003 per participant in first year
- ⁴⁰ *Johnson D et al. Community Health 2012;37:563-71.



Budget Impact Analysis: High Risk





Public Comments

- CHW definition and job roles
- Budget impact analysis: data sources, benefits measured
- Integrated care team as focus of intervention
- Measurement of CHW benefit outside of discrete clinical endpoints

