

#### **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

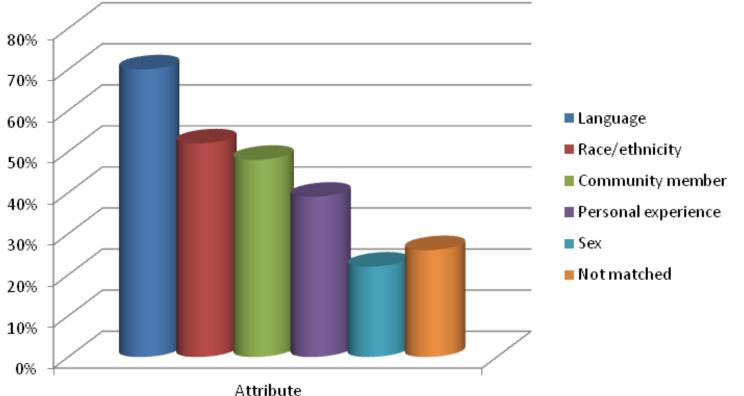


## **ICER Survey**

- 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

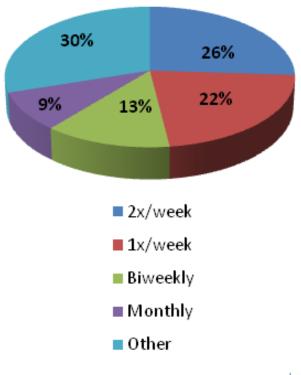
Type of Individual Served	Percentage of Programs	
Racial and ethnic minorities	83%	
Specific diseases or conditions	83%	
Pregnant women	74%	
Older adults or seniors	74%	
Individuals with disabilities	70%	
Infants and children	70%	
Adolescents	65%	
Homeless individuals	61%	
Individuals with substance 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%</li>
<30 min</li>
31-60 min
>60 min

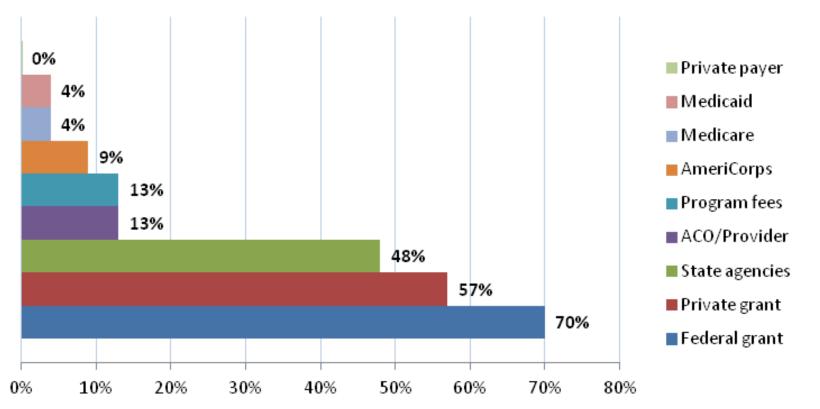
Figure 6a: Length

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

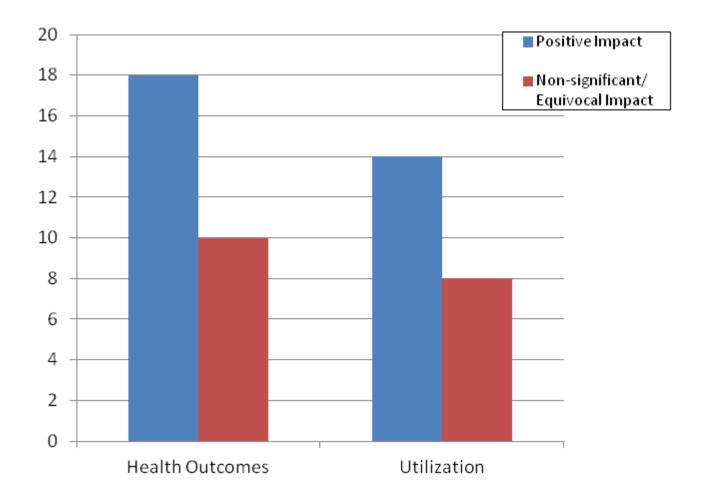


## Effectiveness of CHW Programs: Maternal/Child Health

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)

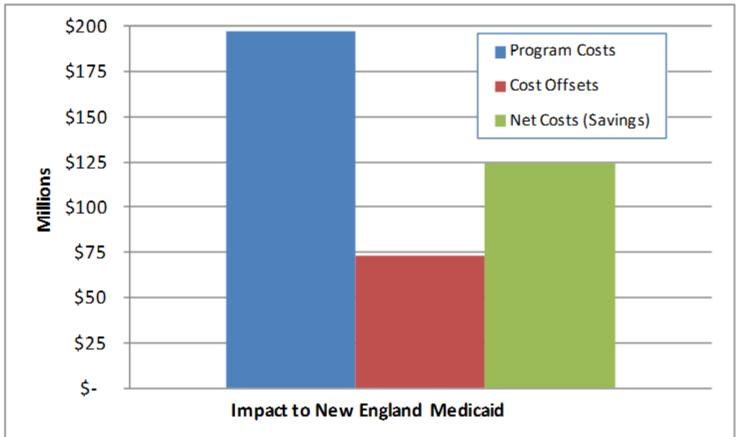


## Budget Impact Analysis: Asthma

- 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
- <sup>38</sup> \*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

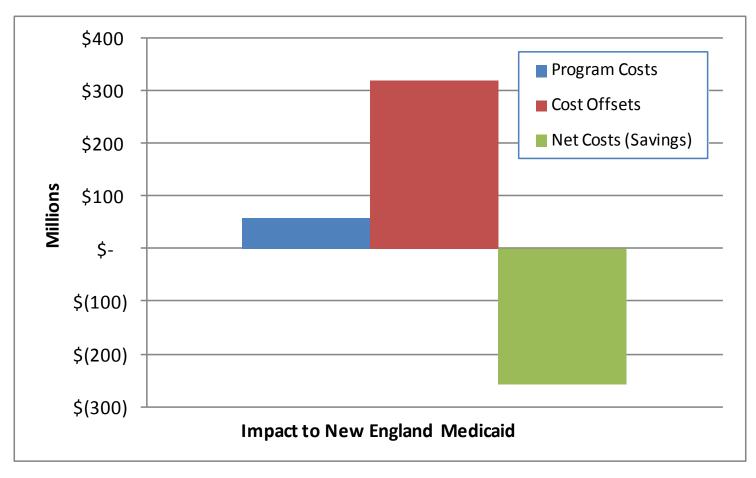


## Budget Impact Analysis: High Risk

- 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
- <sup>40</sup> \*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

