Global Health Initiative Seminar

Community Health Workers:
Diversity of CHW models and Experiences

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Mailman School of Public Health
Global experience with CHWs informs my work!

<table>
<thead>
<tr>
<th>Dates</th>
<th>Title</th>
<th>Issue</th>
<th>Nature of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-1994</td>
<td>Lessons Learned: From BKO to NYC</td>
<td>Childhood immunizations</td>
<td>Applying CHW strategies from BKO, Mali to promoting immunizations in NYC</td>
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<tr>
<td>1996-2002</td>
<td>Northern Manhattan Community Voices</td>
<td>Community empowerment</td>
<td>Community coalition building &amp; development of collaborative health programs</td>
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<td>1998-2004</td>
<td>Harlem Adherence to Treatment Study</td>
<td>HIV treatment</td>
<td>Peer worker program to promote adherence</td>
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<td>1999-2006</td>
<td>Northern Manhattan Start Right Coalition</td>
<td>Childhood immunizations</td>
<td>Coalition building, devt of CHW approach in NYC</td>
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<td>2001-2011</td>
<td>Asthma Basics for Children</td>
<td>Childhood asthma</td>
<td>Collaborative community asthma program w. CHWs</td>
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<td>2006-2012</td>
<td>NOCHOP</td>
<td>Diabetes management</td>
<td>Partnership with medical providers to use CHWs to promote diabetes mgmt</td>
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<td>2001-2006, 2012-3</td>
<td>Season Smart</td>
<td>Childhood disease management</td>
<td>Adapting the C-IMCI program to facilitate delivery by CHWs in Mali and now, Ghana</td>
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<td>2008-2012</td>
<td>Advancing CHW workforce in NY</td>
<td>CHW capacity in NY</td>
<td>Partnership to establish standards for CHW workforce in NY &amp; increase CHWs</td>
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<td>2009-2013</td>
<td>Partnership to Revive Routine Immunization and MNCH in Northern Nigeria</td>
<td>CHWs to promote RI and MNCH</td>
<td>Partnership in 4 states to revitalize PHC and strengthen CHW roles in supporting women to seek appropriate care</td>
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Community Health Workers: A vital health resource on the rise

- **United States:** Over 40,000 CHWs, and CHW is now a recognized workforce category by Dept. of Labor; 6 states have or are developing regulations for the practice; CHW specifically included as part of health reform (ACA); many different models for integrating CHW into health care delivery and promotion.

- **Global:** UNICEF, UNFPA and WHO have promoted CHW through several vertical programs (e.g. IMCI; MNCH; PEI; FP; TB/HIV adherence ...) and many governments now have national and sub-national CHW training and deployment schemes; CHW now “in” as part of HRH; global funders much interested; 1 Million Health Workers report (w. CU participation)...*Aim for CHWs to be 27% of global health work force.*
Why all the interest in CHWs?

- **Human bridge**: CHW bridge between vulnerable and excluded people and health system, translating concerns both directions

- **Evidence base shows effectiveness**: CHWs effective at improving MNCH preventive care and chronic disease prevention and management outcomes (asthma, diabetes, CVD, mental health, TB, HIV and chronic treatment adherence), and other prevention behaviors (cancer screening, immunizations...),

- **Reduce Inequities**: CHWs address social disparities and are effective with the most vulnerable and excluded. Increased equity.

- **Better care at lower cost**: CHWs enhance quality, outcome, efficiency leading to increased patient satisfaction and retention

- **Recommended part of Health Reform efforts (globally)**
  - CHWs play important roles in all required core services for Health Homes and support PCMH...
  - CHW recommended as part of HRH reform and solutions
How do CHWs make a difference for vulnerable and underserved?
The larger context of their work

Community Health Disablers
- Barriers faced by vulnerable and disengaged
  - Language, gender, class and cultural barriers
  - Distance and poor access
  - Little knowledge about prevention
  - Low confidence
  - Peer pressures not to engage w. health system
- Unfamiliarity w. health system
- Can’t afford care or meds

Community Health Enablers
- Community Health Workers
  - Outreach to families
  - Improve communication with providers
  - Help use system
  - Counsel and support
  - Health coaching
  - Links to healthy resources
  - Advocacy

Community Health Support from Health Care System
- Behavioral changes
  - Identification at-risk status
  - Chronic disease prevention and management skills
  - Confidence of controlling disease and prevention
  - Community programs promoting healthy lifestyles

Community Organization Health and Community Devt & Social Service Programs

Improved health:
- Preventive emergencies
- Disease control
- Primary health care
- Health care costs
More important HOW CHW work than WHAT they do: Need sustainable structure

- **Scope of Practice:** Need core competencies in communication, coaching, and support

- **Training:** Different venues, but all recommend participatory, with role-playing

- **Supervision and monitoring:** Need to be linked to the health system and health care providers, interactive, supportive supervision; facilitate monitoring and communication

- **Funding:** Mixture of volunteer, incentivized, and salaried; often no stable funding, esp. in the US where CHW usually grant-funded
Who makes the best CHW?
Global commonalities
Communication and Compassion

NY and US
• Connected
• Resourceful
• Mature
• **Compassionate**
• Open-minded
• Respectful
• Friendly
• Dependable

Global
• Community-selected
• Respected and respectful
• **Compassionate**
• Good communicators
• Reliable
• Literacy a plus but not essential
What CHWs Do: New York vs. Global Recommendations for Roles

New York Scope of Practice
- Outreach/Community Mobilizing
- Community/Cultural Liaison
- Case Management/Care Coordination
- Home-based Support
- Health Promotion & Coaching
- Health System Navigation

Global Recommendations
- Outreach/Community Mobilizing
- Community/Cultural Liaison
- Community-based Service Delivery
- Home-based Support
- Health Promotion & Coaching
- Referrals esp to ETS and hospital/secondary facility
Distribution of Roles Varies by Program

GHI Panel on CHWs 11-19-12

Columbia University Mailman School of Public Health
## Alternative models of CHWs: Volunteer to salaried

<table>
<thead>
<tr>
<th>Roles</th>
<th>Peer-workers-stipends - US asthma/BF</th>
<th>CHW-salaried at CBO, diabetes NYC</th>
<th>Community Volunteers-no pay, Nigeria</th>
<th>VHW- w. incentives (Nigeria)</th>
<th>CHW –CBSD Salaried by state, Nigeria</th>
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<tbody>
<tr>
<td>Outreach &amp; mobilization</td>
<td>XX</td>
<td>X</td>
<td>XXX</td>
<td>XX</td>
<td>X</td>
</tr>
<tr>
<td>Health ed/coaching</td>
<td>XXXX</td>
<td>XXX</td>
<td>X (discussion groups)</td>
<td>XX</td>
<td>XXX</td>
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<tr>
<td>Home support</td>
<td>XX</td>
<td>XXXX</td>
<td>X</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>CBSD</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XXXXXX</td>
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<tr>
<td>Referrals</td>
<td>X</td>
<td>X</td>
<td>XX</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Advocacy/community devt</td>
<td>X</td>
<td>XX</td>
<td>X</td>
<td></td>
<td>X</td>
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Factors Influencing Choice of Model

• **Health care workforce structure:** PHC adequately staffed; supervisors available to support CHW; regulations and programs clearly delegating responsibilities to CHWs

• **Availability of appropriate CHW workforce:** Gender, literacy and health literacy, CHW attributes among candidates

• **CHW roles, responsibilities, and supports:** Training, job aids, monitoring, supplies, transport, etc.
  – Key issue is delegation of medical roles: diagnostic and treatment functions, especially antibiotics (pneumonia & malaria)
  – US-CHW often not “allowed” to write on the EMR and completely inform medical providers

• **Community engagement and support:** CHW roles respected and welcomed, supported by community, response to advocacy requests, support for changes in health care..
<table>
<thead>
<tr>
<th>Intervention model</th>
<th>Treatment with antimicrobials</th>
<th>Referral to nearest health facility: Verbal or facilitated</th>
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<tbody>
<tr>
<td>Number</td>
<td>CHW dispenses antimalarials</td>
<td>Family dispenses antimalarials</td>
</tr>
<tr>
<td>Model 1</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Model 2</td>
<td>No, may give initial treatment prior to referral</td>
<td>No</td>
</tr>
<tr>
<td>Model 3</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Model 4</td>
<td>Family only or shared responsibility</td>
<td>No</td>
</tr>
<tr>
<td>Model 5</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Model 6</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Model 7</td>
<td>Yes</td>
<td>No</td>
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Season Smart Pilot in Navrongo: Modified IMCI model w. growth monitoring, emphasis on simplified supervision and training
CHW at the doorstep: Experienced women trained to provide CBSD, key issue was MW
Funding and Health Care System Linkages Key

- **NY**: Successful transfer of diabetes and asthma programs to hospitals as part of community medicine programs when hospitals recognized the cost-effectiveness of CHW and administration supported the division of labor.

- **Mali**: Slow expansion of CHW programs because medical establishment saw CHW as displacing already trained nurses and doctors

- **Nigeria**: Federal and state governments support CHEWs through SHIT, but then use them in facilities; now have created VHW, but incentives only and very restricted role, through CHEWs in the facility
## CHW Returns on Investment: US experience shows their value

<table>
<thead>
<tr>
<th>Study/site</th>
<th>CHW activities and outcomes</th>
<th>ROI (per year)</th>
<th>Sources for data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeless mentally ill</td>
<td>CHW home visits and behavioral change support reducing institutional care costs</td>
<td>1.15</td>
<td>Calculated from case-control data in Wolff et al., 1997, reported in Viswanathan</td>
</tr>
<tr>
<td>Childhood asthma management, Seattle, WA</td>
<td>High intensity CHW intervention w. home visits, reducing urgent visit/hosp costs</td>
<td>1.21</td>
<td>Calculated from pre-post data in Krieger et al, 2005</td>
</tr>
<tr>
<td>Childhood asthma management, New York, NY</td>
<td>CHW provides education and care coordination reducing urgent visits/hosp.</td>
<td>4.01</td>
<td>Calculated from pre-post in Peretz et al., 2012 *with additional data from Nieto and Peretz</td>
</tr>
<tr>
<td>Theoretical savings for pediatric patients making clinic visits in Harrisonburg, VA</td>
<td>CHW will do primary care triage and manage limited protocol of conditions, reducing clinic visits</td>
<td>1.60</td>
<td>Calculated from comparison data in Garson et al 2012</td>
</tr>
<tr>
<td>Diabetes control along Texas border</td>
<td>Diabetes education and support in making lifestyle changes, reducing care costs through lower A1c</td>
<td>4.62</td>
<td>Calculated from comparative cost data in Culica et al., 2008</td>
</tr>
<tr>
<td>Employees of Langdale Manufacturing in Lowndes County, Georgia</td>
<td>Case management support to workers with chronic disease, reducing acute care costs and work loss days</td>
<td>4.80</td>
<td>Calculated by Miller, 2011</td>
</tr>
<tr>
<td>Chronic illness patients in Denver Health Plan, Colorado</td>
<td>CHW intervention with care management, reduced urgent/hosp costs</td>
<td>2.28</td>
<td>Calculated by Whitley, Everhart &amp; Wright, 2006</td>
</tr>
<tr>
<td>Arkansas Medicaid managed care program</td>
<td>CHW community connector program provided by state managed care program</td>
<td>2.92</td>
<td>Calculated by Felix et al, 2011</td>
</tr>
<tr>
<td>Molina Healthcare, Medicaid Managed Care, New Mexico</td>
<td>CHW focuses on the high-user, complex patients, providing navigation, health coaching, and chronic disease management</td>
<td>2.18</td>
<td>Calculated from pre-post data in Johnson 2011</td>
</tr>
<tr>
<td>Diabetes management for low-income patients in Baltimore, MD</td>
<td>Volunteer CHW educates and provides care coordination, reducing diabetes-related health care costs</td>
<td>6.10</td>
<td>Calculated from pre-post data in Fedder et al, 2003</td>
</tr>
<tr>
<td>Diabetes management for low-income patients, New York, NY</td>
<td>CHW provides education and care coordination, reducing urgent visit/hosp costs</td>
<td>2.32</td>
<td>Calculated from pre-post data supplied to the authors, reported in Findley, Matos &amp; Reich 2012</td>
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## CHW Roles and Health Home Services: NY Recommendations incorporate C-E of CHW

<table>
<thead>
<tr>
<th>Health Home core service</th>
<th>Relevant CHW Roles</th>
<th>Relevant CHW Tasks</th>
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<tbody>
<tr>
<td>Comprehensive Care</td>
<td>Management</td>
<td>Individual strengths/needs assessment; goal setting and action planning; feedback to medical providers on patient goals; advocating for patient at team meetings; communications bridge re. patient goal achievements and remaining problems; patient navigation to assist in access to all health, behavioral and social services</td>
</tr>
<tr>
<td>Care coordination</td>
<td>Coordination and Home Visits</td>
<td>Care coordination of medical, behavioral and social services to align with patient priorities and goals; cross-disciplinary home-based support and follow-up to ensure all care and services are delivered in a coordinated manner</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>Coaching and Health Education</td>
<td>Promotion of health literacy; cultural translation and interpretation; coaching on problem solving; adherence promotion; health coaching and health education from peer perspective; modeling behavior change; assistance in tailoring adherence to daily routines</td>
</tr>
<tr>
<td>Comprehensive transitional care</td>
<td>System Navigation</td>
<td>System navigation; goal setting and follow-up planning; translation and interpretation; post-discharge home visits and calls; facilitation of care coordination and care management</td>
</tr>
<tr>
<td>Individual and family support</td>
<td>Informal Counseling and Support</td>
<td>Supportive communications and counseling; orientation to patient satisfaction; community advocacy and communication; holistic family-oriented support; individual and group social support</td>
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<tr>
<td>Referral to community services</td>
<td>Community Liaison and Advocacy</td>
<td>Addressing basic needs; coordinating, making and following through on referrals for housing, welfare, legal, mental health/addiction and social services; patient empowerment through neighborhood-specific information about community programs and services</td>
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<tr>
<td>Use of linked medical records</td>
<td>Documentation and information sharing</td>
<td>Documentation in the medical record of CHW activities, referrals for services, and feedback from the patient; use of alert/feedback protocols to assure all team members are aware of latest patient updates</td>
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Global Model for CHWs: Interactive, Supportive Supervision is Key!

Community health workers improve access to treatment in underserved areas

Periphery of health centre’s ‘catchment area’, beyond which CCM is needed.

Links between CHW who provides CCM and households

Link between supervisor and CHWs who provide CCM

Health centre with CHW supervisor and store of medicine and supplies

New York CHWs about Supervision: Lessons from Bronx-Lebanon Case Study

- **CHW supervisor must be a CHW;** a nurse does not have the experience of CHW and cannot supervise CHWs.
- **CHW supervisor must have managerial/leadership skills:** advocacy for CHWs is needed w/in the system by the CHW supervisor.
- **CHW champion needs to see the big picture;** must have support from the medical leadership (MD/nurse/medical establishment)
- **Other team members (nurses, midwives, administrators, other partners) must understand the mission and vision of the program**
ABC congratulates and honors achievements:
Proud parent mentors, parents and children
Lessons Learned ... so far

• Community support and connections are key to CHW success

• How is more important than what: Better the right person than the education, and training can ensure core competencies

• Roles and tasks need to be carefully designed to meet needs of people:
  – CHW most successful when they are able to be flexible and address the needs of the families, not confined to narrow health or disease-specific messages...
  – Neither the system nor CHW want medicalization of their roles, but need to have what they need, in the community, esp. for case management and CBSD.

• Supervision must be supportive, with link to PHC