Understanding Scope and Competencies: A Contemporary Look at the United States Community Health Worker Field

Progress Report of the Community Health Worker (CHW) Core Consensus (C3) Project:

BUILDING NATIONAL CONSENSUS ON CHW CORE ROLES, SKILLS, AND QUALITIES

April, 2016

Is your organization endorsing and/or adopting CHW skills, roles and qualities?

Please share any endorsement or adoption of roles and skills with the C3 Project team care of: info@c3project.org.

If you need more information or support, please feel free also to contact the Project team at the same email.

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Letter from the Director and CHW Fellows

Colleagues,

This Report of the Community Health Worker (CHW) Core Consensus (C3) Project offers a contemporary look at US CHW roles and the competencies needed to fulfill those roles. It comes twenty years after the start of the National Community Health Advisor Study (Study) that I directed from 1994-1998. This second national look at the CHW field undertaken in 2014-2015 focuses on what has changed since the original Study and just as importantly, what has stayed the same.

The C3 Project research team, some of whom partnered in both the original Study and now, recognizes a need for a current look at CHW scope of practice and skills but also observes an ongoing need for greater visibility of the still emerging CHW workforce in the United States. There remains a general lack of understanding of who they are, what they do, and subsequently how to best coordinate those roles and skills with others. The findings from this Project--- lists of CHW roles, skills, and qualities--- are intended to address these needs.

Whether you are a practicing CHW, coordinating CHWs, educating and building CHW capacity, or financing CHW services, our aim is for C3 Project findings to serve as a starting point for common understanding of CHWs among a range of stakeholders from employers to policy makers. With greater consensus and understanding, it is our hope that CHWs, both paid and those who choose to volunteer, become a stable presence in the continuum of care and in efforts to promote individual and community health.

Many have contributed to this Project. I am grateful to the Project's staff, CHW Fellows, consultants, advisors, readers, and to our in-kind and direct supporters. In particular, I note the early and significant investment by the Amgen Foundation through the National Area Health Education Centers Organization in coordination with the Project of CHW Policy and Practice at University of Texas, Institute for Health Policy. More recently, support from the Sanofi Corporation has allowed the C3 Project to begin limited sharing of our findings with interested states and also in an open forum at the American Public Health Association(APHA) in coordination with APHA CHW Section. New funding from this same source confirmed this month will allow us to broaden our reach in terms of consensus building and deepen our work on roles and skills in varied settings and skills assessment approaches. This new work will be carried out under the auspices of the Texas Tech University Health Sciences Center, El Paso, in coordination with the Project on CHW Policy and Practice (confirmation pending 4/20/16).

Finally, one last acknowledgement goes to the many CHW Network members and leaders who worked with our C3 Project team to review the findings presented here so that their voice and insight about the work they do could guide us in refining the lists we release with this first C3 Project Report.

On behalf of the C3 Project Team,

E. Lee Rosenthal
C3 Project Director
April, 2016

An Invitation to Be Part of Project from C3 Project CHW Fellows

Welcome Report Readers- to the Community Health Worker (CHW) Community Core Consensus (C3) Project!

As a Community Health Worker and Fellow on this project since 2014, I want to share that this body of work is something that I am truly proud of helping to create. One reason is that this Project has maintained the core value of self-determination. To work on this project alongside Catherine Haywood, a Co-Fellow on this Project, along with many colleagues from across the country, and the various CHW Networks who have actively participated and provided wonderful insight, has been an incredible experience. I would like to share that for me personally, as a CHW and advocate of this workforce for the past seven years in my State of Connecticut and recently on this Project, work up to this point has been truly rewarding. I have learned so much through this process, and have met many wonderful people along the way. I hope that you commit to the focus of this project which is to help advance national consensus from these recommendations. We hope that this "newly revised" contemporary list, that embodies our CHW Scope of Practice and Core Competencies, will become a tool that can assist in designing trainings and curricula and help future stakeholders understand and fully support the depth of the work that we do. There is also a hope that it can be a foundational guide for best practice guidelines at the State and National levels. It is imperative that as this work continues that the integrity and value of the CHW workforce is maintained as this Project moves forward. I would like to thank you for participation in the next phase of this Project. There is lots of work still to do!

Thank you in advance,

Jacqueline Ortiz Miller
C3 Project CHW Fellow

Dear Readers,

Working as a CHW Network Leader, CHW and C3 Fellow is very rewarding. I have valued being a part of the C3 Project effort to bring CHWs to another level. I will never forget the time working with the Project staff and others throughout 2014-2015 to move toward consensus on CHW practice. Working with Jacqueline Ortiz Miller was great- having another CHW Fellow to share with made this experience easy. Working together to lead our conference calls, being able to call one another, bouncing information off of her, was just wonderful- she's a joy to work with. This was one of the best experiences I've had working as a CHW. I learned a lot through the many calls and met a lot of individuals working towards the same goals. It was phenomenal having a part in reviewing the analysis of core documents, building agreement among team members, reporting out to American Public Health Association members, and finally, getting input from CHW Networks across the US on proposed CHW roles, skills and qualities. It was great to share my point of view and I hope you will too. Add your voice by giving us feedback and use these findings- the identified roles, skills, and qualities - to guide and support CHW work to improve health for all.

Sincerely,

Catherine Haywood
C3 Project CHW Fellow

Executive Summary of Community Health Worker (CHW) Comunity Core Concensus (C3) Project

Introduction

The Community Health Worker (CHW) Core Consensus (C3) Project offers recommendations for national consideration related to CHW core roles (scope of practice), core skills, and core qualities (skills and qualities are collectively defined as competencies). The proposed roles, skills, and qualities are intended to inform the range of CHW practice. Notably, they are not intended to define the range of practice of any individual CHW or CHW organization, but rather to represent the potential range of CHW roles and skills, and an essential set of qualities. The C3 Project to date has included an analysis phase and an initial consensus-building phase. Findings are presented as "recommendations" in the report, which ends with a discussion of potential use of the findings and future directions.

It is widely agreed that a greater degree of national consensus about CHW scope of practice and competencies would be an asset to the field. Currently CHW scope of practice and competencies are formally defined, or are in the process of being defined, in most states but no national formal consensus exists. In the absence of such a consensus or guidelines, organizations providing CHW services and/or training find themselves defining roles, skills, and qualities for practicing CHWs, often in very different ways. In contrast, other health-related professions have achieved recognition through a process of defining their professional boundaries and occupational standards; CHWs have not yet done so in a formal way.

In response to this charge, the C3 Project sought to capture how CHW roles, skills, and qualities have changed over time, particularly since the release of the National Community Health Advisor Study (NCHAS) in 1998[17]. The Project incorporated input and facilitated consensus building among state and local CHW associations. The consensus-building process is an end in itself, seeking greater unity and common understanding within the CHW field in the many different settings in which CHWs practice.

Project Strategies: Crosswalk Analysis and Consensus Building

The Project conducted a crosswalk analysis of benchmark documents from the 1998 NCHAS that served as a starting point for comparison against documents from six states (CA, MA, MN, NY, OR, TX) and from the tribal Community Health Representative programs. Notably, state data came from selected states in which either a formal state-level process had been conducted specifying CHW role and skill requirements or which have had a robust history of well-regarded CHW education programs.

Consensus building began with an advisory committee review followed by an open daylong workshop at the 2014 American Public Health Association (APHA) Annual Meeting. Feedback was integrated into the next iteration of the list of roles and skills and presented in a national webinar for representatives of state and local CHW networks. This conference call set the stage for transfer of "ownership" of the process to CHW networks, starting with a second call in Spring 2015 and the initial release of this report and related roles, skills, and qualities documents for review in Summer-Fall 2015 exclusively by CHW leaders active in local and state CHW networks in the United States.

Findings

The C3 Project identified ten roles applicable in many different settings; two were newly identified in the Project's crosswalk analysis. Some baseline roles were also modified including "Care Coordination, Case Management, and System Navigation." In 1998, the Case Management Role was considered by the NCHAS, but CHW advisors specifically requested that Case Management not be named as a core CHW role.

The C3 Project identified eleven core skill areas – three being new skills. Notably, roles and skills are not intended to match each other; rather multiple skills may support several roles. CHW qualities were not re-evaluated; instead the Project team asked for affirmation and endorsement of existing knowledge about CHW qualities with "connection to the community served" being the most critical quality.

Shifts in the CHW roles and skills were also made at the more detailed "sub-role/sub-skill" level. These offer important insight into the true current CHW skill-set. It was evident that a number of these details had not been captured in the NCHAS, and it was also clear that sub-roles/sub-skills were often grouped differently within the various benchmark documents.

CHW Roles

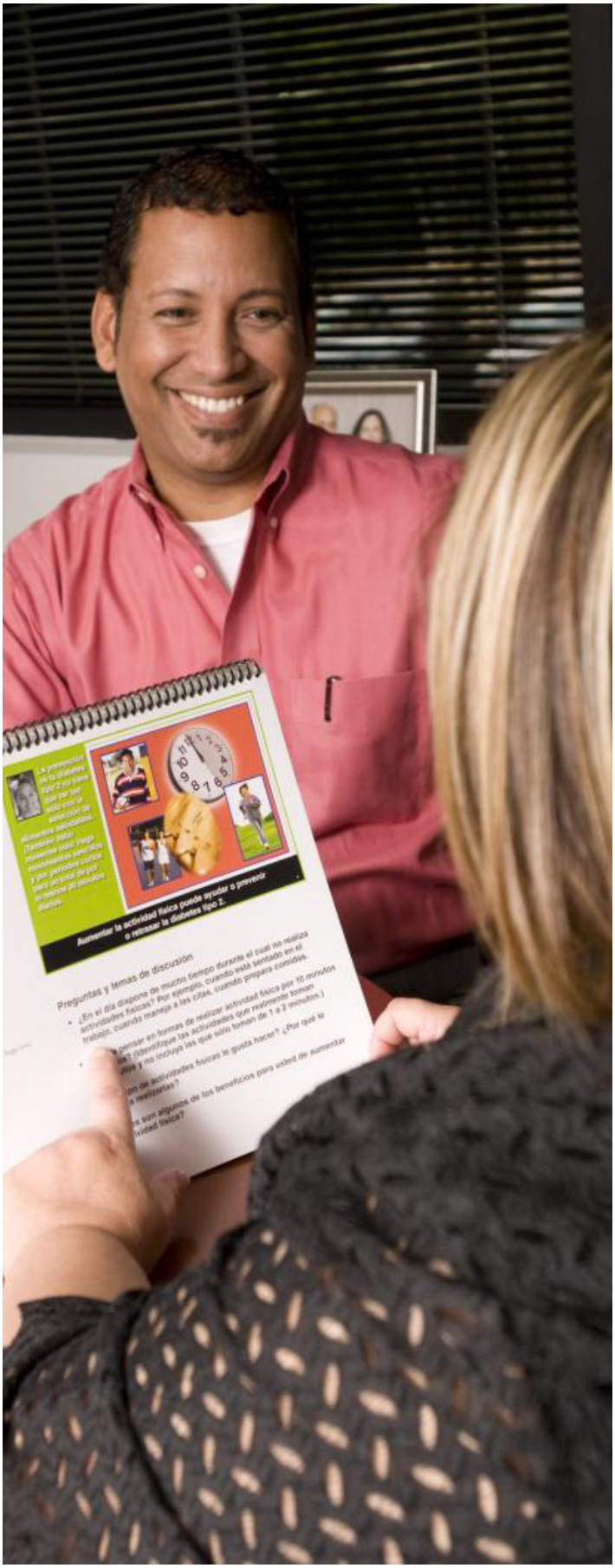
1. Cultural Mediation Among Individuals, Communities, and Health and Social Service Systems
2. Providing Culturally Appropriate Health Education and Information
3. Care Coordination, Case Management, and System Navigation
4. Providing Coaching and Social Support
5. Advocating for Individuals and Communities
6. Building Individual and Community Capacity
7. Providing Direct Service
8. Implementing Individual and Community Assessments
9. Conducting Outreach
10. Participating in Evaluation and Research

CHW Skills

1. Communication Skills
2. Interpersonal and Relationship-building Skills
3. Service Coordination and Navigation Skills
4. Capacity Building Skills
5. Advocacy Skills
6. Education and Facilitation Skills
7. Individual and Community Assessment Skills
8. Outreach Skills
9. Professional Skills and Conduct
10. Evaluation and Research Skills
11. Knowledge Base

Qualities

The C3 Project recommends using existing qualities as identified in previous research and of all qualities, a close connection to the community served is seen as the most critical quality for a CHW to possess among several.



Discussion

The C3 Project findings suggest that the CHW field has evolved to meet the needs of the changing public health and healthcare environment, but at the same time much of the core of CHW practice has remained unchanged over the past two decades. Reflecting this, roles, skills, and qualities still cover many of the same areas but there is a stronger emphasis on some roles and skills that have emerged from the sub-role or sub-skill position to prominence; new language captures the nuances of the times.

Though the Project does not seek to put forward standards for CHWs, it is intended to provide recommended guidelines for consideration by CHWs and other stakeholders in the field. Related to this, the goal is to offer a contemporary and comprehensive starting point for CHW network leaders who wish to explore creating CHW role and skill standards that they may collectively propose for state or national use. It seems likely that currently active individual states are likely to modify the Project's recommended roles, skills, and qualities for their own use, but at the same time it is anticipated that the review and discussion of these findings will provide a greater opportunity for consensus building.

In creating specific CHW position descriptions, certain roles may be emphasized or in some cases omitted, but in a larger policy context, the Project team urges that the full range of roles be embedded in policy for CHW scope of practice to ensure exercise of the full depth and breadth of CHWs' capabilities.

Skills guidelines are intended to inform the development of CHW education programs or as a comparison tool to assess the content of a current CHW training or capacity building curriculum. Of all the areas that define the CHW profession, innate qualities such as "community connectedness" are ultimately of the highest importance. These qualities should be used to inform the recruitment and selection of highly effective CHWs. In the case of policy initiatives, it is important to articulate the importance of qualities within legislation and related regulations.

Proposed future directions for next steps following the C3 Projects' work include:

1. Ongoing outreach to CHW networks and other stakeholders
2. Refinement of CHW knowledge base standards, including specialty content areas
3. Subsets of CHW roles and competencies in clinical versus community settings
4. Mapping of detailed sub-roles against specific sub-skills
5. Establishing a career pathway for CHWs (en try-level, intermediate, and advanced skills)
6. Developing skills assessment tools emphasizing performance-based assessment
7. Skills standards development by a national CHW association
8. Documentation of roles and skills in action
9. Developing core evaluation measures for CHW programs and activities
10. Ongoing cycle of review of roles, skills and qualities

Glossary of Frequently Used Terms

American Public Health Association (APHA): APHA is the world's largest professional and scientific organization devoted to public health. The association aims to protect all Americans and their communities from preventable, serious health threats and strives to assure that community-based health promotion and disease prevention activities and preventative health services are universally accessible in the US. Motto: For science. For action. For health.

Attribute: see "Quality."

Benchmark Sources: Usually associated with assessing performance, providing a point of comparison; considered representative of standards within a given field. For the C3 Project, this was data from original policy-oriented research and/or state and national standards on CHW roles and skills that have been cited frequently as standards for the field.

Capacity Building: This term is used in reference to both individuals and communities, and refers to a process of building on the existing strengths of individuals, not only through training and education, but also through encouragement and support for self-driven problem assessment, planning and mobilization of resources.

CHW Ally (singular) Allies (plural): A term used by many working in CHW workforce development. An ally is an individual that works with and supports CHWs. This could be a policy advocate, researcher, CHW supervisor, or another individual, who works to support CHW workforce development and individual CHWs but is not a CHW.

CHW National Education Collaborative (CHW-NEC): A four-year project (2004-2008) funded by the US Department of Education on college-based educational programs for CHWs. The CHW-NEC website remains a resource for development of CHW educational programs. For more information visit website: http://www.chw-nec.org.

Community Based Participatory Research (CBPR): CBPR is an approach to research that involves those who are the subject of the research in every phase of the research endeavor including design, hypothesis generation, data collection, interpretation, recommendation development and dissemination. Policy and social change are often the outcomes of this research. It is common in the field of public health.

Community Health Representative (CHR): CHRs serve tribal communities throughout the US. This is largest and oldest CHW program in the US, created in 1968 and administered by tribal governments in partnership with the Indian Health Service (IHS). For more information visit: IHS.gov or the National Association of CHRs (NACHR.net).

Community Health Worker Network: CHWs come together to form associations at the local, state, regional and national levels for purposes of networking, sharing resources, and organize to better develop CHW practice and resources dedicated to it. There are close to 50 identified Networks at the time of this writing in 25 states.

Community Health Worker Section: A group within APHA (see above) that is focused on supporting and capacity building and showcasing research and practice focused on the US and international CHWs; especially when such work is undertaken in collaboration with CHW leadership.

Competency: Something that a person is capable of doing such as a skill gained through study or practice. Competencies includes skills and qualities. In this context, "qualities" mean personal characteristics or traits that can be enhanced but not taught. Patience, compassion, and persistence are examples of qualities.

Consensus Building: Consensus decision-making is a process used to generate widespread participation and agreement. The process has certain common elements: it should be:

- Inclusive: As many stakeholders as possible are involved.
- Participatory: All participants are allowed a chance to contribute.
- Collaborative: The group constructs proposals with input from all interested group members.

Endorsement: Declaration of approval or support.

Functional Task Analysis: Procedure to identify and understand work. Describes the worker, the work, and the work setting. The worker components include qualifications, experience, education, and training. Nature of work includes functions, sub-functions, activities, and tasks. Work setting describes purpose, goals, objectives, and resources.

Inter-rater Reliability: Degree of agreement among individual reviewers of qualitative data. With both statistics and qualitative data, this is a measure of homogeneity, or agreement, among different evaluators of the data under review.

Knowledge Base: Facts and principles essential to the work of a profession, the "things" a CHW "needs to know," as distinct from tasks or activities they need to be "able to do." Knowledge base in nutrition, for example, might include the basic nutritional benefits or cautions associated with different types of foods.

National Area Health Education Center Organization (NAO): Supports and advances the Area Health Education Center network to improve health by leading the nation in recruitment, training, and retention of diverse health work force for underserved communities.

Participatory Action Research: Research approach focused on participation and action to help understand the world and change it. The focus is on collective inquiry and experimentation grounded in experience and social history.

Quality: Personal characteristics or traits can be enhanced but not taught. Also called "attributes."

Role: Functions that CHWs serve in communities and the health care system. For example, CHWs provide health education.

Scope of Practice: An all-inclusive list of roles and tasks which an occupation includes in its scope of work. The exact mix of these roles and tasks for any one individual will vary based on the needs of those served and host organizations.

Self-determination: The ability of individuals, tribes, communities or a workforce (specifically CHWs) to be engaged in determining policies and standards that impact their daily life and in the case of a workforce, their own practice.

Skill: The ability, coming from one's knowledge, practice, and aptitude, to do something well. A core role or a task that must be performed may be supported by multiple skills.

Stakeholders: A group that has an interest in, and can affect or be affected by, the actions of another group. In the case of the C3 Project this includes CHWs, CHW allies (can be a range of non-CHW stakeholders), CHW employers, CHW trainers, policymakers, and others.

Project Introduction

Project Background and the Importance of CHW Defined Role, Skills, and Qualities

The CHW field has recently seen a notable period of growth, as evidenced by the development of public policy related to CHWs,[1,2] activity in federal agencies in support of CHWs,[3-6] and increased attention to CHWs in peer-reviewed literature,[7,8] in the popular press, and even on social media. Furthermore, health reforms focus on achieving the triple aim of improved health outcomes, improved experience of care, and reduced cost of care has further stimulated interest in CHWs.[9 10,11] The Patient Protection and Affordable Care Act (ACA) also brought increased attention to CHWs and their roles in improving access to care and in delivering preventive services.[12-14]

Many state governments have begun developing polices, services, and educational resources for CHWs. As a part of these initiatives, states and interested organizations are also developing and defining CHW roles and skills for practicing CHWs. Among the many roles and skills documents generated are certain well-recognized, frequently cited materials. These key documents have helped establish an informal consensus in CHW policy and practice, but to date the CHW field has yet to agree on formal national standards or guidelines on CHW roles, skills, and qualities. Recognized, agreed upon roles, skills, and qualities are an important cornerstone in any profession, but particularly in an emerging one drawn generally from marginalized populations that have not yet secured their place in the public health and health care workforce.

Lincoln Chen of the Institute for Health Metrics and Evaluation, discussing the transformation of health professions globally, noted that the competencies of any profession are politically based and negotiated. Each of the recognized health professions that are accepted members of the modern health care team has achieved recognition through a process of defining their professional boundaries and occupational standards. A comparative examination of CHWs against three professions – Nurse Practitioners, Direct-Entry Midwives, and Home Health Aides – revealed that CHWs have lagged behind in the establishment of core roles and skills. All three of these other occupations established guidelines for educational institutions.

Well articulated core role and competency guidelines for CHWs, as in other professions, can help to give the CHW field more tools to guide education, practices and policies that impact CHWs nationwide.[15]

Because of the growing interest in CHWs in public health and healthcare, the C3 Project Team recognized the importance of building national consensus about CHW roles, skills, and qualities. The C3 Project therefore undertook the development of a contemporary list based on an analysis of existing data in select benchmark documents. The Team analyzed existing data in select benchmark documents using a consensus-building approach among CHW leaders to develop a contemporary list of CHW roles and competencies.

Project Overview

Since summer 2014, the CHW C3 Project has worked to examine CHW roles, skills, and qualities among CHWs in the US. This was 20 years after the start of the NCHAS[21] that offered a first national look at CHW core roles, skills, and qualities among several topics.[17] Two decades later, the C3 Project aims to offer contemporary CHW- and stakeholder-driven recommendations for national consideration and adoption related to CHW core roles, skills, and qualities (see Table 1).

The C3 Project is a community-based research project with a focus on involving CHWs and stakeholders in the research process.[18,19] The intent is to support action through information based on sound research of CHW roles, skills, and qualities. The Project included two major phases: an analysis phase and a consensus-building phase. This report provides an overview

Table 1. CHW Roles (Scope of Practice) and Competencies, including Skills and Qualities

CHW roles are also known collectively as CHW scope of practice. Roles or scope of practice help to define and set the boundaries of the work of any profession. "Legal scopes of practice for the [licensed] health care professions establish which professionals may provide which health care services, in which settings, and under which guidelines or parameters."[16] It should be noted, however, that states are not seeking to license CHWs; scope of practice definitions for CHWs are descriptive rather than regulatory.

CHW skills and qualities are important contributors to the competence of CHWs and at times have been referenced together as "competencies as in the National Community Health Advisor Study."[17] For simplicity, in this report they are discussed individually as CHW skills and CHW qualities as defined below:

- **CHW skills** establish important parameters for the field. Skills inform CHW training and educational decisions.
- **CHW qualities** help to inform who is or becomes a CHW. When CHWs are recruited, agreement on CHW qualities can help inform a job description and employer decisions.

of the Project and its methods during both phases. The report then shares Project findings on core CHW roles, skills, and qualities. Findings are also referenced as "recommendations" in the report. The report ends with a discussion of potential use of the findings and discussion of both planned and potential future directions, including a wider stakeholder consensus building phase moving beyond the CHW field itself.

The C3 Project Team

The Project on CHW Policy and Practice at the University of Texas – Houston School of Public Health, Institute for Health Policy, coordinated the C3 Project, with funding from the Amgen Foundation administered by the National Area Health Education Center Organization (NAO). The Project also coordinated its outreach activities with the CHW Section of the APHA. Numerous in-kind and monetary contributions supported the Project following the initial funding period, including financial sponsorship from Sanofi-US through Texas AHEC East. The final phase of this project period also included contributed coordination support from Texas Tech University Health Sciences Center, El Paso.

The C3 Project Team, its staff and core consultants, including CHW Fellows, have a long history of work in the CHW field at the national and state level. Individually and together, team members have been involved in a variety of previous efforts to advance the CHW field, including development of the CHW Section of the APHA, the NCHAS,[20,21] the CHW National Workforce Study,[22] and the CHW National Education Collaborative.[23] Team members have also led efforts to define the CHW field and develop sustainable funding sources for CHW programs as well as establishing numerous state-level and national-level CHW networks.

The C3 Project's 13-member Advisory Committee, chaired by the CHW Fellows, included seven CHWs recommended as leaders by their peers. Advisory Committee members also included academics, non-profit executives and program coordinators in urban, rural, and tribal communities.

The Project Readers Panel was composed of 16 members from a range of states and from various sectors including CHW networks, community-based groups, researchers, and governmental organizations. One of the Readers Panel co-chairs is a CHW. The Readers Panel provided feedback on the draft report to help ensure clarity and to offer the perspective and concerns of varied audiences who would potentially respond to this report and its findings.

A special CHW Network Review Advisory Group was brought together to participate in guiding the Project in the final phase of 2015 activity when CHW Networks reviewed the proposed roles, skills, and qualities. These individuals were recruited through the Policy Committee and the Education y Capacitación Committee of the APHA CHW Section. This group included representatives of five more states who had not been represented in the first Advisory Committee.

All in all the C3 Project team, including Advisors and Panel members, involved participants from nearly half of the states.

Project Definition and Shared Core Values of CHW Leadership

The C3 Project Team agreed upon shared definitions and values at the start of the Project. The C3 Project adheres to the CHW definition contained in a policy statement from the APHA:

"A CHW is 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."[24]

When the C3 Project first began, a small core of staff and consultants came together to discuss their vision for this Project. The C3 Project staff team proposed adoption of guiding values for the Project. Foremost among the guiding values was supporting CHW self-determination, especially related to policies impacting

their practice. This led to an organizational structure that maximized the role of CHWs in shaping the Project's methods, interpreting and refining Project findings, and making recommendations for the use of those findings.

Project Goals

The Project established short, intermediate and long-term goals that would allow for the ongoing refinement and endorsement of the Project's recommendations during the life of the Project and beyond.

Table 2. Project Core Values

The C3 Project Believes CHWs Should

- Share lived experience with the communities they serve
- Be recognized as members of a unique profession with a unique scope of work
- Be meaningfully involved in efforts to create policy for their field
- Be recognized and rewarded for their experiential knowledge
- Be trained and supported in a full range of roles to work across all levels of the socio-ecological model from the individual level to the family, community and policy levels[25]
- Participate in initial and on-going training that is informed by and based on popular education and adult learning and that includes relevant and practical content
- Receive sufficient and appropriate supervision that supports their professional growth
- Be compensated at a level commensurate with their skills and as they gain experience, be involved as trainers for new CHWs[26,27]

Table 3. C3 Project Goals

Project Goals

- **Short Term:** *Dissemination* of C3 Project findings on roles, skills, and qualities or attributes for consideration and refinement by *CHW network leaders, individual CHWs and other stakeholders* leading to consensus on roles, skills, and qualities
- **Medium Term:** *Building of national consensus on and wide distribution of C3 Project recommendations* on roles and skills, and qualities and their use as a *comparative guideline* by states and others developing CHW policy, practice and educational resources.
- **Long Term:** *Endorsement and adoption* of C3 Project recommended roles, skills, qualities *by local, state, and national organizations* and other entities seeking to start or strengthen CHW education, practice, and policies

C3 Project Methods

Analytic Framework

The C3 Project used community-based participatory research (CBPR) methods adapted to use with a "virtual" community which included a wide circle of C3 Project staff, consultants, advisors, and CHW Network leaders, all of who are members of an extended network of CHWs and the many allies who support them.[18] The Project sought to answer the following questions:

1. How have CHW roles and skills changed over time in the US, particularly since the release of the NCHAS in 1998?

2. What contemporary roles (scope of practice) best capture the work of CHWs today in any setting?

3. What skills and qualities (collectively, competencies) do CHW need to fulfill these roles?

Based on the recognized value of CHW self-determination, the Project team devoted considerable energy to positioning the Project's research activities as input to a more extensive consensus-building process. This approach, also undertaken in the NCHAS (1998)21 adheres to the values put forward in a recent APHA policy statement on CHW self-determination.[27] The consensus-building process included plans to involve CHW networks/associations from across the US in the review and refinement of the preliminary report and the recommended roles and skills. The consensus-building process extended far beyond the initial funded Project activities and moves the focus of the Project beyond a purely academically based set of definitive recommendations. The Project's methods therefore include multiple levels of review, outreach, and engagement with the CHW community.

As noted in the introduction to this report and as defined in the NCHAS,[17] CHW competencies include both skills and qualities. The C3 Project Team concluded that these qualities have not changed substantially over time, that research has confirmed the contribution of these qualities to the effectiveness of CHWs, and that there would be minimal benefit from further study of the qualities. Though the Project did not propose new CHW qualities, it affirms the central importance of qualities that should always be included in reviews of the workforce and a review of existing CHW quality lists were included in all review steps of the Project.

Project Phases: Data Source Selection, Crosswalk Analysis, and Consensus Building

Data Source Selection

The C3 Project Team used "benchmark" documents from six states. Two national sources were consulted to update CHW roles and skills. State materials were deliberately chosen from states where a formal process had been conducted to define CHW roles and skills requirements. The Project team also sought states with a robust history of well-regarded formal CHW education programs. The NCHAS was selected as a baseline and the Community Health Representative (CHR) program of the Indian Health Service was included, as it is largest and oldest CHW program in the US.

Ultimately, the C3 Project Team worked with eight sources as primary data sources. These include (see Table 4):

California: California had not completed a formal state study process to define CHW roles and skill requirements, but it was included because one of the oldest college-based CHW programs in the US, at City College of San Francisco, offered one of the best resources for CHW skills. Their curriculum is captured in the only published CHW textbook in the country.

Massachusetts: The state undertook a comprehensive study of CHW practice and educational resources over ten years that has led to the development of state scope of practice and training standards. An appointed statewide CHW advisory workgroup and a CHW Board of Certification developed final core roles and competencies collaboratively.

Minnesota: Minnesota worked with a planning group of stakeholders including employers, payors, educators, and health and human services providers to develop a state approved curriculum that included a scope of practice definition and reflected training standards. The state standard curriculum is required preparation for CHWs to be paid under Medicaid.

New York: A robust state-level study had been conducted in New York, but not officially adopted by the state government at the time of data collection; however, the New York study included one of only a very few "mapping" analyses (connecting detailed roles and skills) ever done for CHWs, using "functional task analysis," which provided rich data.

Oregon: At first the C3 Project Team planned to use a curriculum from the Community Capacitación Center in the Multnomah County Health Department as a stand-in for Oregon but early in the Project it became apparent that there were emerging official guidelines available from the Oregon Traditional Health Workers Commission, which were then used in the Project.

The National Community Health Representative (CHR) Program: The CHR Program has a national scope of practice definition and is developing its own national training standards. At the time of the Project's crosswalk analysis, the C3 Project Team was only able to access and review the program's national scope of practice definition. Skill standards were under revision and not available during the Project analysis period.

The National Community Health Advisor Study (NCHAS). The NCHAS, carried out from 1994-1998, included an analysis of original primary data collected in focus groups and in a national survey. Given its national scope and current wide recognition, it served as a baseline to which all the other standards would be compared.

Crosswalk Analysis Methods

The analysis compared source documents, looking for new and emerging trends in both roles and skills. Project staff used a spreadsheet format in which columns represented the data sources and rows represented the various roles and sub-roles, and skills and sub-skills. The analysis began by filling in core roles and skills from the 1998 NCHAS as a "baseline" or starting point for the comparison (see Appendix A and B).

Initially, one staff member was assigned to review and analyze each benchmark data source, and then a team of three staff members jointly reviewed and refined the crosswalk analysis updating the grid as needed. Following the staff review, the Project's consultants checked the crosswalk analysis. With several individuals participating in the analysis inter-rater reliability was assured. Finally, source document providers were invited to cross check the analysis to assess the Team's interpretation of their materials. Updates were made to the analysis in a few instances based on source provider validation.

Consensus Building

Following the crosswalk analysis, the Project team began multi-party review of the roles and skills. The larger Advisory Committee, co-chaired by the CHW Fellows, conducted a second level of review. The "List" was then shared during an official pre-conference event at the APHA Annual Meeting in New Orleans (November, 2014), which offered the first exposure of the draft to a larger audience and produced another level of dialogue and refinement. Feedback from that meeting was integrated into the next iteration of the "List" of roles and skills by the Project staff, consultants, and advisors.

In the fall of 2014, the Project hosted a webinar and conference call for state and local CHW network representatives, which was the first step in systematic national outreach for consensus building. This call also set the stage for transfer of "ownership" of the process to CHW networks, starting with a second conference call in spring 2015 and the formal release of this Report in summer 2015 exclusively to CHW leaders. This exclusive release provided the Networks with an opportunity to give their input on the roles and skills that the C3 Project recommended. It also was intended to give CHW networks lead time to study the report and strategize how they would choose to engage other stakeholder groups and disseminate the findings. Release to the networks included supplemental user friendly materials in English and Spanish such as a PowerPoint and video clip, all featuring the recommended CHW roles and skills. Of the 45 Networks invited, 23 reviewed the report and the roles, skills, and qualities. Following the Network Review the lists of roles and skills were further refined. This list was circulated again to all identified CHW Networks.

Table 4. C3 Benchmark Documents

State	Role (Scope of Practice)	Training Standards (Curricula)
California[28]	California Health Workforce Alliance State Conference Study (2014)	City College of San Francisco Community Health Worker Certificate Program (2014)
Masschusetts[29]	State Scope of Practice (2015)	State Board of Certification Core Competencies (2015)
Minnesota[30]	Minnesota Community Health Worker Alliance (2012)	State Approved Standard Curriculum for Medicaid (2012)
New York[31]	New York State CHW Initiative Guidance to State (2011)	New York State CHW initiative Guidance to State (2011)
Oregon[32]	State Traditional Health Worker Commission (draft) (2014)	State Traditional Health Worker Commission (2014) and Sample Curriculum (2014)
Texas[33]	State Definition of CHWs (2010)	State Certificate Standards/ and Training Guidance (2010); Sample State Curriculum (2014)
Indian Health Service/Community Health Representatives Program[34]	Indian Health Service Scope of Practice (2014)	N/A due to revisions (Revisit at a later date)
National Community Health Advisor Study (1998)[21]	NCHAS Core Roles	NCHAS Core Skills

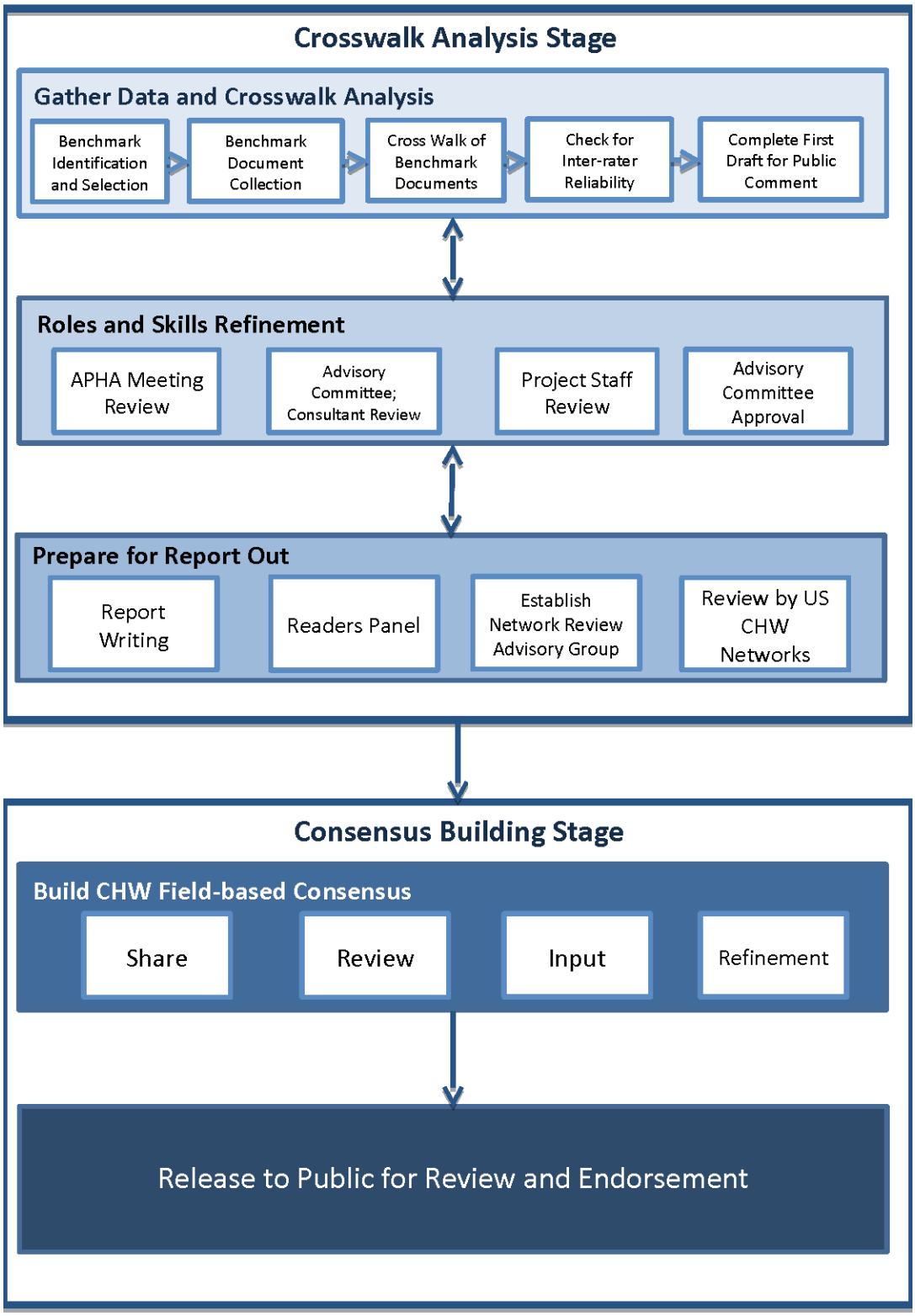


Figure 1. Overview of C3 Process

Findings

CHW Roles and Skills

The primary findings of this Project are a contemporary view of CHW roles and skills, and a reaffirmation of historic understanding of CHW qualities. As described by Matos (2011) in "Paving a Path for CHWs in New York," CHW scope of practice "…should be seen as an all-inclusive list of roles and tasks which CHWs…may be expected to fulfill. However, the exact mix of these roles and tasks will vary from organization to organization where CHWs may be employed to fulfill one or more of the roles. This structure also provides the opportunity for career development pathways where CHWs might become 'specialists' in one or two of the roles while others may advance by becoming generalists with expertise in a number of roles."[31]

According to Wiggins (1998), for the CHW field, competencies are "things that people are able to do that can be objectively measured – a more flexible, less traditional definition of 'competency' is required to fit a flexible, less traditional field."[17] Competencies include both skills and qualities. Skills are simply "something a person is capable of doing because they have learned, whereas qualities are personal characteristics or traits that can be enhanced but not taught."[17]

Figure 2. Supporting CHWs to Sustain Those They Serve

CHW Roles or Scope of Practice

CHW roles provide a framework for understanding the broad scope of the activities that CHWs carry out day to day in many different settings. The Project also acknowledges that all the roles outlined in this report may not be formally required in a specific work setting, but are often at play informally in some combination. The C3 Project has identified ten major roles that together constitute the contemporary CHW scope of practice. Of these roles, seven are quite similar to the roles identified in the NCHAS (see Appendix A and B), but in some cases new wording was developed to describe the role in contemporary terms. Three new CHW roles were also identified (see Table 5).

An example of a wording shift made to the roles was the much discussed role originally entitled "Assuring People Get the Services They Need" in 1998 NCHAS and now entitled "Care Coordination, Case Management, and System Navigation." Even in 1998 this was a controversial role to define; the NCHAS Advisory Council in fact specifically requested that the Case Management role not be named. Today that role has taken on greater prominence. Twenty years after the start of the NCHAS, some CHWs clearly see themselves as working in this area, identified as a sub-role and the other sub-roles clustered with it in this critical role.

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In the newly identified roles proposed by the C3 Project, there are antecedents or "seeds" in the sub-roles of the NCHAS. In the crosswalk analysis it became clear that certain topics identified as new roles had simply grown in importance within the practice of CHWs. An example is the case of the "Individual and Community Assessment" role, which was a sub-role in the NCHAS (1998), but which now stood out in several benchmark documents as a distinct role rather than as a sub-role. In addition to these existing roles and sub-roles, several new sub-roles identified in the benchmark documents that were not captured in any way in the baseline roles of the NCHAS. The complete list of proposed roles and sub-roles reflecting that integration process is presented in Table 5.

Table 5. Roles and Sub-Roles

	Role	Sub-Roles
1	**Cultural Mediation among Individuals, Communities, and Health and Social Service Systems**	a. Educating individuals and communities about how to use health and social service systems (including understanding how systems operate) b. Educating systems about community perspectives and cultural norms (including supporting implementation of Culturally and Linguistically Appropriate Services [CLAS] standards) c. Building health literacy and cross-cultural communication
2	**Providing Culturally Appropriate Health Education and Information**	a. Conducting health promotion and disease prevention education in a manner that matches linguistic and cultural needs of participants or community b. Providing necessary information to understand and prevent diseases and to help people manage health conditions (including chronic disease)
3	**Care Coordination, Case Management, and System Navigation**	a. Participating in care coordination and/or case management b. Making referrals and providing follow-up c. Facilitating transportation to services and helping to address other barriers to services d. Documenting and tracking individual and population level data e. Informing people and systems about community assets and challenges
4	**Providing Coaching and Social Support**	a. Providing individual support and coaching b. Motivating and encouraging people to obtain care and other services c. Supporting self-management of disease prevention and management of health conditions (including chronic disease) d. Planning and/or leading support groups
5	**Advocating for Individuals and Communities**	a. Advocating for the needs and perspectives of communities b. Connecting to resources and advocating for basic needs (e.g. food and housing) c. Conducting policy advocacy
6	**Building Individual and Community Capacity**	a. Building individual capacity b. Building community capacity c. Training and building individual capacity with CHW peers and among groups of CHWs
7	**Providing Direct Service**	a. Providing basic screening tests (e.g. heights & weights, blood pressure) b. Providing basic services (e.g. first aid, diabetic foot checks) c. Meeting basic needs (e.g., direct provision of food and other resources)
8	**Implementing Individual and Community Assessments**	a. Participating in design, implementation, and interpretation of individual-level assessments (e.g. home environmental assessment) b. Participating in design, implementation, and interpretation of community-level assessments (e.g. windshield survey of community assets and challenges, community asset mapping)
9	**Conducting Outreach**	a. Case-finding/recruitment of individuals, families, and community groups to services and systems b. Follow-up on health and social service encounters with individuals, families, and community groups c. Home visiting to provide education, assessment, and social support d. Presenting at local agencies and community events
10	**Participating in Evaluation and Research**	a. Engaging in evaluating CHW services and programs b. Identifying and engaging community members as research partners, including community consent processes c. Participating in evaluation and research: i) Identification of priority issues and evaluation/research questions ii) Development of evaluation/research design and methods iii) Data collection and interpretation iv) Sharing results and findings v) Engaging stakeholders to take action on findings

CHW Competencies: Skills and Qualities

CHW Skills

Skills, as noted earlier in this report, are something a person is capable of doing because they have learned how to perform the specified task. The C3 Project identified eleven core CHW skill areas (see Table 6), three more skill areas than the baseline NCHAS. These skills support all roles and they do not directly match the roles one-to-one. For example, communication skills support most roles, including those that range from the interpersonal "Providing Coaching and Social Support" to "Building Individual and Community Capacity." Many of the skills updates also took place at the sub-skill level, with numerous new sub-skills identified. These changes were especially visible in what many articulated as the most important CHW skill (Communication), where numerous new concepts for clear communication were added based on the crosswalk analysis.

These are Evaluation and Research Skills, Outreach Skills, and Individual and Community Assessment Skills. Evaluation and Research skills stood out in the various benchmark documents with a range of skill sets being specified; this led the C3 Project Team to propose a rather wide range of sub skills to support this skill area. The second new skill, Outreach Skills were clearly part of earlier CHW work and training but crosswalk analysis revealed that such a skill was of primary importance to CHW everyday work thus it went from being a sub-skill to being an overarching skills. Research and evaluation skills were newly emerging in 1994-1998 but they now are revealed as a common area of CHW activity.

Another area, listed as a skill, but addressing a range of general content areas, is referred to as Knowledge Base. Knowledge base is common to all professions, in which the specific information areas of their discipline are identified. Knowledge Base is a foundational element that supports all other skill areas. Knowledge Base, as identified in the NCHAS, had three sub-topics; in the C3 Project the list grew to nine items. It includes public health content about both broad and specific health issues.

Table 6. Skills and Sub-Skills

	Skill	Sub-skill
1	**Communication Skills**	a. Ability to use language confidently b. Ability to use language in ways that engage and motivate c. Ability to communicate using plain and clear language d. Ability to communicate with empathy e. Ability to listen actively f. Ability to prepare written communication including electronic communication (e.g., email, telecommunication device for the deaf) g. Ability to document work h. Ability to communicate with the community served (may not be fluent in language of all communities served)
2	**Interpersonal and Relationship-Building Skills**	a. Ability to provide coaching and social support b. Ability to conduct self-management coaching c. Ability to use interviewing techniques (e.g. motivational interviewing) d. Ability to work as a team member e. Ability to manage conflict f. Ability to practice cultural humility
3	**Service Coordination and Navigation Skills**	a. Ability to coordinate care (including identifying and accessing resources and overcoming barriers) b. Ability to make appropriate referrals c. Ability to facilitate development of an individual and/or group action plan and goal attainment d. Ability to coordinate CHW activities with clinical and other community services e. Ability to follow-up and track care and referral outcomes

	Skill	Sub-skill
4	**Capacity Building Skills**	a. Ability to help others identify goals and develop to their fullest potential b. Ability to work in ways that increase individual and community empowerment c. Ability to network, build community connections, and build coalitions d. Ability to teach self-advocacy skills e. Ability to conduct community organizing
5	**Advocacy Skills**	a. Ability to contribute to policy development b. Ability to advocate for policy change c. Ability to speak up for individuals and communities
6	**Education and Facilitation Skills**	a. Ability to use empowering and learner-centered teaching strategies b. Ability to use a range of appropriate and effective educational techniques c. Ability to facilitate group discussions and decision-making d. Ability to plan and conduct classes and presentations for a variety of groups e. Ability to seek out appropriate information and respond to questions about pertinent topics f. Ability to find and share requested information g. Ability to collaborate with other educators h. Ability to collect and use information from and with community members
7	**Individual and Community Assessment Skills**	a. Ability to participate in individual assessment through observation and active inquiry b. Ability to participate in community assessment through observation and active inquiry
8	**Outreach Skills**	a. Ability to conduct case-finding, recruitment and follow-up b. Ability to prepare and disseminate materials c. Ability to build and maintain a current resources inventory
9	**Professional Skills and Conduct**	a. Ability to set goals and to develop and follow a work plan b. Ability to balance priorities and to manage time c. Ability to apply critical thinking techniques and problem solving d. Ability to use pertinent technology e. Ability to pursue continuing education and life-long learning opportunities f. Ability to maximize personal safety while working in community and/or clinical settings g. Ability to observe ethical and legal standards (e.g. CHW Code of Ethics, Americans with Disabilities Act [ADA], Health Insurance Portability and Accountability Act [HIPAA]) h. Ability to identify situations calling for mandatory reporting and carry out mandatory reporting requirements i. Ability to participate in professional development of peer CHWs and in networking among CHW groups j. Ability to set boundaries and practice self-care
10	**Evaluation and Research Skills**	a. Ability to identify important concerns and conduct evaluation and research to better understand root causes b. Ability to apply the evidence-based practices of Community Based Participatory Research (CBPR) and Participatory Action Research (PAR) c. Ability to participate in evaluation and research processes including: i) Identifying priority issues and evaluation/research questions ii) Developing evaluation/research design and methods iii) Data collection and interpretation iv) Sharing results and findings v) Engaging stakeholders to take action on findings
11	**Knowledge Base**	a. Knowledge about social determinants of health and related disparities b. Knowledge about pertinent health issues c. Knowledge about healthy lifestyles and self-care d. Knowledge about mental/behavioral health issues and their connection to physical health e. Knowledge about health behavior theories f. Knowledge of basic public health principles g. Knowledge about the community served h. Knowledge about United States health and social service systems

CHW Qualities

Qualities are personal characteristics or traits that can be enhanced but not taught. CHW qualities were not revised by the C3 Project; rather existing portrayals of qualities (in research, standards, and job descriptions) were endorsed with special acknowledgement given to two sources: the NCHAS list of qualities and the more recent CHW Network of New York City (2011) list of attributes.[21,31] The C3 Project Team and Advisory Committee collaborators also agreed to make special note of the essential nature of the quality of "connection to or close understanding of the community served." **The C3 Implementation Team recognizes this connection and related experience as the primary source of CHW expertise.**[35] Below find the two noted lists of qualities or attributes that are at the core of CHW success and that are sought after by those who work with CHWs.

Table 7. NCHAS qualities of Community Health Advisors[21] and CHW Network NYC: Preferred CHW Attributes[31]

NCHAS	New York
Connected to the community (a community member or possessing shared experience with community members)	Connected to Community • Community member OR having a close understanding of the community they serve • Shared life experiences • Desire to help the community
Strong and courageous (healthy self-esteem and the ability to remain calm in the face of harassment)	Mature • Courageous • Prudent • Temperate • Wise
Friendly/outgoing/sociable	Friendly, Outgoing, Sociable • Gracious • Pleasant • Responsive • Welcoming
Patient	Patient [contained in list below]
Open-minded/non-judgmental	Open-minded/Non-judgmental--Relativistic, Non-dualistic • Unbiased • Flexible • Tolerant
• Motivated and capable of self-directed work • Caring • Empathetic • Committed/dedicated • Respectful	
Honest	Honest, Respectful, [Patient] • Sincere • Candid • Polite • Courteous
Open/eager to grow/change/learn	
Dependable/responsible/reliable	Dependable, Responsible, Reliable • Trustworthy • Loyal • Motivated and capable of self-directed work • Committed/dedicated
Compassionate	Empathic, Caring, Compassionate • Kind • Gentle • Considerate • Sensitive
• Flexible/adaptable • Desires to help the community • Persistent • Creative/resourceful	Persistent, Creative, and Resourceful • Determined • Imaginative • Ingenious

Discussion

In the mid 1990's, at the time of the NCHAS, CHWs were not widely recognized, yet there was an array of CHW programs and networks available to support the NCHAS research. Only a few very limited CHW workforce studies had been conducted at that time, and it was necessary to collect original qualitative and quantitative data directly from the field.[36,37] Since the time of the NCHAS, efforts to implement supportive CHW research, policy, and practice have taken center stage within the public health arena.[1,38] A new, CHW-driven practice-based definition of the core roles, skills, and qualities of CHWs was needed to ensure the integrity of CHW practice and professional values as defined by CHWs themselves.

After conducting the crosswalk review, the C3 Project Team has a heightened sense of the important growth that has taken place in the field over the past few decades and there is a renewed appreciation for the roles, skills, and qualities that make it possible for CHWs to excel at their work. The findings suggest that the CHW field has evolved to meet the changing needs of the public health and health care environments ,especially as they seek to address health inequities and the social determinants of health. This has to some degree pushed providers of care to pursue holistic models that address issues people face outside of the health care system. CHWs help providers working within clinical settings to understand and integrate patients' life experiences into diagnosis and treatment, better enabling providers to pursue patient-centered and even community-centered approaches.

It is also remarkable how much of the core of CHW practice has stayed the same over the past few decades. In some cases, it is more the terminology that has changed than the CHW's actual work of supporting individuals, families, and communities. Thus, previously "buried" sub-roles have been highlighted as roles; skills have been re-named to be more suitable and streamlined as well.

This Project has also revealed a tremendous level of interest in these topics at the state and national level as state and federal governments, and other stakeholders, struggle to understand the unique dynamics of the CHW workforce. Despite a historical lack of national guidelines, states and organizations developing CHW services, trainings, and policies, have successfully developed their own definitions of both CHW roles/scope of practice and skills. CHW advocates have also reminded employers and policy makers of the importance of CHW qualities in identifying and recruiting CHWs. However, many individuals and organizations are still clamoring for guidance in this process. The C3 Project Team recognizes and honors past and current policy efforts, and intends that these guidelines may serve as a cross check to validate and improve upon work already done if not incorporated in full.

Guidelines, Not Standards

The C3 Project's scope was carefully defined to issue recommendations for consideration that could be used as guidelines but not as national standards. At the same time, CHWs across the US who have reviewed and refined the roles, skills, and qualities put forward in this report may feel that it provides a relevant starting point for the development of standards in the future for state or national use.

It is clear looking at trends across states that there is a growing demand for documentation of CHW skills and for CHW education and training standards.[38] State governments and other stakeholders are increasingly looking for tools to create evidence-based policies for this workforce. The values of the CHW field dictate that a CHW-led organization, such as a state or national association, should take the lead on standards development. This report is intended as a tool for them to use in entering into a dialog with state governments and other stakeholders about that standards development process.

Recommendations

This section offers ideas for recognition and endorsement of the C3 project's findings. The first set of recommendations focuses on the proposed use and promotion of the C3 Project's findings; the second looks at proposed adoption, adaptation, and endorsement of the CHW roles, skills, and qualities by public and private entities nationwide.

Recommended Use of Roles, Skills, and Qualities

C3 Project role, skills, and qualities findings offer a starting point for those working to develop CHW services and policies and they offer a counterpoint checklist for existing services and policies. The use of the roles, skills, and qualities by those active in the field can help to strengthen a common core that links CHWs throughout the US.

The Project design assumes that individual states may modify the Project's findings for their own use, but in the process there should be opportunity for at least a greater level of consensus among states about the important definition and standards elements that it presents.

Use of Roles. CHW roles as outlined in this report help to define the scope of practice for a CHW.

- In practice settings, the roles can be used to develop a job description for CHWs in multiple practice settings. In some clinical or community-based settings, various roles may be emphasized or in some cases omitted. It is worthwhile for employers and payers to recognize that even within a narrowly defined set of formal job responsibilities, a CHW may find it necessary to exercise a broader range of roles (activities) in pursuit of successful outcomes at an individual or community level.
- A robust definition of CHW roles can be helpful in educating potential employers who have limited exposure to CHWs.
- In a policy context, the Project encourages that the full range of roles be embedded in policy as a formal scope of practice definition to ensure that the full potential breadth of CHW practice will be supported by any given policy.
- Clear scope of practice guidelines can be crucial in building relationships with other professions by helping to define practice boundaries.

Use of Skills. CHW skills, as presented in this report, are intended to outline the range of potential abilities that are central to CHW work in a variety of settings where CHWs work with individuals, families, communities and within systems.

- In practice-oriented settings, a primary use anticipated for these skills is to inform the development of CHW training or continuing education, or a comparison tool to assess the content of a current CHW training or capacity building curriculum. The skills presented may help states and organizations that are struggling to develop evidence- and competency-based training, and in deciding whether to require standardized CHW curriculum content.
- In policy, skills standards should consider the full range of skills, and adequate financial support should be made available for training in the full range of skills.
- The array of skills presented is intended to be comprehensive. Important practice and policy debates persist about what constitutes the various skill levels for CHWs, and whether all skills are necessary for CHWs in varied settings such community-based vs. clinically-based practice. Such distinctions are beyond the scope of the C3 Project at present, but the Project's findings should be used to inform these discussions. Such distinctions are beyond the scope of the C3 Project at present, but the Project's findings should be used to inform these debates.

Use of Qualities. As noted earlier in this report, the Project has affirmed existing lists of the important qualities of CHWs emphasizing "connection to the community served" as a key aspect of CHW's competence and an essential point in the integrity of CHW practice.

- In practice settings when recruiting CHWs, the Project strongly recommend the use of the Qualities to guide the selection of the most effective CHWs.
- In policy, it is important to emphasize and promote access to the profession for community-based individuals who share these Qualities, especially that of a connection to the community served. It may be challenging to embody the qualities in public policy, but it should always be clear that positions which are not defined in terms of the qualities should not be considered CHW positions.

Incorporation and Endorsement of CHW Roles and Skills

Diversity and local self-determination have great meaning in a field that is tailored to local community assets and needs. That being said, a shared set of national roles, skills, and qualities will allow CHWs and their supporters to focus on CHW capacity building and identification of supportive funding streams, focusing efforts on outcomes and customization of roles and skills to fit circumstances and preferences within a given state.

Endorse Roles, Skills and Qualities as They Pertain to Your Organization or Public Body. Employer and payer organizations, CHW networks, and states are urged to endorse this list of roles, skills, and qualities list, and to use it as a guide to policy and practices being developed under their purview. Leadership organizations are asked to identify a formal way of recognizing and endorsing the roles, skills and qualities as they pertain to your state or organization, and to document that endorsement.

Future Directions

The following section shares ten proposed next steps forward. The C3 Project sets the stage for several new activities, some carrying forward and refining the work of the C3 Project itself, and other related activities that have similar visions and direction. Proposed future directions include:

1. CHW Core Consensus Project Active Outreach. Build on initial outreach for feedback to CHW networks to more individualized follow up with each CHW network to identify concerns and interest areas. Network outreach will also serve to expand the national dialog among CHWs. This should be followed by outreach to other stakeholders to build awareness of the Project and recommended roles, skills, and qualities. Outreach would include current and potential employers in medical, public health, and social services organizations; health insurers and other payers, and state and federal policy makers. This consensus building process would present a greater opportunity for refinement and potential endorsement of proposed CHW roles, skills, and qualities. It can also serve as part of an awareness and education strategy for these non-CHW stakeholders: despite growing interest, many of them still know little or nothing about CHWs.

2. CHW Roles, Skills, and Qualities in Varied Settings. The roles, skills, qualities presented here are offered as a common core. In the course of implementing the Project comments have been recorded about the importance of flexibility and differing application of roles and skills in various settings (e.g., clinical versus community settings). Further analysis of how roles, skills, and qualities are carried out in various settings would provide additional needed guidance to the field.

3. Develop Assessment Guidelines and Tools. With identified skills in hand, CHWs, CHW educators, and CHW employers look for ways to assess individual proficiency in those skills. Generating self-assessment tools for CHWs to track their skill development and identify areas in which they wish to develop further will extend the value of the skills and sub-skills list offered by the C3 Project. Additionally developing self-study guidelines for CHW trainers and capacity building programs is recommended. All such tools will need to include well developed "Performance Assessment Measures" that allow for assessment of proficiency, taking

into account the nature of the CHW workforce and the value of observable outcomes as part of such tools.

4. CHW Knowledge Base Updates. Work routinely with CHW leaders and relevant other disciplines to review the core proposed Knowledge Base and, as appropriate, support development of specialty content areas. This work should be carried out more frequently than the proposed cyclical review of roles, skills, and qualities overall proposed in this Future Directions section.

5. Roles and Skills Mapping. The uncertainty or lack of consensus over what is required for a "high quality" or comprehensive skill development program begs a next step in the analysis of C3 Project roles and skills that can be described as a "mapping process" in which roles and skills would be analyzed to assess what skills are needed to perform each roles as was undertaken in the CHW workforce study in New York in 2010.[31]

6. Establish Skill/Career Pathways. Guidance is needed on CHW career paths, and support for capacity building curricula that identify CHW roles, skills and qualities at varied levels including articulation of entry-level, intermediate and advanced skills. Career paths should be available in senior roles for experienced CHWs who want to remain CHWs, and supports should be available for CHWs who choose to pursue other related careers in which their CHW experience can also be a significant asset.

7. Skills Standards Development. Skills identified here open the door to future work on training assessment approaches and even skills standards. Skills standards for a profession are a statement of the basic

qualifications to do the work of that profession. Conventionally, these are expressed as learning topics of both task activities and knowledge to be included in the educational preparation of a member of the profession. Given the focus of the C3 Implementation Team on self-determination, it is best that this work be carried out under the leadership of a coalition of CHW networks or a national association of CHWs.

8. Showcase How Roles and Skills Are Put Into Action. To increase attention on core roles and skills, and qualities, opportunities should be pursued to showcase examples of how individuals, organizations, and policy makers are using them to advance CHW practice. For roles, examples of role delineation in varied settings can be found, including in Patient Centered Medical Homes. For skills, examples could include integration into CHW training and other professional development activities (e.g., conferences, webinars), use in certification efforts, and within emerging performance assessment methods.

9. Core Evaluation Measures. Taking an approach of working with benchmark evaluation protocols and indicators, a Project could be undertaken to put forward a list of core measures of CHW impact and effectiveness, as well as organizational "critical success factors" that can help to maximize outcomes. These measures could offer guidelines to those implementing CHW services and to those working to develop supportive polices to create a sustainable environment for CHW services.

10. Regular Roles, Skills, and Qualities Review. As depicted in Figure 5, it is important to continue the cycle of consensus building and refinement of CHW roles, skills, and qualities on a regular basis. The C3 Project Team proposes a ten-year review cycle for the field. In an ideal long-term process, additional data from other states can be incorporated into the original "crosswalk" analysis and the process repeated on a regular basis.

As next steps for the C3 Project moving forward at the time of this writing are work on items 1, 2, and 3 above.

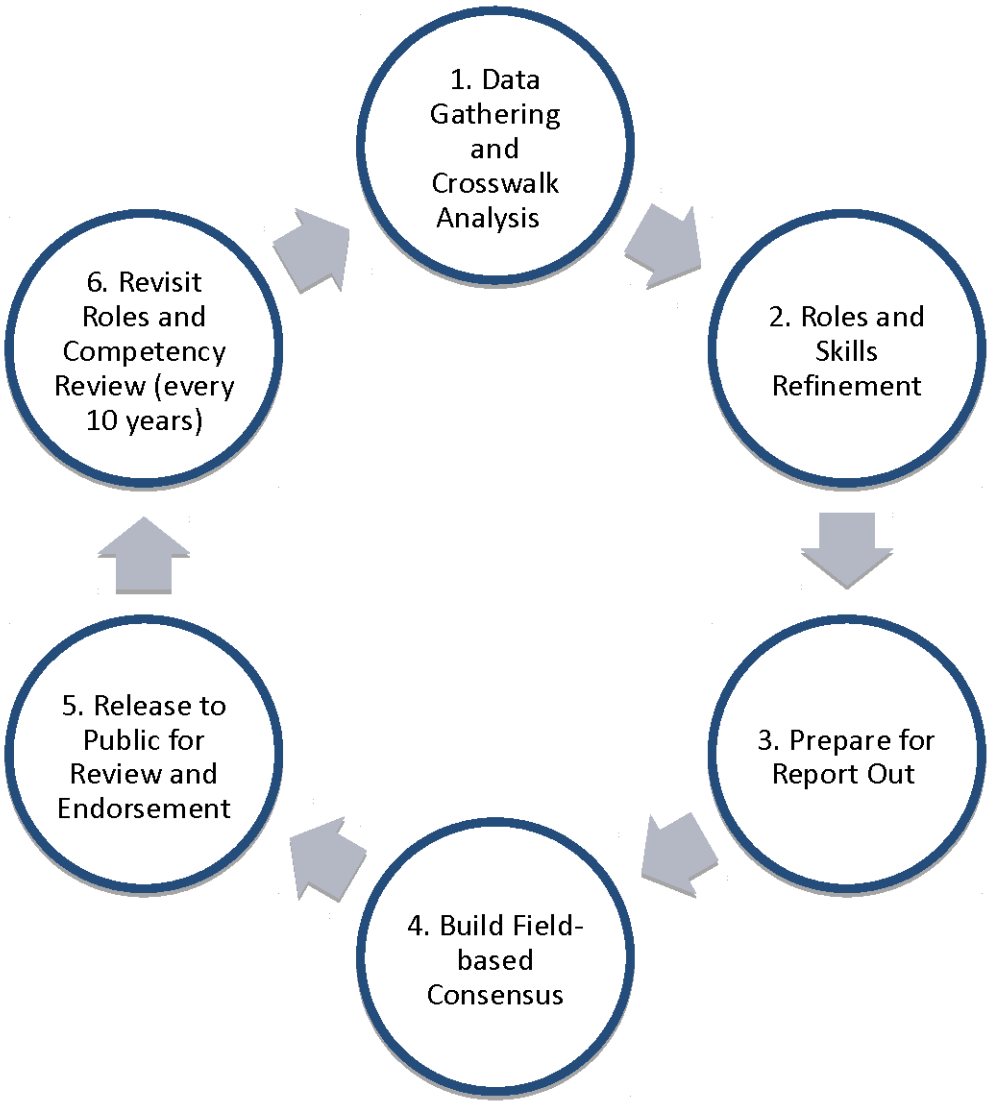
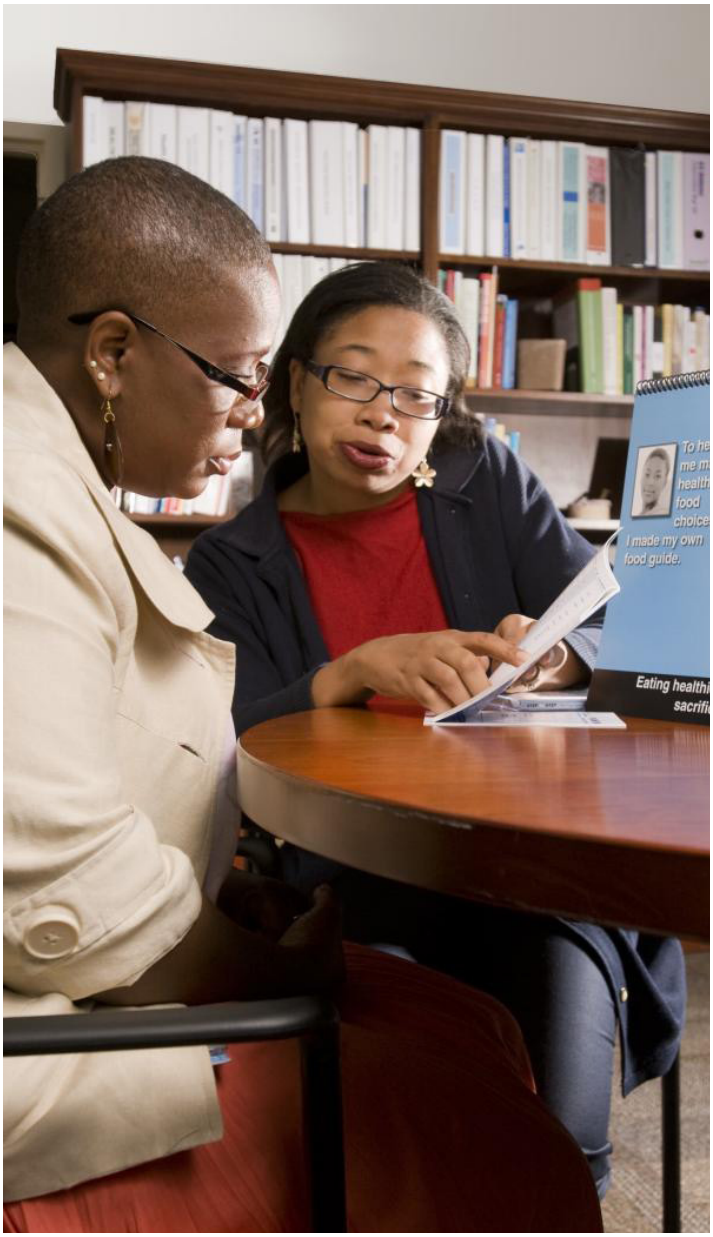


Figure 3. Proposed CHW C3 Review Cycle



Closing Comments: The Importance of CHW Collaboration and Leadership

In closing, the C3 Project Team notes that partnerships are key to the implementation of any of the next steps proposed. Future efforts will be most fruitful when implemented in alliance with existing CHW-led efforts in the field. New efforts must be dedicated to fostering strong CHW leadership especially in areas that have been overlooked, under-resourced, or otherwise left out.

The C3 Project next anticipated ares of action from our lits of Future Directions include: (1) greater stakeholder outreach, (2) work on CHW roles and skills in varied settings looking especially at clinical and community settings, and (3) developing recommendations as possible tools for skills assessment.

The CHW field is varied, with many titles reflecting the diversity of the field. For some CHWs this opportunity to formally identify roles, or scope of practice, and articulation of skills will be welcome guidance. However, it is also true that the potential formalization and standardization that could grow from the endorsement and adoption of the roles, skills, and qualities may supplant or pre-empt local working knowledge about how CHWs best serve their communities. Efforts must be made to use these findings to strengthen local capacity and infrastructures that support CHWs and the many ways they are already successfully working in communities to improve health and wellbeing.

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Appendix A. Comparison of 1998 Roles and 2015 Roles

1998 Roles NCHAS[17]	Final Roles
Role 1: Bridging/Cultural Mediation Between Communities and the Health and Social Service Systems a. Educating community members about how to use the health care and social service systems b. Gathering information for medical providers c. Educating medical and social service providers about community needs d. Translating literal and medical languages	Role 1: Cultural Mediation among Individuals, Communities, and Health and Social Service Systems a. Educating individuals and communities about how to use health and social service systems (including understanding how systems operate) b. Educating systems about community perspectives and cultural norms (including supporting implementation of Culturally and Linguistically Appropriate Services [CLAS] standards) c. Building health literacy and cross-cultural communication
Role 2: Providing culturally appropriate health education a. Teaching concepts of health promotion and disease prevention b. Helping to manage chronic illness	Role 2: Providing Culturally Appropriate Health Education and Information a. Conducting health promotion and disease prevention education in a manner that matches linguistic and cultural needs of participants or community b. Providing necessary information to understand and prevent diseases and to help people manage health conditions (including chronic disease)
Role 3: Assuring people get the services they need a. Case finding b. Making referrals c. Providing follow-up	Role 3: Care Coordination, Case Management, and System Navigation a. Participating in care coordination and/or case management b. Making referrals and providing follow-up c. Facilitating transportation to services and helping to address other barriers to services d. Documenting and tracking individual and population level data e. Informing people and systems about community assets and challenges
Role 4: Providing Informal Counseling and Social Support a. Providing individual support and informal counseling b. Leading support groups	Role 4: Providing Coaching and Social Support a. Providing individual support and coaching b. Motivating and encouraging people to obtain care and other services c. Supporting self-management of disease prevention and management of health conditions (including chronic disease) d. Planning and/or leading support groups
Role 5: Advocating for individual and community needs a. Advocating for individuals b. Advocating for community needs.	Role 5: Advocating for Individuals and Communities a. Advocating for the needs and perspectives of communities b. Connecting to resources and advocating for basic needs (e.g. food and housing) c. Conducting policy advocacy
Role 6: Providing clinical services and meeting basic needs a. Providing clinical services. b. Meeting basic needs.	Role 6: Providing Direct Services a. Providing basic screening tests (e.g. heights & weights, blood pressure) b. Providing basic services (e.g. first aid, diabetic foot checks) c. Meeting basic needs (e.g., direct provision of food and other resources)

1998 Roles NCHAS[17]	Final Roles
Role 7: Building individual and community capacity a. Building individual capacity. b. Building community capacity	Role 7: Building Individual and Community Capacity a. Building individual capacity b. Building community capacity c. Training and building individual capacity with CHW peers and among groups of CHWs
	Role 8: Implementing Individual and Community Assessments a. Participating in design, implementation, and interpretation of individual-level assessments (e.g. home environmental assessment) b. Participating in design, implementation, and interpretation of community-level assessments (e.g. windshield survey of community assets and challenges, community asset mapping)
	Role 9: Conducting Outreach a. Case-finding/recruitment of individuals, families, and community groups to services and systems b. Follow-up on health and social service encounters with individuals, families, and community groups c. Home visiting to provide education, assessment, and social support d. Presenting at local agencies and community events
	Role 10: Participating in Evaluation and Research a. Engaging in evaluating CHW services and programs b. Identifying and engaging community members as research partners, including community consent processes c. Participating in evaluation and research: i) Identification of priority issues and evaluation/research questions ii) Development of evaluation/research design and methods iii) Data collection and interpretation iv) Sharing results and findings v) Engaging stakeholders to take action on findings

Appendix B. Comparison of 1998 Skills and 2015 Skills

1998 Skills NCHAS[17]	Final Skills
Skill 1: Communication skills a. Listening b. Use language confidently & appropriately c. Written communication	Skill 1: Communication skills a. Ability to use language confidently b. Ability to use language in ways that engage and motivate c. Ability to communicate using plain and clear language d. Ability to communicate with empathy e. Ability to listen actively f. Ability to prepare written communication including electronic communication (e.g., email, telecommunication device for the deaf) g. Ability to document work h. Ability to communicate with the community served (may not be fluent in language of all communities served)
Skill 2: Interpersonal skills a. Counseling b. Relationship-building	Skill 2: Interpersonal and Relationship-Building skills a. Ability to provide coaching and social support b. Ability to conduct self-management coaching c. Ability to use interviewing techniques (e.g. motivational interviewing) d. Ability to work as a team member e. Ability to manage conflict f. Ability to practice cultural humility
Skill 3: Knowledge base a. Broad knowledge about the community b. Knowledge about specific health issues c. Knowledge of health and social service systems	Skill 11: Knowledge Base a. Knowledge about social determinants of health and related disparities b. Knowledge about pertinent health issues c. Knowledge about healthy lifestyles and self-care d. Knowledge about mental/behavioral health issues and their connection to physical health e. Knowledge about health behavior theories f. Knowledge of basic public health principles g. Knowledge about the community served h. Knowledge about United States health and social service systems
Skill 4: Service coordination skills a. Ability to identify and access resources b. Ability to network and build coalitions c. Ability to provide follow-up	Skill 3: Service Coordination and Navigation Skills a. Ability to coordinate care (including identifying and accessing resources and overcoming barriers) b. Ability to make appropriate referrals c. Ability to facilitate development of an individual and/or group action plan and goal attainment d. Ability to coordinate CHW activities with clinical and other community services e. Ability to follow-up and track care and referral outcomes
Skill 5: Capacity-building skills a. "Empowerment" ability to identify problems and resources to help clients solve problems themselves b. Leadership	Skill 4: Capacity Building Skills a. Ability to help others identify goals and develop to their fullest potential b. Ability to work in ways that increase individual and community empowerment c. Ability to network, build community connections, and build coalitions d. Ability to teach self-advocacy skills e. Ability to conduct community organizing
Skill 6: Advocacy skills a. Ability to speak up fro individuals or communities and withstand intimidation	Skill 5: Advocacy skills a. Ability to contribute to policy development b. Ability to advocate for policy change c. Ability to speak up for individuals and communities

1998 Skills NCHAS[17]	Final Skills
Skill 7: Teaching skills a. Ability to share information one on one b. Ability to master information, plan and lead classes, and collect and use information from community people	Skill 6: Education and Facilitation skills a. Ability to use empowering and learner-centered teaching strategies b. Ability to use a range of appropriate and effective educational techniques c. Ability to facilitate group discussions and decision-making d. Ability to plan and conduct classes and presentations for a variety of groups e. Ability to seek out appropriate information and respond to questions about pertinent topics f. Ability to find and share requested information g. Ability to collaborate with other educators h. Ability to collect and use information from and with community members
Skill 8: Organizational sills a. Ability to set goals and plan b. Ability to juggle priorities and manage time	Skill 9: Professional Skills and Conduct a. Ability to set goals and to develop and follow a work plan b. Ability to balance priorities and to manage time c. Ability to apply critical thinking techniques and problem solving d. Ability to use pertinent technology e. Ability to pursue continuing education and life-long learning opportunities f. Ability to maximize personal safety while working in community and/or clinical settings g. Ability to observe ethical and legal standards (e.g. CHW Code of Ethics, Americans with Disabilities Act [ADA], Health Insurance Portability and Accountability Act [HIPAA]) h. Ability to identify situations calling for mandatory reporting and carry out mandatory reporting requirements i. Ability to participate in professional development of peer CHWs and in net working among CHW groups j. Ability to set boundaries and practice self-care
	Skill 7: Individual and Community Assessment skills a. Ability to participate in individual assessment through observation and active inquiry b. Ability to participate in community assessment through observation and active inquiry
	Skill 8: Outreach skills a. Ability to conduct case-finding, recruitment and follow-up b. Ability to prepare and disseminate materials c. Ability to build and maintain a current resources inventory
	Skill 10: Evaluation and Research Skills a. Ability to identify important concerns and conduct evaluation and research to better understand root causes b. Ability to apply the evidence-based practices of Community Based Participatory Research (CBPR) and Participatory Action Research (PAR) c. Ability to participate in evaluation and research processes including: i) Identifying priority issues and evaluation/research questions ii) Developing evaluation/research design and methods iii) Data collection and interpretation iv) Sharing results and findings d. Engaging stakeholders to take action on findings

Appendix C: C3 Project Team

Staff and Consultant Bios

E. Lee Rosenthal, PhD, MS, MPH, is a public health educator, researcher and advocate based in the US southwest where she is a member of the faculty at Texas Tech University Health Sciences Center in the Paul L. Foster School of Medicine. She is a co-founder of the Project on CHW Policy and Practice based at the University of Texas. Lee specializes in Community-based Participatory Research reflected in both the National Community Health Advisor Study she directed from 1994-1998 and in her current leadership of the C3 Project.

Carl H. Rush, MRP, was a lead author on the CHW National Workforce Study for HRSA (2007), and has supported studies on CHW employment policy for the states of Arizona, Texas and Indiana, and for Public Health Seattle/King County. He wrote and recently revised an e-learning series for CDC on policy and systems change to promote employment of CHWs. He has advised numerous national projects and CHW policy initiatives in more than 20 states. He is a co-founder of the Project on CHW Policy and Practice based at the University of Texas. He serves as the Research Director of the C3 Project.

Caitlin G. Allen, MPH, CHES, is the Assistant Research Director at the Center for Implementation and Improvement Sciences at Boston University. She served as a Project Research Assistant on the C3 project and currently serves as the Program Planner for the APHA CHW section. Her work focuses on the integration of CHWs into care teams, workforce development, and CHW training.

Jacqueline Ortiz Miller, BS, is an Outreach Education Coordinator for the Curtis D. Robinson Center for Health Equity in Connecticut. The focus of her work is promoting healthcare access through coordinating free preventative health education and screenings. As a Community Health Worker and advocate, she is embedded in the CHW movement within her state and is a current board member of the Connecticut Community Health Worker Association. Jacqueline is also a CHW Fellow for the "Community Health Worker Common Core (C3) Project.

Catherine Gray Haywood, BSW, Community Engagement Program Manager for Tulane's Prevention Research Center (PRC) and the current chair for Louisiana Community Health Outreach Network and she is also one of the C3 Fellows. Catherine received her BSW from Southern University at New Orleans. She is active on many leadership committees locally and nationally including serving as one of the founding member of Women with a Vision, a non- profit organization that has been in existence for the last 22 years. Catherine is also, working to educated communities around health disparities. Catherine served as CHW Fellow for the C3 Project.

Jessica Uriarte, DrPH, is an Advanced Fellow in Educational Leadership for the Department of Veterans Affairs and Baylor College of Medicine. She specializes in instructional design for health professions training and education in quality improvement and Interprofessionalism. She designs educational materials for a wide range of health professionals, including Community Health Workers, health department employees, medical school faculty and Interprofessional clinical teams. She served as Research Assistant to the C3 Project.

Durrell Fox, BS, is a Community Health Worker (CHW) with over 25 years of experience providing outreach, direct services, case management support and advocacy for adolescents/ young adults and their families. He continues in his CHW role coordinating and staffing a young men's rites of passage program on Saturdays in Boston. In October 2015 he also joined JSI as a Technical Advisor for the MA Department of Public Health's Prevention and Wellness Trust Fund (PWTF).Since 1991 Durrell has been involved in local, state, regional and national CHW workforce development efforts. Durrell first served as the Reader's Panel Co-Chair for the C3 Project and later as a consultant.

Gail Hirsch, MEd, is the Co-Director of the Office of Community Health Workers at the Massachusetts Department of Public Health, where she has coordinated state public health efforts to support community health workers for over 20 years. As a long-time leader in CHW organizing efforts in the state, she has served on the

Advisory Board of the Massachusetts Association of Community Health Workers (MACHW) since its inception in 2000. Nationally, Gail is an active leader and advisor on CHW issues. She co-chaired the Readers Panel of the C3 Project.

Sergio Matos, BS, has been a community health worker for over 25 years with 15 years championing the CHW field nationally and internationally through education, advocacy and research. He is a cofounder and executive director of the Community Health Worker Network of NYC. Sergio played a leadership role in a national campaign that led to the development of a national CHW definition and succeeded in getting a unique standard occupational classification (SOC # 21-1094) for CHWs. Sergio recently published a book with Sally Findley titled, Bridging the Gap – How Community Health Worker Improve the Health of Immigrants. He served as a consultant to the C3 Project.

Noelle Wiggins, EdD, MSPH, is the co-founder and director of the Community Capacitation Center at the Multnomah County Health Department. Noelle has over 25 years' experience training and supporting Community Health Workers (CHWs) and conducting participatory research about CHW programs and popular education methodology. From 1986 to 1990, Noelle trained and supported CHWs in a rural area of El Salvador. From 1990 to 1995, Noelle served as Director of La Familia Sana (The Healthy Family), a CHW program in Hood River, Oregon. Noelle was the lead author on the Roles and Competencies Chapter of the National Community Health Advisor Study. She served a consultant to the C3 Project.

Donald E. Proulx, MEd, served at the University of Arizona where he emphasized health professions curriculum and instruction. Don served as associate director (1992-2011) of the University of Arizona Area Health Education Centers Program. He was principal investigator and director of an initiative known as Project Jump Start, which nationally disseminated "A Core Curriculum Guidebook for a Community Health Worker (CHW) Basic Certificate Program." He served as principal investigator and co-director of the CHW National Education Collaborative disseminating "Key Considerations for Opening Doors. Don served as a consultant to the C3 Project.

J. Nell Brownstein, PhD, served for 25 years at the U.S. Centers for Disease Control and Prevention where she furthered the science base and provided technical training for CDC, HHS, and state health department staff on CHW issues. She also provided evaluation assistance to national projects and state programs and developed a CHW Training Resource and many other products including two CHW CDC TRAIN courses. She served as a member of the Health and Human Services Federal Workgroup and an advisor to the CHW Section of APHA. She has been an advisor to the C3 project.

Jorge Ibarra, MD, MPH, studied medicine in Mexico and later obtained his MPH in Epidemiology in the US. He served as educator and researcher at Instituto Nacional de Salud Pública and directed an urban health center. In the US, he has worked on the implementation, analyses and reporting of several population-based projects within academia and in the public health sector. He served as an evaluator/Technical Assistant support on a six state REACH CHW project. He is currently serving in an evaluation and technical assistant role with several local, regional and national public health and CHW projects including the C3 Project.

Leslie Hargrove, MCHES, serves as the Executive Director of the Texas AHEC East Coastal Regional Office. Reflective of Leslie's passion for the field, the Coastal office has long supported Community Health Workers as a critical part of the healthcare team. She has developed the infrastructure to serve as a training center for both CHWs and CHW Instructors. Leslie was also instrumental in working with the Department of Labor to have CHWs deemed an apprenticeable trade.

Robert M. Trachtenberg, MS, received his Bachelor's Degree in Psychology from the University of Wisconsin-Madison, his Master's Degree in Science Administration and Management from St. Michael's College and has training in Public Health from Boston University. He has been the Chief Executive Officer of the National AHEC Organization since April 2011, was a board member of the National AHEC Organization from 2006-2011 and was president of the National AHEC Organization from 2009-2010. Rob served as advisor to the C3 Project and NAO served as the fiscal home of the original Project.

CHW Networks Active in CHW Network Review Process

Arizona Community Health Worker Association
Arkansas Community Health Worker Association
Chicago CHW Local Network
Community Health Worker Initiative of Sonoma County
Community Health Worker Network of Buffalo
Community Health Worker Network of NYC
Community Health Workers Association of Connecticut
COWNT Coalition of Springfield, MA
Dallas-Ft. Worth CHW Association
Florida CHW Coalition, Inc.
Georgia Community Health Worker Network
Georgia Health Care Partnership
La Presa Community Center (San Antonio)
Louisiana Community Health Outreach Network
Maryland Community Health Worker Association
Massachusetts Association of Community Health Workers
Michigan Community Health Worker Alliance
Minnesota Community Health Worker Alliance
New Mexico Community Health Worker Association
Northern Texas Community Health Worker Resource Coalition
Oregon Community Health Worker Association
Promotores de Salud Community Health Workers of the Northwest
South Carolina Community Health Worker Association
Texas Gulf Coast CHWs/Promotores Association
United Voices Collaborative of Wisconsin
Wisconsin Community Health Worker Alliance Peer Exchange Network

A special thanks to all CHWs and CHW Network leaders who took time to offer their input to the Project team.