Migration Letters

Volume: 19, No: S5 (2022), pp. 1034-1047

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

An Integrative Review Of Interprofessional Teamwork And Collaboration Between Nursing And Social Worker; Scoping Review In Hospital Administrators Strategies

Saleh Ahmed Ali Al-Daghrir[1] , Mubarak Ateeq Hussain Alyami[2] , Badr Mohammad Saleh Al-Alhareth[3] , Hadi Jahwil Al Mansour[4] , Mahdi Hussein Al-Munjam[5] , Fahad Mohmmad Zidan Al Dubays[6] , Mohmmad Saleh Zidan Al-Abaas[7] , Hassan Shajaa Al Rizq[8] , Abdullah Nasser Alsalah[9] , Dleem Ali Alqahtani[10] , Ahmed Mater Alwadai[11] , Mohammad Saad Alshaklia[12] , Hailah Sbr Hamed Algehany[13] , Karimah Atig Hassan Alqadiah[14] , Ibrahim Mohmmad Almradef[15] , Muhammad Mana Al-Munjam[16] Samah Farhan Alanazi[17]

Abstract

Goals:

Community Health Workers (CHWs) help underprivileged people get better results. Their interaction among medical teams hasn't been well researched, though. The aim of this integrative review was to find interprofessional cooperation and collaboration between CHWs and health care teams by looking at published research reports that showed better health outcomes as a result of CHW intervention.

Methods:

A total of 47 studies spanning 33 years were reviewed using an integrative literature review methodology for evidence to support the following a[1]ssumptions of effective interprofessional teamwork between CHWs and health care teams: One or more of the following: (1) equality;

[1]Nursing Technician, Primary Health Care Center In Jerba, Najran
[2]Sociology, King Khalid Hospital
[3]Senior Specialist In Health And Hospitals Management, Public Health NAJRAN
[4]Nursing, General Medical Authority, Najran
[5]Healthy Assistant, Najran General Medical Authority
[6]Health Information Technician, Al-Hudan Health Centre, Najran
[7]Health Information Technician, NAHUQA Health Centre, Najran
[8]Al-Husayniyah Health Center, Health Information Technician
[9]Nursing Technician, King Khalid Hospital
[10]Health Administration, Al Harejah General Hospital
[11]Health Assistant Nursing, Al Harejah General Hospital
[12]Hospital Administration Specialist, Jeddah Mental Health Hospital.
[13]Social Worker, Jeddah Health Affairs
[14]Nursing Technician, Najran General Hospital, Najran
[15]Nursing Specialty, Aldammam, Badr District Health Center
[16]Social Worker, Medical Authority, Najran
[17]Nursing Technician, Third Health Assembly

(2) common knowledge of roles, norms, values, and team objectives; (3) collaboration; (4) interdependence; and (5) synergy.

Findings:

Out of the 47 research, 12 mentioned at least one effective interprofessional cooperation premise. All five interprofessional collaboration assumptions were supported by four research.

Conclusions:

The four papers that this integrative review found are models of successful interprofessional collaboration between CHWs and medical teams. The nature of interprofessional cooperation and teamwork in connection to patient health outcomes requires more research.

Introduction

Background

For those who are underprivileged, community health workers (CHWs) can enhance results.(1, 2) There is proof that CHW interventions enhance illness prevention, health promotion, and health care management in underprivileged groups. Community health workers boost health promotion activities like cancer screenings and vaccines, show net cost savings, and improve the treatment of chronic illnesses like diabetes, asthma, and mother-child health concerns.[1-3]This data has increased interest in novel CHW models. Delivery systems work to address quality and cost issues, increase cultural congruence, and enhance health care accessibility for the expanding immigrant population as well as other marginalized, vulnerable, and isolated groups of individuals. The CHW model offers a way to accomplish these objectives.[4–6]

Currently, there is a nationwide push to increase the utilization of CHWs for enhancing public health. In 2011, the CDC and Division for Heart Disease and Stroke Prevention released Addressing Chronic Disease through CHWs: A Policy and Systems-Level Approach that proposed states integrate CHWs in communities facing high risks associated with chronic disease prevention. Additionally, as part of their strategic plan against hypertension's adverse effects on society, IOM endorsed using CHW services routinely.[7,8] The Affordable Care Act (ACA) acknowledged promoting engagement between healthcare providers with medical assistance-seeking individuals from underserved areas toward better wellness outcomes necessitated involving more CHW personnel effectively[9]. Moreover; it was found necessary by CDC experts to provide additional support towards strengthening existing programs utilizing Community Health Workers(CHWS). This move helps eliminate disparities tied around effective means used tackling diabetes management efforts across multiple community groups within society at large[10].

Simultaneously, a number of national and international organizations started advocating for interprofessional collaboration and team building as a component of the health care system overhaul[11]. This early appeal was started by the IOM's "Crossing the Quality Chasm..." report from 2001. Almost ten years later, the World Health Organization[12] recognized that, in order to improve primary care health systems, there was an urgent need to include interprofessional education and collaborative practice into global health policy, education, and

services. Ultimately, key skills for interprofessional collaborative practice were proposed in 2011 by an expert panel of the Interprofessional Education Collaborative.[13]

Furthermore, the creation of community-based interprofessional teams inside patient-centered medical homes (PCMHs), a paradigm for primary care reform, has received support from several national health care organizations (HMOs)[14–18].

The nature and extent of teamwork and cooperation with CHWs within health care teams is not fully understood, despite the compelling evidence supporting the employment of CHWs and the nationally acknowledged necessity for collaborative practice in care giving. Thus, the goal of this integrative literature review was to investigate interprofessional cooperation and teamwork with CHWs in studies that showed improved health outcomes as a consequence of CHW intervention.

Collaboration and Interprofessionality

Interprofessional cooperation and teamwork may enhance patient outcomes and accessibility to medical treatment, according to research.[12, 19–30] Furthermore, health care professionals who collaborate with others are more productive and have greater job satisfaction than those who don't.28, 31, and 32

D'Amour and Oandasan33 introduced the term "interprofessionality," which they describe as "the development of a cohesive practice between professionals from different disciplines," in reaction to disjointed health care practices. It is the method by which experts consider and create approaches to their work that offer a comprehensive and well-rounded response to the demands of the client, family, or population.[31] (page 9) Different from multidisciplinary work, which is a process in which different disciplines work independently and concurrently on a same project, interprofessionality reflects a lower level of collaboration on the spectrum.

In the context of interprofessional teams, it is crucial to comprehend the notion of "collaboration," which has been highlighted as essential to ensuring high-quality healthcare33. "The idea of sharing and implies collective action oriented toward a common goal, in a spirit of harmony and trust, particularly in the context of health professionals," is how collaboration is defined.[32] A "negotiated agreement between professionals which values the expertise and contributions that various healthcare professionals bring to patient care" is what interprofessional cooperation is.[33] and works best when team members appreciate differing viewpoints and have open lines of communication.35 D'Amour et al.[34] developed four principles connected to collaboration: power, sharing, partnership, and interdependency, based on an examination of the literature on collaborative practice.

"A group of people working together to achieve common purpose for which they hold themselves mutually accountable" is the definition of a team.[35] The formation of teams is predicated on the idea that groups may perform better than individuals in complicated tasks where there is a stake in the result and when resource efficiency is required. Shared work products, interconnected tasks, shared accountability for outcomes, adherence to a single strategy, and cooperative relationship management across organizational boundaries are all essential components of collaboration.36

Effective cooperation is a prerequisite for collaboration. The task that has the potential to lead to cooperation is supported by the atmosphere that is created via teamwork. The synergy that team members produce is most directly tied to collaboration. Building a team environment that combines the viewpoints of all professionals and fosters a sense of respect and trust for each other are two essential and consistent components of collaboration. The first is the creation of collective action that handles the complexity of client demands[36]. The second is the creation of a team life.[33]

Model for Integrative Review

Rice[37] describes teamwork as "a mechanism for putting collaboration into effect," which makes a connection between teamwork and collaboration.[37] Rice (p. 62) listed five collaborative tenets that provided the conceptual basis for this integrative evaluation. These presumptions include: (1) a common understanding of the roles, norms, values, and objectives of the team; egalitarian, cooperative, and interdependent team dynamics; and the benefits of the team's combined efforts and shared decision-making for patients outweigh those of the individual disciplines acting alone.

The following is how Rice37's assumptions about successful cooperation that lead to successful collaboration were operationalized for this review:

1. A common comprehension. Mutual comprehension of the team's responsibilities, conventions, values, and objectives: Evidence of precisely stated project interventions goals, team member responsibilities, or team members' alignment with purpose and values. This assumption will be referred to as "shared understanding" for the purposes of this assessment.
2. Egalitarianism. An egalitarian team functions by respecting the opinions of patients and their families when making decisions, defining goals, or making choices. This shows that patients and families are an integral component of the health care team.
3. Cooperation. A cooperative team is one that meets regularly or participates in joint training to demonstrate that it values and appreciates the participation and contributions of all of its members.
4. Interdependence. The way a team functions is interdependent: There is a lack of autonomy or independence, as seen by team meetings and role group consultations.
5. Combine. The patient benefits more from the team's joint efforts and collaborative decision-making than from the contributions of any one specialty working alone. This evaluation will use the term "synergy," which is defined as a method of working that produces an output that is superior to what any one person could produce alone,39 to refer to this assumption as demonstrated by the fact that the results of interventions are ascribed to the combined team effort.

Goal

This integrative review set out to investigate interprofessional cooperation and collaboration with CHWs in studies that showed improved health outcomes following CHW intervention. (1) Did the CHW perform as a part of the healthcare team? was one of the main questions that

directed the review process. and (2) Did CHWs and healthcare teams operate under the same presumptions about collaboration as described by Rice[37]

Techniques

In two significant systematic reviews of the literature, evidence of Rice's five assumptions of successful cooperation between CHWs and providers was found using an integrated review methodology40.1, 2 In order to find peer-reviewed studies that reported on the health effects of CHW treatments, a review of the literature was done. MEDLINE, Psych INFO, Cochrane Reviews, CINAHL, and the World Wide Web were among the electronic databases used to publish these research in English between 1996 and 2013[38]. Primary care, health outcomes, community health worker(s), and synonyms for CHW, such as lay health worker, outreach worker, health advocate, and promotora de salud, were among the important search terms. By using these keywords, we were able to locate two thorough systematic reviews of studies evaluating the impact of CHW treatments[39].

The Agency for Healthcare Research and Quality (AHRQ)1 selected studies that looked at the cost, results, and features of CHW therapies between 1980 and November 2008 in their first systematic review. All American-conducted research that was published in English was reviewed. Studies with less than [40] participants, those that weren't original research, and those that didn't cover subjects related to the study's main questions were all removed. Based on the AHRQ Comparative Effectiveness Guide, it assigned an excellent, fair, or poor rating to the studies' quality.[41-43] These writers found 53 unique research papers in total.

The New England Comparative Effectiveness Public Advisory Council conducted a second systematic review that updated the AHRQ study from January 2008 to April 2013.[44] Their focus was on the impact of CHW interventions and they used rigorous search criteria and quality ratings based on the AHRQ Comparative Effectiveness Guide, resulting in an initial pool of 18 studies[45]. These were combined with other good or fair-quality studies dating back from 1980 to create a database of total [46,47] reliable studies reporting positive health outcomes as a result for over three decades due solely to their intervention programs by CHWs (excluding those focused only improved patient knowledge/satisfaction). This integrative review is exclusively based on these selected research works which offer strong evidence towards this regard.

Data Abstraction

The study goal, the existence of a team including the CHW, and the teamwork assumptions (shared understanding, egalitarianism, collaboration and interdependence, and synergy) were extracted from each of the [47] research reports. Research that reported the same intervention in many publications were analyzed and totaled as a single research.

Data Reduction

Each study was scrutinized to determine if the CHW collaborated with other health professionals. To be tagged as team evidence, a study necessitated that the CHW worked hand-in-hand with at least one professional coming from any medical field or acknowledged membership in either an interprofessional or multidisciplinary group. Consequently, 35 studies failed to meet this criterion and were excluded from review database creation. The remaining

dozen underwent examination for signs of effective teamwork which included synergy, shared understanding, egalitarianism/cooperative work undertakings & promoting efficient performance within dependent groups while employing pre-identified criteria - shared comprehension/understanding (1), cooperative approachability (2), equal participation levels amongst members(3); mutual dependence requirements across tasks/responsibilities rested upon by all collaborating parties collectively responsible towards achieving stipulated goals.(4); harmonious collaboration resulting in improved overall output not possible through individual efforts alone due to developed ties based on trust/honing skills tailored per diverse practices engaging patients/fellow healthcare personnel alike generating optimally functioning care-setting teams honing strengths via rehashed best-practices sharing framework employed during previous successful endeavors [5]).

Results

Twelve of the 47 best evidence papers that were analyzed showed that CHWs were collaborating with medical teams.42–56 Table 1 displays the data. Most of the time, CHWs made up the teams together with nurses, doctors, and nutritionists. Teams involving CHWs included social workers, project managers, research assistants, psychologists, representatives from community organizations, and a nursing director less commonly. In one research, a Hawaiian healer was involved.

Studies	Mutual comprehension	Fairness	Collaboration	Dependency	Synergy	Number of Study/Coded Assumptions
Beckham et al, 200842	X	X	X	X	X	5
Gary et al, 2003;48 Gary et al, 200549	X	X	X	X	X	5
Jandorf et al, 200544	–	X	X	–	–	2
Korfmacheret al, 199951	X	–	–	–	–	1
Krieger et al, 200956	X	X	X	X	X	5
Levine et al, 200345	–	X	–	–	X	2
Lujan et al, 200743	X	X	–	–	–	2
Schuler et al, 200050	–	–	X	–	–	1
Sixta and Ostwald, 200855	X	X	X	X	X	5
Spencer et al, 201154	–	X	–	–	–	1
Total no. of concepts/category	7	10	7	4	5	
Wang et al, 2010;52 Wang et al, 201253	–	X	–	–	–	1

Williams et al, 2001;46 Auslander et al, 200247	X	X	X	–	–	3

Seven of these twelve studies were coded for evidence of common understanding, the first presumption of effective cooperation.43–44, 46–49, 51–55–56 Clearly defined team responsibilities for the intervention and CHW recruitment based on shared values for leadership and communication skills are examples of shared understanding within the team.

Ten studies coded equality, the second premise of cooperation.42–49, 52–56 Examples of egalitarianism included patients' and/or families' active involvement as team members in decisions about the location of the CHW visit; goal-setting for the health plan, including physical activity schedules, blood pressure targets, and focus group participation; help with problem-solving; and recognition and consideration of patients' readiness for the intervention. As an illustration of equality, consider the following: "Encouraging patients with diabetes to learn how to manage their own disease is a vitally important mission for healthcare institutions, since the patient is ultimately the most significant provider of medical care."[42] (page 425).

For collaboration, the third premise of successful teamwork, seven research were coded. Examples included paperwork demonstrating shared communication and team members participating in joint talks and consultations.[42, 44, 46–50, 55–56] Cooperation can take many forms, such as attending routinely scheduled conferences, debriefings, and team meetings where CHWs and other members of the healthcare team discuss and work through patient difficulties.

Four research showed interdependence, the fourth premise of successful cooperation.[42, 48–49, 55–56] Instances of interdependence included evidence of regularly planned team meetings with the deliberate aim of obtaining a range of perspectives from all team members, a combination of team members seeing patients individually and together, and collaborative decision-making.

Five investigations identified synergy to be the fifth and final assumption required for productive cooperation.[42, 45, 48–49, 55–56] One example of synergy was attributing some of the benefits of cooperation to better patient outcomes. According to one research, the team had fortnightly discussions to "promote synergy" in addition to coordinating treatments.[48 (page 25)]Some particular instances of synergy are as follows:

The ongoing research into strategies to bridge the persistent health status gap between different minority populations and the majority of the US population seems to benefit from this [team] paradigm.[45 (page 360)]

These findings imply that major reductions in HbA1c lipids, blood pressure, and other health outcomes may arise from combined NCM [nurse case manager]/CHW therapies in general care.[48]

Out of the twelve investigations, four showed proof of each of the five fundamental presumptions required for productive cooperation.[42, 48–49, 55–56] The following traits were

shared by all four of these studies: These four studies were the only ones to show how a team functions in an interdependent manner. CHWs were members of the primary care team and had relationships with other members of the primary care team. Study participants were members of community health centers, public health clinics, or academic center primary care clinics. The study design involved the management of a chronic disease, with three of the studies pertaining to the management of type II diabetes and one to the management of asthma.

Discussion

This review aimed to determine whether the five basic assumptions of teamwork proposed by Rice - shared understanding, egalitarianism, cooperation, interdependence and synergy - were present in studies involving community health workers (CHWs) as part of healthcare teams with positive patient outcomes. Two systematic reviews spanning 33 years formed the basis of this integrative study. Out of a total database containing 47 studies, only 12 featured CHWs functioning within healthcare teams; however all twelve reported indications that elements associated with effective team collaboration were evident during their involvement . This finding supports calls made both at an international level by organizations such as IOM and WHO for interprofessional teamwork development which aims to underpin more robust and successful improvements in overall quality clinical care delivery.

A cooperative way of functioning and a common knowledge of responsibilities, norms, values, or objectives among team members were evident in more than half of the 12 studies in the integrative review database[42–43,46–49,51], and [55–56.42, 44, 46–50, 55–56] The aforementioned results bolster the notion that mutual comprehension, deference to personal roles, goal and value sharing, and collaboration are critical components of successful collaboration between CHWs and other members of the healthcare team. These results bolster the significance of collaboration and the requirement for consistent communication within the team.

Most studies found that health care teams implemented egalitarianism in their operations (42–49, 52–56). Encouraging patients and their families to participate actively in the healthcare team is a cornerstone of the Patient Centered Medical Home and aligns with the 2001 IOM11 report.14 This team attribute symbolizes a paradigm change from the conventionally paternalistic system, in which medical professionals make choices without consulting patients, to an inclusive and patient- and family-empowering system.

Regardless of rank or assigned leadership role, a third of the 12 studies (42, 48–49, 55–56) showed evidence of interdependence, indicating that these teams worked as a unit and consulted with one another. These results set interprofessional work apart from the multidisciplinary work process that occurs concurrently.[57] A move away from traditional barriers, such as medical dominance, concerns about professional turf, the sense of exclusive authority that may be developed in professional training, and ignorance of the abilities and roles of other team members, is supported by the interdependence amongst members of the health care team.37 These four studies (42, 48–49, 55–56) showed evidence of all the presumptions of successful collaboration and might act as models for successful collaboration between CHWs and other members of the healthcare team.

Approximately half of the research There was evidence shown in [42, 45, 48–49, 55–56] indicating patients benefited from collaboration in a synergistic way. The ultimate purpose of interprofessional collaboration is to achieve this desired outcome. The group understands this and works to guarantee that the result is superior to what any one member might do on their own. These results validate the PCMH paradigm and lend credence to the ACA9 and IOM58's calls for funding the formation of interprofessional teams for primary care practices that include CHWs.[14]

Implications

This integrative study provides a basic grasp of what successful cooperation and effective teamwork look like when a CHW is incorporated into interprofessional health care teams, with credit given to CHW treatments for the related favorable health outcomes. Just looking at the assumptions listed above, one can see how important they are in setting the groundwork for interprofessional collaboration. Effective cooperation requires the presence and reinforcement of certain components of teamwork.

In this integrative analysis, four research demonstrated each of Rice's five presumptions for productive cooperation.[37] Based on the features reported in these studies, it appears that the most favorable conditions for effective cooperation and coordination arise when CHWs are part of a primary care health team, represent the population they work with, receive cultural sensitivity training, and take part in the treatment of chronic conditions. Patients who attend community health, public health, or academic primary care clinics may exhibit good cooperation and collaboration due to other features mentioned in these four research.

As the workforce in healthcare practices is restructured, these findings have significant implications for all team members. It will require them to identify and collaborate effectively within their teams. However, this may not be an easy task as most health professionals are trained to work independently from other disciplines. Therefore, accepting Community Health Workers (CHWs) as equal participants on a healthcare team can prove challenging for those accustomed to licensed medical providers taking charge while unlicensed staff follow orders. All members of the team must undergo training so that they function optimally together in their respective roles; further more it would be prudent to initiate experiential pilot programs with continuous improvement evaluations because support from senior leadership such as setting clear mission statements &values, stated expectations, funding & manpower will also play a crucial role needed during restructuring processes.

When unlicensed healthcare professionals, including CHWs, are included in interprofessional teams, access to care for chronic diseases is improved, patient outcomes are improved, and health inequalities are decreased. The CHWs provide their contacts with community people, understanding of culture and customs, and expertise in health promotion, prevention, and screening. Public health clinics and community health facilities, which are mostly found in underprivileged and medically underserved regions, are dedicated to recruiting locals.[59,60]

It is no longer possible to provide patient care inside the compartments of certain health professions. Redesigning the workforce is necessary to handle the increasing number of people joining the healthcare system. Primary care practices will serve as the center of care access due

to the PCMH movement's emphasis on the formation of primary care teams. Thus, it is imperative that academics, clinicians, and policy makers in the health care field investigate the viability and benefits of incorporating CHWs into primary care while maintaining their advocacy role in community-based activities and projects.

The integration of CHWs into PCMH health care teams is the subject of several recently published reports that emphasize the necessity of institutional protocols, evaluation plans, teambuilding, clinical and management training for CHWs, clearly defined team roles, education of providers and CHWs about their respective roles, and team building.[61–63] Further research is required to determine the most effective ways to deliver team training, program assessment, role clarification, and team communication.

According to the IOM,58 the combination of interprofessional cooperation and collaboration with primary care workforce reform, which include CHWs, is poised to close the gap between primary care and public health. Through this integration, there is a chance to lower costs and health inequities while simultaneously enhancing patient and team satisfaction, chronic illness management, and access. It has the potential to be a model that strengthens the healthcare system as a whole by promoting the general health of people, families, and communities.

Limitations

It is necessary to consider the integrative review's limitations while analyzing its conclusions. It looked mostly at individual health outcomes studies after CHW interventions that weren't expressly created to look at the impact of cooperation and teamwork. Therefore, it's probable that certain aspects of collaboration and teamwork existed but weren't documented. It's also crucial to remember that the 35 trials that did not report CHW and care team collaboration still had successful patient outcomes. The value of these outcomes is not lessened by the fact that neither cooperation nor teamwork within the healthcare team were mentioned.

Conclusion

This integrative review found data demonstrating better health outcomes as a result of CHW intervention, as well as evidence of interprofessional cooperation and collaboration between CHWs within the healthcare team. As we learn more about the function of CHWs in interprofessional teams, these findings are crucial. To fully grasp the potential of this interprofessional approach, more research on the results of cooperation and collaboration with CHWs is required.

References

1. Viswanathan M, Kraschnewski J, Nishikawa B, et al. Outcomes of community health worker interventions. Evid Rep Technol Assess. Assessment No. 181. AHRQ Publication No. 09-E014. Rockville, MD: Agency for Healthcare Research and Quality. 6 2009.
2. The New England Comparative Effectiveness Public Advisory Council. Community health workers: a review of program evolution, evidence on effectiveness and value, and status of workforce development in New England: The Institute for Clinical and Economic Review. Web site. http://cepac.icer-review.org/wp-content/uploads/2011/04/CHW-Final-Report-07-26-MASTER1.pdf. Published May 24, 2013. Updated, July, 2013. Accessed April 2, 2014.

3. Massachusetts Department of Public Health. Community health workers in Massachusetts: improving health care and public health. 2009. Web site. http://www.mass.gov/eohhs/docs/dph/com-health/com-health-workers/legislature-report.pdf. Published December, 2009. Accessed April 6, 2014.
4. American Public Health Association. Support for community health workers to increase health access and to reduce health inequities. Policy number 20091. Web site. http://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/09/14/19/support-for-community-health-workers-to-increase-health-access-and-to-reduce-health-inequities. Updated 2009. Published November 10, 2009. Accessed April 2, 2014.
5. U.S. Department of Health and Human Services Health Resources and Services Administration Bureau of Health Profession. Community health workers evidence-based models toolbox: HRSA office of rural health policy. 2011. Web site. http://www.hrsa.gov/ruralhealth/pdf/chwtoolkit.pdf. Published August, 2011. Accessed July 10, 2014.
6. U.S. Department of Health and Human Services Bureau of Health Professions. Community health worker national workforce study. 2007. Web site. http://bhpr.hrsa.gov/healthworkforce/reports/chwstudy2007.pdf. Published March, 2007. Accessed March 10, 2014.
7. Center for Disease Control and Prevention. Addressing chronic disease through community health workers: a policy and systems-level approach. 2011. Web site. http://www.cdc.gov/dhdsp/docs/chw_brief.pdf. Published 2011. Accessed July 7, 2014.
8. Institute of Medicine. A population-based policy and systems change approach to prevent and control hypertension. The National Academies Press. Web site. http://www.iom.edu/Reports/2010/A-Population-Based-Policy-and-Systems-Change-Approach-to-Prevent-and-Control-Hypertension.aspx. Published February 22, 2010. Accessed April 12, 2014.
9. One hundred eleventh Congress of the United States of America. Patient protection and affordable care act, 42 (USC). 2010. Pub L No. 111-148, 124 Stat 855. Ammended May 1, 2010.
10. Centers for Disease Control and Prevention. Community health workers/promotores de salud: critical connections in communities. Web site. http://www.cdc.gov/diabetes/projects/pdfs/comm.pdf. Accessed July 7, 2014.
11. Institute of Medicine. Committee on Quality of Health Care in America. Crossing the quality chasm: a new health system for the 21st century. National Academies Press; 2001. Web site. http://www.nap.edu/catalog.php?record_id=10027. Published March, 2001. Accessed April 12, 2014.
12. World Health Organization (WHO). Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization, Department of Human Resources for Health. 2010. Web site. http://www.who.int/hrh/resources/framework_action/en/. Published 2010. Accessed August 16, 2014.
13. Interprofessional Education Collaborative Expert Panel. Core competencies for interprofessional collaborative practice: report of an expert panel. Washington, DC: Interprofessional Education Collaborative. 2011. Web site. http://www.aacn.nche.edu/education-resources/ipecreport.pdf. Accessed on August 16, 2014.
14. Agency for Healthcare Research and Quality. Patient centered medical home: resource center. Web site. http://pcmh.ahrq.gov/. Updated 2014. Accessed August 16, 2014.
15. American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, American Osteopathic Association. Joint principles of the patient-centered medical home. Del Medical J. 2008;80 (1):21–22.

16. National Partnership for Women and Families. Patient-centered medical home. Web site. http://www.nationalpartnership.org/issues/health/patient-centered-medical-home.html. Published 2014. Updated 2015. Accessed August 16, 2014.
17. Institute of Medicine. Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. The future of nursing: leading change, advancing health. National Academies Press; 2010. Web site. http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx. Published 2011. Accessed April 12, 2014.
18. Blue Cross Blue Shield. Blue Cross and Blue Shield patient-centered medical home programs are improving the practice and delivery of primary care in communities nationwide. Available June 4, 2012. Web site. http://www.bcbs.com/healthcare-news/bcbsa/blue-cross-and-blue-shield-4.html. Published June 4, 2012. Accessed August 16, 2014.
19. Archer J, Bower P, Gilbody S, et al. Collaborative care for depression and anxiety problems. Cochrane Database Syst Rev. 2012;10:1–277.
20. Bower P, Campbell S, Bojke C, Sibbald B. Team structure, team climate and the quality of care in primary care: an observational study. Qual Saf Health Care. 2003;12 (4):273–279.
21. Davenport DL, Henderson WG, Mosca CL, Khuri SF, Mentzer RM Jr. Risk-adjusted morbidity in teaching hospitals correlates with reported levels of communication and collaboration on surgical teams but not with scale measures of teamwork climate, safety climate, or working conditions. J Am Coll Surg. 2007;205 (6):778–784.
22. Schmid AA, Kapoor JR, Miech EJ, et al. A multidisciplinary stroke clinic for outpatient care of veterans with cerebrovascular disease. J Multidiscip Healthc. 2011;4:111–118. doi:10.2147/JMDH.S17154.
23. Richardson LP, Ludman E, Lindenbaum J, et al. Collaboartive care for adolescents with depression in primary care: a randomized clinical trial. JAMA. 2014;312 (8):809–816.
24. Thota AB, Sipe TA, Byard GJ, et al. Collaborative care to improve the management of depressive disorders: a community guide systematic review and meta-analysis. Am J Prev Med. 2012;42 (5):525–538.
25. Pape GA, Hunt JS, Butler KL, et al. Team-based care approach to cholesterol management in diabetes mellitus: two-year cluster randomized controlled trial. Arch Intern Med. 2011;171 (16):1480–1486.
26. Howard-Thompson A, Farland MZ, Byrd DC, et al. Pharmacist-physician collaboration for diabetes care: cardiovascular outcomes. Ann Pharmacother. 2013;47 (11):1471–1477.
27. Sorbero ME, Farley DO, Mattke S, Lovejoy SL. Outcome measures for effective teamwork in inpatient care: final report. Rand Corporation; 2008. Web site. http://www.rand.org/content/dam/rand/pubs/technical_reports/2008/RAND_TR462.pdf. Accessed August 16, 2014.
28. Raab CA, Will SEB, Richards SL, O'Mara E. The effect of collaboration on obstetric patient safety in three academic facilities. J Obstet Gynecol Neonatal Nurs. 2013;42 (5):606–616.
29. Neily J, Mills PD, Young-Xu Y, et al. Association between implementation of a medical team training program and surgical mortality. JAMA. 2010;304 (15):1693–1700.
30. Zatzick D, Russo J, Lord SP, et al. Collaborative care intervention targeting violence risk behaviors, substance us, and posttraumatic stress and depressive symptoms in injured adolescents: a randomized clinical trial. JAMA Pediatrics. 2014;168 (8):532–539.
31. Abramson JS, Mizrahi T. When social workers and physicians collaborate: positive and negative interdisciplinary experiences. Soc Work. 1996;41 (3):270–281.
32. Baggs JG, Ryan A. Intensive care unit nurse-physician collaboration and nurse satisfaction. Nurs Econ. 1990;8 (6):386–392.
33. D'amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. J Interprof Care. 2005;19 (S1):8–20.

34. Zwarenstein M, Goldman J, Reeves S. Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. Cochrane Database Syst Rev. 2009;3 (CD000072):1–30.
35. Buscemi J, Steglitz J, Spring B. The impact of team science collaborations in health care: a synopsis and comment on Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. Transl Behav Med. 2012;2 (4):378–379.
36. Scholtes PR, Joiner BL, Streibel BJ. The Team Handbook. 3rd ed. Madison, WI: Oriel; 2003.
37. Rice AH. Interdisciplinary collaboration in health care: education, practice, and research. Natl Acad Pract Forum. 2000;2 (1):59–73.
38. Barr O. Interdisciplinary teamwork: consideration of the challenges. Br J Nurs. 1997;6 (17):1005–1010.
39. Gage M. From independence to interdependence: creating synergistic healthcare teams. J Nurs Adm. 1998;28 (4):17–26.
40. Whittemore R, Knafl K. The integrative review: updated methodology. J Adv Nurs. 2005;52 (5):546–553.
41. Agency for Healthcare Research and Quality. Methods guide for effectiveness and comparative effectiveness reviews. Web site. http://effectivehealthcare.ahrq.gov/ehc/products/60/318/CER-Methods-Guide-140109.pdf. Published October, 2007. Updated January, 2014. Accessed July 7, 2014.
42. Beckham S, Bradley S, Washburn A, Taumua T. Diabetes management: utilizing community health workers in a Hawaiian/Samoan population. J Health Care Poor Underserved. 2008;19 (2):416–427.
43. Lujan J, Ostwald SK, Ortiz M. Promotora diabetes intervention for Mexican Americans. Diabetes Educ. 2007;33 (4):660–670.
44. Jandorf L, Gutierrez Y, Lopez J, Christie J, Itzkowitz SH. Use of a patient navigator to increase colorectal cancer screening in an urban neighborhood health clinic. J Urban Health. 2005;82 (2):216–224.
45. Levine DM, Bone LR, Hill MN, et al. The effectiveness of a community/academic health center partnership in decreasing the level of blood pressure in an urban African-American population. Ethn Dis. 2003;13 (3):354–361.
46. Williams JH, Belle GA, Houston C, Haire-Joshu D, Auslander WF. Process evaluation methods of a peer-delivered health promotion program for African American women. Health Promot Pract. 2001;2 (2):135–142.
47. Auslander W, Haire-Joshu D, Houston C, Rhee CW. A controlled evaluation of staging dietary patterns to reduce the risk of diabetes in african-american women. Diabetes Care. 2002;25 (5):809–814.
48. Gary TL, Bone LR, Hill MN, et al. Randomized controlled trial of the effects of nurse case manager and community health worker interventions on risk factors for diabetes-related complications in urban african americans. Prev Med. 2003;37 (1):23–32.
49. Gary TL, Hill-Briggs F, Batts-Turner M, Brancati FL. Translational research principles of an effectiveness trial for diabetes care in an urban african american population. Diabetes Educ. 2005;31 (6):880–889.
50. Schuler ME, Nair P, Black MM, Kettinger L. Mother-infant interaction: effects of a home intervention and ongoing maternal drug use. J Clin Child Psychol. 2000;29 (3):424–431.
51. Korfmacher J, O'Brien R, Hiatt S, Olds D. Differences in program imp nurses and paraprofessionals providing home visits during pregnancy and infancy: a randomized trial. Am J Public Health. 1999;89 (12):1847–1851.

52. Wang EA, Hong CS, Samuels L, Shavit S, Sanders R, Kushel M. Transitions clinic: creating a community-based model of health care for recently released California prisoners. Public Health Rep. 2010;125 (2):171–177.
53. Wang EA, Hong CS, Shavit S, Sanders R, Kessell E, Kushel MB. Engaging individuals recently released from prison into primary care: a randomized trial. Am J Public Health. 2012;102 (9):e22–e29.
54. Spencer MS, Rosland AM, Kieffer EC, et al. Effectiveness of a community health worker intervention among African American and Latino adults with type 2 diabetes: a randomized controlled trial. Am J Public Health. 2011;101 (12):2253–2260.
55. Sixta CS, Ostwald S. Texas-Mexico border intervention by promotores for patients with type 2 diabetes. Diabetes Educ. 2008;34 (2):299–309.
56. Krieger J, Takaro TK, Song L, Beaudet N, Edwards K. A randomized controlled trial of asthma self-management support comparing clinic-based nurses and in-home community health workers: the Seattle–King county healthy homes II project. Arch Pediatr Adolesc Med. 2009;163 (2):141–149.
57. D'Amour D, Ferrada-Videla M, San Martin Rodriguez L, Beaulieu M. The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. J Interprof Care. 2005;19 (S1):116–131.
58. Institute of Medicine. Primary care and public health: exploring integration to improve population health. The National Academies Press. 2012. Web site. http://www.iom.edu/Reports/2012/Primary-Care-and-Public-Health.aspx. Published 2012. Accessed June 16, 2014.
59. Bond MA, Haynes MC, Toof RA, Holmberg MD, Quinteros JR. Healthdiversity: practices that support diverse staffing in community health centers. University of Massachusetts, Lowell: Center for Women and Work. 2011. Web site. http://www.uml.edu/docs/Healthy%20Diversity%20Report_tcm18-49658.pdf. Accessed August 16, 2014.
60. Whelan EM. The importance of community health centers: engines of economic activity and job creation. Center for American Progress. Web site. https://www.americanprogress.org/issues/healthcare/report/2010/08/09/8195/the-importance-of-community-health-centers/. Published August 9, 2010. Accessed June 16, 2014.
61. Islam N, Nadkatni SK, Zahn D, Skillman M, Kwon SC, Trinh-Shevrin C. Integrating community health workers within Patient Protection and Affordable Care Act implementation. J Public Health Management Practice. 2015;21 (1):42–50. doi:10.1097/PHH.0000000000000084.
62. Matiz LA, Pereyz PJ, Jacotin PG, Cruz C, Ramirez-Diaz E, Nieto AR. The impact of integrating community health workers into patient-centered medical home. J Prim Care Community Health. 2014;5 (4):271–274. doi:10.1177/2150131914540694.
63. Wennerstrom A, Bui T, Harden-Barrios J, Price-Haywood EG. Integrating community health workers into a patient-centered medical home to support disease self management among Vietnamese American: lessons learned. Health Promot Pract. 2015;6 (1):72–83. doi:10.1177/1524839914547760.