AADE POSITION STATEMENT
Community Health Workers in Diabetes Management and Prevention

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Introduction

A complex set of social, political, historical, environmental, and behavioral factors influence both the onset of type 2 diabetes and the sustainability of diabetes self-care practices. No single set of interventions is capable of addressing all of these influences. Rather, multiple approaches that include education, social support, policies, and community programs are needed. These approaches should also be directed at multiple levels, including individuals, families, communities, healthcare providers, and policy makers. To strengthen the links between healthcare providers and community members, many health promotion and diabetes programs are engaging community health workers (CHW).[1-5]

CHWs are uniquely positioned to collaborate with diabetes educators and other health care providers to improve the quality of diabetes education, care, and prevention in communities. CHWs who are dedicated to diabetes prevention and care, and who have completed specialized training in this area, are especially needed. For the purposes of this paper and other official communications of the American Association of Diabetes Educators (AADE), CHWs will be described as individuals who serve as bridges between their ethnic, cultural, or geographic communities and health care providers and engage their community to prevent diabetes and its complications through education, lifestyle change, self-management and social support.

AADE maintains the following positions

1. Diabetes educators and other health care professionals should support the role of CHWs in serving as bridges between the health care system and people with and at risk for diabetes;

2. Diabetes educators and other health professionals should support the role of CHWs in primary and secondary prevention;

3. CHWs should receive effective training in core diabetes skills and competencies;

4. There should be reciprocal exchange of information and support between CHWs and the health care team to facilitate the best outcomes for people with and at risk for diabetes; and

5. Diabetes educators and other health care professionals should support continued research that evaluates the roles, contributions and effectiveness of CHWs.

Background and Definitions

CHWs—also known as community health advocates, lay health advisors, lay health educators, community health representatives, tribal diabetes educators, peer health promoters, community health outreach workers, and *promotores de salud*—are

> *Frontline public health workers who are 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.*[6]

In 1999, the AADE sponsored a series of focus groups that explored the collaboration between diabetes educators and CHWs to achieve common goals. AADE convened the Diabetes Community Health Workers Summit in 2002 to further explore the roles, training needs, and scope of practice issues. The first CHW position paper was developed from that dialogue and from a review of the published literature.[7] In 2008, AADE asked the writing group to review the original position paper in light of current research and practice and to write this update.

Formal involvement of CHWs for diabetes prevention and care is garnering increasing interest across the country, but it is not a new concept. All cultures from the beginning of civilization have had a lay health care system consisting of people who are natural helpers.[8] These are "particular individuals to whom others naturally turn for advice, emotional support, and tangible aid".[9] Recently, the Health Resources and Services Administration (HRSA) published a report on the Community Health Worker National Workforce Study.[10] This report summarized four periods marking the history of the CHW workforce. These range from the "*early documentation"* period (1966-1972) to the recent period (2000-2006) which is focused on "*public policy*" actions resulting in legislation passed in several states regarding CHWs and recommendations in the 2003 Institute of Medicine Report (IOM) regarding their integration into multidisciplinary teams.[11] The HRSA report indicated that approximately 86,000 CHWs assisted communities across the United States in 2000. Based on 900 survey respondents, the summary of paid and volunteer CHWs indicated they are predominantly female, but represent a broad variety of backgrounds and educational levels. (Table 1)

The communities served by CHWs are also diverse in ethnic and racial background and included underserved groups, such as uninsured, immigrant, homeless, and isolated rural residents. CHWs serve individuals with a number of illnesses and disabilities.[10,12] One of the largest and most developed programs of CHWs in the United States was established in 1968 with early federal funding from the Office of Economic Opportunity and was transferred to the Indian Health Service (IHS).[10] Currently, over 1700 community health representatives work with tribal managed or IHS programs in most of the more than 550 federally recognized American Indian and Alaska Native communities. This group of CHWs is well-established and has evolved to include a national organization with its own leadership and mission statement, website, regular educational conferences, and ongoing advocacy activities.

The community-based system of care and social support provided by CHWs complements, but does not substitute for, the more specialized services of health care providers.[13] CHWs are uniquely skilled to serve as bridges between community members and healthcare services because they live in the communities in which they work, understand how to translate "medical talk" to community members and how to explain the community perspective to providers, and communicate in the language of the people in their communities. They know the cultural buffers, such as cultural identity, spiritual coping, and traditional health practices that can help community members cope with stress and promote positive health outcomes.[14] A critical asset of programs that engage CHWs is that they build on already existing community network ties that contribute to the acceptance and sustainability of effective community programs.[11,15] CHWs use a number of core skills and competencies to provide this community-based system of care and social support. The National Community Health Advisor Study in 1998 identified seven core services provided by CHWs.[16]

More recently, the HRSA Workforce Study reported on nine literature reviews, published between 2002 and 2006, that represented the best available research on interventions using CHWs. This study characterized the work of CHWs into five distinct "models of care": member of care delivery team, navigator, screening and health education provider, outreach/enrolling/informing agent, and organizer.[10] Regarding the effectiveness of CHW interventions, the report states: "Due to the variety of topics, methodologies, and results, the collective research did not provide a systematic evaluation of CHW effectiveness and best practices". It did present, however, valid-if fragmented-evidence of CHW contributions to the delivery of health care, prevention, and health education for underserved communities. Also, these literature reviews could provide a useful framework on which to base future research".[10]

The first systematic review of the effectiveness of community health workers specific to diabetes care, done by Norris *et al* found "preliminary data demonstrating improvements in participant knowledge and behavior".[17] From the studies reviewed, the authors also classified the roles of CHWs into five types of service: patient care and support; education and assistance with skill development; instrumental support; care coordination/ health care liaison; and social support.[2,3,5,18] At least eleven additional studies published since the review by Norris support the use of CHWs in diabetes care.[19-30] In a recent study of employers of CHWs,[10] about half had educational or training requirements for the positions. Twenty-one percent reported that at least a high school diploma (or GED high school equivalency) was expected. A bachelor's degree was required by 32% of the organizations. Once hired, most employers required some kind of training either through continuing education (68%), classroom instruction (32%), or mentoring (47%). The length of training reported varied greatly and ranged from nine to 100 hours. Several diabetes training programs for CHWs have shared their objectives and curriculum strategies as well as results of their formative evaluations to assist others in developing and supporting a CHW program.[32]

The institutional and political base of support for community health workers is expanding. The IOM recommends that health care systems support the use of CHWs to address racial and ethnic disparities in health care.[11] The IOM has stated that "community health workers offer promise as a community-based resource to increase racial and ethnic minorities' access to health care and to serve as a liaison between health care providers and the communities they serve."[11] In 2002, the American Public Health Association passed a resolution entitled "Recognition and Support for Community Health Workers' Contributions to Meeting our Nation's Health Care Needs."[33] The Health Resources Service Administration mandates that all of its area health education centers use CHWs for outreach to community members. A number of states have legislation in support of CHWs, in some cases collaborating with the Centers for Disease Control and Prevention's Diabetes Prevention and Control Programs within state health departments.

AADE supports the role that CHWs play in diabetes care and prevention. Table 2 provides recommendations to enhance the interaction and communication with other members of the health care team. They can also help educate other health care providers about community health needs and the cultural relevance of diabetes education, care, and prevention programs. Such collaborations can increase the effectiveness of health care teams within communities and improve health outcomes for community members with and at risk for diabetes.

Role of the Diabetes Educator

Diabetes educators support the role of CHWs in primary and secondary prevention and provide training in core diabetes skills and competencies to these individuals. Diabetes educators supervise CHWs who have non-technical, non-instructional responsibilities in DSME/T programs. In this structure, CHWs are important members of the diabetes health care team who can facilitate community-based diabetes care, education, and prevention.

References

1. Hopper SV, Miller JP, Birge C, Swift J. A randomized study of the impact of home health aides on diabetes control and utilization patterns. Am J Public Health. 1984; 74(6):600-602.

2. Brown SA, Harris CL. A community-based, culturally sensitive education and group-support intervention for Mexican Americans with NIDDM: a pilot study of efficacy. Diabetes Educ. 1995; 21(3): 203-210.

. 3. Corkery E, Palmer C, Foley ME, Schecter CB, Frisher L, Roman SH. Effect of a bicultural community health worker on completion of diabetes education in a Hispanic population. Diabetes Care. 1997; 20(3):254-257.

4. Lorig K, Gonzalez VM. Community-based diabetes self-management education: definition and case study. Diabetes Spectrum. 2000; 13(4): 234-238.

5. Gary TL, Bone L, Hill M, Levine D, McGuire M, Sauder C, Brancat F. A randomized controlled trial of nurse case-manager and community health worker team interventions to improve risk factors for diabetes-related complications in African Americans. Prev Med. 2003; 37:23-32.

6. U.S. Department of Health and Human Services Health Resources and Services Administration Bureau of Health Professions. Community Health Worker National Workforce Study. 2007. http://bhpr.hrsa.gov/healthworkfoce/chw. Accessed March 19, 2009.

7. Albright A, Satterfield D, Broussard B, Jack L, Mikami J, Perez G, Perez Rendon A. Position statement on diabetes community health workers by the American Association of Diabetes Educators. The Diabetes Educator, 2003;29(5):818-24.

8. Leninger MM. Culture Care Diversity and Universality: A Theory of Nursing. New York: National League of Nursing; 1991.

9. Eng E, Parker E. Natural helper models to enhance a community's health and competence. In: DiClemente RJ, Crosby RA, Kegler MC. Emerging Theories in Health Promotion Practice and Research. San Francisco: Jossey-Bass; 2002:126-156.

10. Health Resources and Services Administration. Community health worker national workforce study. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, March 2007.

11. Smedley BD, Stith AY, Nelson AR. Institute of Medicine (U.S.), Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Unequal treatment: Confronting racial and ethnic disparities. Washington D.C.:National Academies Press, 2003.

12. Brownstein JN, Norris SL, Chowdhury FM, Armour T, Jack L, Zheng X, Satterfield D. Effectiveness of community health workers in the care of persons with hypertension. Am J Prev Med. 2007;32:435-447.

13. The Community Health Worker Committee of the Oregon Public Health Association. Community health worker position paper. Portland, Ore: Oregon Public Health Association; 1999.

14. Walters KL, Simoni JM. Reconceptualizing native women's health: an indigenist stress coping model. Am J Public Health. 2002;92(4):520-524.

15. Israel B. Social networks and social support: implications for natural helper and community level interventions. Health Educ Q. 1985;12(1):65-80.

16. University of Arizona and Annie E. Casey Foundation. The national community health advisor study: weaving the future. Tucson, Ariz: Mel and Enid Zuckerman Arizona College of Public Health. 1998. Publication 410-223-2890. http://aecf.org. Accessed March 19, 2009.

17. Norris S, Chowdhury F, Van Le K, Horsley T, Brownstein J, Zhang X, Satterfield DW. Effectiveness of community health workers in the care of persons with diabetes. Diabetic Medicine. 2006;23(5):544-556.

18. Griffin JA, Gilliland SS, Perez G, Carter JS, Helitzer D, Carter J. Participant satisfaction with a culturally appropriate diabetes education program: the Native American Diabetes Project. Diabetes Educ. 1999;25(3):351-363.

19. Balcazar H, Alvarado M, Hollen M, Gonzalez-Cruz Y, Pedregon V. Evaluation of Salud Para Su Corazón (Health for Your Heart) — National Council of La Raza Promotora Outreach Program. Preventing Chronic Disease. 2005;2(3):1-9.

20. Ingram M, Gallegos G, Elenes J. Diabetes is a community issue: the critical elements of a successful outreach and education model on the U.S.-Mexico border. Preventing Chronic Disease. 2005; 2(1):A15.

21. Ingram M, Torres E, Redondo F, Bradford G, Wang C, O'Toole M. The impact of promotoras on social support and glycemic control among members of a farmworker community on the US-Mexico border. The Diabetes Educator. 2007;33(6):S6:172S-178S.

22. Liebman J, Heffernan D, Sarvela P. Establishing diabetes self-management in a community health center serving low-income Latinos. The Diabetes Educator. 2007;33(S6):132-138.

23. Lujan J, Ostwald S, Ortiz M. Promotora diabetes intervention for Mexican Americans. The Diabetes Educator. 2007; 33(4):660-670.

24. Plescia M, Groblewski M, Chavis L. A lay health advisor program to promote community capacity and change among change agents. Health Promotion Practice. 2006;9(4):434-439.

25. Sixta C, Ostwald S. Texas-Mexico border intervention by promotores for patients with type 2 diabetes. The Diabetes Educator. 2008; 34(2):299-309.

26. Teufel-Shone N, Drummond R, Rawiel U. Developing and adapting a family-based diabetes program at the U.S.-Mexico border. Preventing Chronic Disease. 2005;2(1):A20.

27. Thompson J, Horton C, Flores C. Advancing diabetes self-management in the Mexican American population: a community health worker model in a primary care setting. The Diabetes Educator. 2007;33(6):159S-165S.

28. Two Feathers J, Kieffer E, Palmisano G, Anderson M, Sinco B, Janz N, Heisler M, Spencer M, Guzman R, Thompson J, Wisdom K, James S. Racial and ethnic approaches to community health (REACH) Detroit partnership: improving diabetes-related outcomes among African American and Latino adults. American Journal of Public Health. 2005;95(9):1552-1560.

29. Vetter M, Bristow L, Ahrens J. A model for home care clinician and home health aide collaboration: diabetes care by nurse case managers and community health workers. Home Healthcare Nurse. 2004;22(9):645-648.

30. Brownson C, Heisler M. The Role of Peer Support in Diabetes Care and Self-Management. Patient. 2009;2(1):5-17.

31. Struthers R, Hodge F, De Cora L, Geishirt-Cantrell B. The experience of native peer facilitators in the campaign against type 2 diabetes. The Journal of Rural Health. 2003;19(2):174-180.

32. Tregonning PB, Simmons D, Fleming C. A community diabetes educator course for the unemployed in South Auckland, New Zealand. Diabetes Educ. 2001;27(1):94-100.

33. American Public Health Association. American Public Health Association resolution. Recognition and support for community health workers' contributions to meeting our nation's health care needs. 2002. http://www.apha.org/advocacy/policy/policysearch/default.htm?id=254. Accessed March 19, 2009.

Table 1: Profile of Community Health Workers

Background	
Hispanic	35.2%
Non-Hispanic white	38.5%
African American	15.5%
American Indian/Alaskan Native	5%
Asian/Pacific Islander	4.6%
Education	
College level (1-4yrs)	57.8%
High school/GED	34.8%
Less than high school	7.4%
Sex	
Female	82%
Male 1	8%
Roles	
Assistance accessing medical services	84%
Assistance accessing nonmedical services	72%
Translating	36%
Interpreting	34%
Counseling	31%
Social support	46%
Transportation	36%

Source: Health Resources and Services Administration. Community health worker national workforce study. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, March 2007.

Table 2: Role of the Community Health Worker in DSME/T

- Support the roles of CHWs as bridges between health care systems, communities, and people diagnosed or at risk for diabetes.
- Support the roles of CHWs in primary prevention (e.g. lifestyle changes,) and secondary prevention (e.g. smoking cessation and self management skills).
- Provide opportunities for core diabetes skills and competencies training and continuing education for CHWs.
- Encourage reciprocal exchange of information and support between CHWs and the health care team to facilitate the best outcomes for people with and at risk for diabetes.
- Support continued research that evaluates the roles, contributions, and effectiveness of CHWs in diabetes care, prevention, diabetes education, and community engagement.
- Encourage diabetes educators and other health care professionals to become familiar with publications addressing practical applications and research findings regarding contributions of CHWs. (Please see reference list, especially references 10, 11, 16).
- Encourage participation of CHWs in the AADE and of diabetes educators in CHW organizations, as well as, collaboration between AADE and CHW organizations.