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The role of community engagement in building sustainable health-care delivery interventions for Kenya

Community
engagement

35

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Abstract

Purpose – The purpose of this article is to provide a general review of the health-care needs in Kenya which focuses on the role of community engagement in facilitating access and diminishing barriers to quality care services. Health-care concerns throughout Kenya and the culture of Kenyan's health-care practices care are considered.

Design/methodology/approach – A comprehensive review covered studies of community engagement from 2000 till present. Studies are collected using Google Scholar, PubMed, EBSCOhost and JSTOR and from government and nongovernment agency websites. The approach focuses on why various populations seek health care and how they seek health care, and on some current health-care delivery models.

Findings – Suggestions for community engagement, including defining the community, are proposed. A model for improved health-care delivery introduces community health workers (CHWs), mHealth technologies and the use of mobile clinics to engage the community and improve health and quality of care in low-income settings.

Practical implications – The results emphasize the importance of community engagement in building a sustainable health-care delivery model. This model highlights the importance of defining the community, setting goals for the community and integrating CHWs and mobile clinics to improve health status and decrease long-term health-care costs. The implementation of these strategies contributes to an environment that promotes health and wellness for all.

Originality/value – This paper evaluates health-care quality and access issues in Kenya and provides sustainable solutions that are linked to effective community engagement. In addition, this paper adds to the limited number of studies that explore health-care quality and access alongside community engagement in low-income settings.

Keywords Kenya, Access, Quality of care, Community engagement, mHealth, Community health worker, Mobile clinic

Paper type General review



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This paper forms part of a special section “Global health and human development in Africa”, guest edited by Fredrick Muyia Nafukho.

Introduction and purpose

The objective of this review is to examine the literature on effective methods used in low- to middle-income countries such as Kenya to engage the community in healthy behaviors through identification, evaluation and summarization of available evidence. The ultimate goal is to provide a specific, practical, effective and sustainable model that will improve health behavior for health professionals and for patients seeking care through community engagement for low-resource and low-income countries. The proposed model focuses on fringe stakeholders and encompasses several solutions that focus primarily on community engagement and empowerment strategies.

Research methodology

A general review of literature covering community engagement, access to health services and quality of health services was performed for low-resource countries within the African continent, with a focus on Kenya. To best understand these topics, it was necessary to first understand the general health of the people of Kenya. Thus, literature was reviewed to complete a general health analysis of Kenya. The proposed intervention models are relevant to all low-resource and low-income areas. Some information was gathered pertaining to low-income countries outside of Africa, but was not considered relevant because of the demographics of the studies. Relevant articles were retrieved from Google Scholar, PubMed, EBSCOhost, JSTOR and various government and nongovernment agency websites. To begin, it was necessary to collect information concerning the cultural background of Africa, and specifically Kenya, and to consider how these diverse backgrounds affect the culture of health-care decision-making in present day. Each article was selected on the basis of its relevance to community engagement and the goal of building sustainable health-care delivery. Literature that addressed why populations seek health care, how populations make health-care decisions and some current health-care delivery models was collected. Models were required to be applicable to low-income settings, and applicable to the health-care market of Kenya. Finally, literature explaining the role of the community health worker (CHW) in low-income settings was collected. Information regarding the CHW was collected after realizing their importance to the health-care culture in Kenya and other low-resource settings in community engagement.

Findings and discussion

Health-care concerns throughout Kenya

HIV/AIDS is responsible for close to 30 per cent of all deaths and almost 25 per cent of all disability in the country; respiratory infections, including tuberculosis, are responsible for almost 15 per cent of deaths; malaria contributes 30 per cent of the total outpatient morbidity, and is the leading cause of mortality among children under five years of age ([World Health Organization, 2017](#); [World Health Organization, 2015](#)). Comorbidities of HIV and tuberculosis are common, and outbreaks of hemorrhagic fevers such as dengue and chikungunya are common emergencies throughout Kenya. Non-communicable diseases accounted for more than 50 per cent of hospital admissions and more than 55 per cent of deaths in Kenya in 2012, causing a great social and economic burden on the country ([World Health Organization, 2017](#)). Most recent statistics report that the prevalence of HIV infection in Kenya is 5.6 per cent, a decrease from 10.5 per cent in 1995-1996 ([National AIDS Control Council, 2017](#)). Women are more disproportionately affected than men in terms of HIV prevalence, and adolescent women have the highest prevalence of HIV, reaching up to 9.0 per cent prevalence in Kenya. As for sex workers, who are typically women, the prevalence

of HIV reaches almost 30 per cent (National AIDS Control Council, 2017). The prevalence has reached a decline because of the scale-up of HIV treatment and care, but the National AIDS Control Council suggests a focus on the reduction of new HIV infections (2017). The Kenyan Government recognizes the need to spend time and money on reducing the spread of HIV, and spends 19 per cent of the total health expenditure on HIV (Health Policy Project, 2016). HIV prevalence and infection are concentrated in specific regions of the country, thus providing a framework for areas important to target with community engagement interventions. The World Health Organization notes that there are wide health disparities across the country, confirming these findings from the National AIDS Control Council (2017). The health disparities are linked to underlying socioeconomic, gender and geographical disparities (World Health Organization, 2017). In terms of community engagement, it is important to recognize the key populations in which risk of infectious disease and non-communicable disease is highest.

While Kenya has managed to decrease the prevalence of HIV over the past few decades, progress can also be identified through the increase of life expectancy at birth and the reduction of infant mortality. Life expectancy at birth increased from 45.2 years in the 1990s to 64.3 years by 2015, and infant mortality decreased from 77 deaths per 1,000 live births in the 1990s to 39 deaths per 1,000 live births in 2014. Similarly, the under-five mortality decreased from 115 deaths per 1,000 live births in the 1990s to 52 deaths per 1,000 live births in 2014 (World Health Organization, 2017). More than 60 per cent of births are attended by a skilled health personnel, as of 2014 in Kenya. Maternal mortality sits at 362 deaths per 100,000 live births as of 2015, which is reported to be decreasing since 1993 (World Health Organization, 2017). Maternal and child deaths have been greatly reduced because of the preventive action by First Lady Margaret Kenyatta, who launched the Beyond Zero campaign in 2014. Beyond Zero works to affect policy regarding prioritization and formulation of maternal and child health care, while improving resource allocation and service delivery for individual health-seeking behaviors and practices (Beyond Zero, 2017).

The majority of clinics in Kenya are located in highly dense urban areas, leaving rural areas with limited access to health services (Dussault and Franceschini, 2006). In rural areas, clinics are sparse, and are often several miles from the closest town or village, making it hard for patients to present to clinics. Because of the inability to transport patients, or inability to afford transportation for patients, some rely on the advice of family, friends and traditional healers that are located in their communities before seeking advice from medical professionals (Noor *et al.*, 2004).

Kenya Vision 2030 is the national long-term development policy that aims to transform Kenya into a developed country by 2030. The Vision is:

A national long-term development blue-print to create a globally competitive and prosperous nation with a high quality of life by 2030, that aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment (Kenya Vision 2030, 2017).

The Vision encompasses the economy, society and politics in three main pillars, which then focus on specific projects and goals. Kenyan leaders within economics, society and politics are aware of the challenging road ahead, and strive to strengthen health facilities, medical supplies, human resources, Ministries of Health, funding for health facilities, and improve hygiene and sanitation, among others. Leadership of Vision 2030 acknowledges the need for improved health and access to health facilities throughout Kenya, and is actively working to achieve high-quality health care for the country (Kenya Vision 2030, 2017).

Culture of health-care practices: how populations make health-care decisions

Within any country, there exist a diverse mix of cultures and languages, sometimes with numerous ethnic groups, each possessing a unique set of beliefs. Culturally, a majority of Kenya follows traditional health-care practices, and sick individuals rely on the advice of traditional healers, family members or friends before relying on the advice of trained doctors or nurses (Kigen *et al.*, 2013). Nyamongo's research breaks health-care-seeking patterns in Kenya into three categories:

- (1) self-treatment, as a cost-saving strategy;
- (2) government clinics; and
- (3) private clinics, which are more expensive but have trained health-care providers and higher availability of drugs (Nyamongo, 2002).

The poorest 40 per cent of rural Kenya self-treat using shop-bought drugs, which have the potential to be unreliable or tampered with, whereas 42 per cent attempt visiting a health facility only to find they cannot afford treatment (Chuma *et al.*, 2010). During self-treatment, Kenyans may also rely on traditional healers within their community. While traditional herbal medicine is referred to in multiple terms across the world, this paper will refer to all traditional medicine techniques, such as complementary medicine or non-conventional medicine, as traditional medicine. Traditional medicine is used in almost all communities throughout Kenya, and is an important and underestimated form of health care (World Health Organization, 2014). Even in an urban setting where women have access to health facilities, 12 per cent used traditional medicine during their most recent pregnancy (Mothupi, 2014). The role of traditional healers is to rid the body of sickness, or what is sometimes believed to be evil spirits. Typically, traditional healers combine medicine made from plants and contacting spiritual realms to bring healing to patients (Podolecka, 2016). These methods are not widely accepted in Western medicine, but must be respected when considering community engagement strategies, as the cultural beliefs of communities are important to uphold when developing health interventions. In addition, some studies have confirmed the use of traditional medicine in some treatments, and the World Health Organization encourages development and continuation of traditional medicine techniques (Mwangi *et al.*, 2005; Ochwang'I and Oduma, 2017).

Traditional medical practitioners play a role in 70-80 per cent of the population of Kenya when it comes to health care (Kigen *et al.*, 2013). The World Health Organization defines traditional medicine as:

The sum total of the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical or mental illness (World Health Organization, 2000, p. 1).

Traditional medical healers have shown to increase positive health behaviors among their communities (Arazeem, 2011). These facts are important considerations for community engagement techniques and interventions, and it is important to note that traditional healers hold a leadership role in their communities in Kenya, as they are trusted with the health of the people.

Gender roles in Kenya also affect the way individuals and family seek health care. Women in Kenya are restricted from contributing to important development goals, specifically the economy, nutrition, and food security, and women are also underrepresented in the decision-making process. With less access to education, land and employment, women are overall disadvantaged when compared to men in Kenya. The gender roles practiced by

the Kenyan society can further create inequities when it comes to the delivery of certain health-care practices. Gender inequality creates situations where women lack autonomy, resulting in their inability to negotiate prevention practices and access to health-care services for themselves and their families (Singh *et al.*, 2013). The US President's Emergency Plan for AIDS Relief is in place to increase prevention, care, treatment and knowledge about HIV/AIDS, and is an example of one program that prioritizes women and children (USAID, 2015). The US Agency for International Development suggests the integration of men, boys, women and girls to bring about changes at home, in the workplace and in the community to promote gender equality and bring about positive change (USAID, 2015).

Barriers to community engagement in health-care utilization

Cost of health care

In recent years, Kenya has made significant advancements in their total health expenditure as a nation (World Health Organization, 2016). Kenya's total health expenditure accounted for 6.8 per cent of gross domestic product (GDP) in 2012/13, which contrasts sharply with developing nations' total health expenditure (the USA spent 17.1 per cent of their total GDP on health in 2014) (World Bank, 2014; World Health Organization, 2017). However, Kenya's GDP on health is increasing over 1 per cent per year, as the total health expenditure in 2009/10 was 5.4 per cent (Health Policy Project, 2016). In addition, the government health budget grew 31 per cent from 2012/13 to 2014/15, and increased 57 per cent from 2013/14 to 2014/15. Kenya is primarily dependent on donors for health spending, but is able to provide free maternity care and, in 2013, abolished all fees in public dispensaries and health centers (Health Policy Project, 2016). Chuma *et al.* reported in 2010 that the highest percentage of insurance coverage is found among the urban rich population (Chuma *et al.*, 2010). Without insurance, Kenyan citizens rely heavily on out-of-pocket payments, and many simply cannot afford health services when they become ill (Wamai, 2009). Similarly, cost of medicine or cost of appointments with a medical professional can negatively influence a patient's choice to seek care, if the cost is too high (Cisse, 2011). In 2007, 11 per cent of households experienced catastrophic health spending (Kimani and Maina, 2015). However, policies are in place to try and relieve some of the health-care spending on households and individuals. Insurance currently covers 11 per cent of the Kenyan population, but there are programs in place to prioritize insuring rural populations, especially poor populations, the elderly and those with disabilities. There is a 15-year plan to try and reach insurance coverage to the entire nation of Kenya (Health Policy Project, 2016). Kenya also focuses health financing on the specific needs of each of their 47 counties, taking into account population, poverty, land share and others (Health Policy Project, 2016).

Health care in Kenya relies heavily on funding from international programs such as the US Agency for International Development, which provides financial support on programs to decrease incidence of infectious diseases and to improve length and quality of life for all (Health Policy Project, 2016). Kenya is also funded by the United Nations Development Programme, which partners with people at all levels of society, and works to produce sustainable growth to improve quality of life for all (United Nations Development Programme, 2016). Funding from the United Nations Development Programme goes to primary health facilities and hospitals alike. Figure 1 illustrates Kenyan health-care funding and spending as reported by the World Health Organization. Even with international donors, individuals and households tend to carry the highest burden of individual health-care costs, as international funding covers general health-care needs for the country (Health Policy Project, 2016).

A barrier that keeps Kenyans from seeking care is cost of health services. Kenyans may choose to forgo a trip to a health clinic depending on their personal income, the user fees and their gender and education levels. With a low income and high user fees, individuals or households may choose to pursue a traditional healer or the advice of a family member or friend instead of visiting a health clinic. In addition, women with low levels of education are less likely to visit a health facility in Kenya. Some additional barriers to care include cost of transportation, reliability of transportation and cost of medicines (Cisse, 2011).

Overall, public programs are in place to enhance and increase the utilization of health-care services in Kenya. Policymakers have been mindful of the determinants that may affect whether or not Kenyan citizens will seek health-care services. By engaging with the community to understand the needs and gaps in ability to seek care, policies have been developed which are geared toward the specific needs of each of the 47 counties in Kenya. Continued engagement with communities will greatly increase those covered by insurance, and will continue to encourage households and individuals to seek care, whether it be traditional medicine or a medical professional in a public health facility.

Practical implications

The literature presented thus far has provided factors important to focus on for community engagement interventions. Yet, to effectively develop health interventions which properly engage the community, it is important to first define the community and determine the goals for the community. Once the community is defined with a clear population of peoples, engagement strategies can be considered. Some important factors in facilitating community engagement are proposed. First, the CHW is presented as an important factor responsible for engaging the community. Second, the use of mobile clinics is considered for engagement throughout Kenya.

Defining community engagement: terms and challenges

As noted, defining the community that will be engaged is the first step in preparing for engagement initiatives. Yet, it is also important to understand the definition of engagement we will be referring to. Engagement may include a wide range of activities, including public health, policymaking, ethics, community mobilization and advocacy (Dunn, 2011). Engagement is not about providing information to specific communities, but rather exchanging ideas and knowledge with communities to advance specific goals they may have (Denison *et al.*, 2017; Dunn, 2011). Engaging with communities to change their behaviors also allows citizens to hold government systems and institutions accountable for actions that may lead to ill health (Dunn, 2011). Community engagement strategies should not create unrealistic expectations for the communities or for those conducting engagement interventions (Mochizuki *et al.*, 2016). There are some documented levels of community

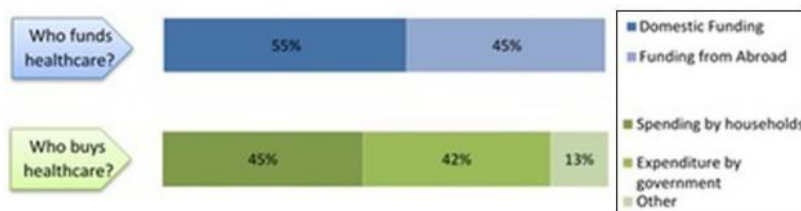


Figure 1.
Funding and
spending for
healthcare delivery in
Kenya

engagement which should be considered: cooperation, during which time members of the community are involved in the planning and execution of research or interventions; co-learning, which occurs when the community acquires knowledge and skills from research or interventions; and collective action, wherein researchers, the community and policymakers take action to bring about change (Batista *et al.*, 2006).

Defining a community for engagement is an important process that may change depending on the setting and location of the community. The strategies suggested are meant to be applied to Kenya, but will be successful in any setting. By defining a community, engagement practitioners will ensure that the given community is not simply a passive recipient of knowledge, information or strategies (Dunn, 2011). Community engagement may come to a pre-defined community with existing social relationships, who reaches out to a public or private institution with the goal of addressing a certain issue. A community may also be formed to address the issue, and thus be newly evolving throughout the process of engagement. When communities define themselves, they may be connected via existing social relationships or through specific needs. When outsiders define a community, the community may be formed around geography, or by their socioeconomics (O'Mara-Eves *et al.*, 2013). During the development of community engagement strategies, it is also important to draw on knowledge from the defined community to develop the best intervention for the given problem. Partnership with local stakeholders and experts in the field of the issue will ensure empowerment of the community (O'Mara-Eves *et al.*, 2013).

Challenges may arise when defining a community and understanding engagement. While a community, either pre-existing or newly evolving, may be connected over one specific issue, in the case of developing countries such as Kenya, they will have daily tasks to continue completing during the development of engagement strategies (Kajeechiwa *et al.*, 2017). Daily tasks may include caring for children and the elderly, caring for livestock, preparing food or selling products in the market (Schatz and Gilbert, 2014; Karneback *et al.*, 2015). Public and private institutions that are asked to engage with communities must understand the importance of integrating new community engagement strategies into the established daily life of communities. In some cases, this means continuing health care with traditional healers and allowing births to take place at home, despite the Western medicine expectation that a medical facility is the best place to seek care. Generally, respecting the cultural and religious beliefs of a community is vital toward the success of a community engagement project (O'Mara-Eves *et al.*, 2013). Putting together a community advisory board (CAB) is a strategy suggested to be effective in ensuring the community's needs are heard, and that ideas are properly exchanged between the community and the engagement institutions (Dunn, 2011). CABs are made up of representatives from the community and from the public or private institutions that the community is engaging with, and may also include professionals who work with the issue at hand. CABs should be fluid, and can ensure that the defined community is continually representing all people effectively, and that goals are being met or adjusted when necessary.

Community health workers for community engagement

CHWs are frontline providers of health services, generally in low-resource settings, who reduce the health service delivery burden while also providing culturally sensitive care among vulnerable populations (Braun *et al.*, 2013; Payne *et al.*, 2017). CHWs in Kenya can reduce the burden on health-care systems by offering to volunteer their time. Motivations for volunteering time include financial as well as non-financial factors, such as personal development and recognition within a community, and working conditions (Takasugi and Lee, 2012). CHWs can also be nominated by members of a community. In these cases, CHWs are already leaders or

respected members of the community capable of leadership and management, and continue on as trusted health providers (Jenkins *et al.*, 2010). The Millennium Development Goals (MDGs) discuss the role of the CHW and the ways they can best extend primary care from health facilities to communities. It is also a vision of the MDGs that CHWs may be trained and paid professional who provide advice, treatment and are able to implement preventive measures in their communities (Singh and Sachs, 2013). Currently, CHWs communicate with local health clinics for advice when necessary, as they typically have no formal health training. In Kenya, each health facility may have about 20 CHWs that are responsible for the health of specific areas and communities. In appropriate conditions, CHWs can be given additional training to deal with specific areas of concern, such as mental health or chronic disease care (Jenkins *et al.*, 2010).

Through appropriate training and communication with health facilities, CHWs can provide advice on when it is time to seek medical attention at a facility. This process allows CHWs to improve the referral system from the community to health facilities (Jenkins *et al.*, 2010). CHWs also have the ability to target key demographics within the Kenyan population. CHWs play an integral role in motivating women to engage in healthy behaviors, especially when it comes to prenatal care, childbirth and newborn care. CHWs have proven to be most effective in situations where there is direct face-to-face contact so that a personal relationship can be established and built upon. To engage the community in healthy behaviors, especially women, a clinical health system should use CHWs to implement community-based educational initiatives that address common misconceptions regarding health-care utilization (Schenk *et al.*, 2014).

An important aspect of the CHWs role in the community is the use of mobile health, or mHealth (Kallander *et al.*, 2013; Braun *et al.*, 2013). These technologies are considered an innovative approach to deliver health services across Africa, and are more cost-effective than alternate strategies (i.e. visiting a health clinic in person) (Aranda-Jan *et al.*, 2014). mHealth technologies are proposed to address inefficiencies in the health systems of developing and low-resource countries, and allow CHWs to introduce mHealth technologies in communities who may lack health care (van Heerden *et al.*, 2017). mHealth presents an opportunity to support CHWs, and to improve their motivation and performance (Thondoo *et al.*, 2015). mHealth devices are portable electronic devices with software applications that assist in providing health services, communicating with medical professionals, screening for the quality of medicines and managing patient information (Kallander *et al.*, 2013; Fernandes *et al.*, 2015). Incorporating mHealth into the daily tasks of CHWs can improve medication adherence and enhance prevention efforts (Mushamiri *et al.*, 2015). mHealth technologies may also allow CHWs to communicate with community members during emergencies, or when community members have questions about specific health concerns or medications (DeKoekkoek *et al.*, 2015).

The use of mobile clinics for community engagement

With appropriate supplies, policies and quality of services, mobile clinics can be used to provide health care to hard-to-reach populations (Abbasi *et al.*, 2016). Mobile clinics are an effective means of providing health-care services and medications at a lower cost for vulnerable patients, and address barriers related to transportation for communities that are especially far in distance from a health facility. Patients who use mobile clinics instead of regional hospitals or health facilities are on average poorer, less educated and sicker than their counterparts who use hospitals and health facilities. However, health outcomes are comparable between those who visit health facilities and those who use mobile clinics (Gorman *et al.*, 2015). Regularly scheduled visits by mobile clinics allow

communities to have consistent routines with necessary medications and primary health check-ups. This is especially helpful for pregnant or nursing mothers, or patients who are HIV positive and requiring antiretroviral treatments (Schwitters *et al.*, 2015). Mobile clinics can also help in diagnosis and management of health conditions, by using similar mHealth technology that CHWs use (Free *et al.*, 2013). All aspects of the benefits of mobile clinics have been achieved in Kenya through the Beyond Zero campaign, put in place by First Lady Margaret Kenyatta. The Beyond Zero campaign has delivered 47 fully stocked mobile clinics delivering half a million integrated services to over 14 million Kenyans (Beyond Zero, 2017). Funding for these mobile clinics comes from marathons, in which members from all backgrounds and walks of life participate and raise money for the purpose of improved health for all.

The role of the CHW should include informing community members of the benefits of mobile clinics so that patients are trusting of the national health system. CHWs can also work with religious leaders and traditional healers to increase acceptance of mobile clinics (Schwitters *et al.*, 2015). Mobile clinics can act as a resource to CHWs as well, by providing medical advice and assisting with education of specific health concerns to community members.

Mobile clinics have proven to be effective in managing and diagnosing conditions, and in delivering quality health services and medications to communities that may otherwise not receive or seek care from medical professionals. In conjunction with traditional healers and the general care of community and family members, mobile clinics help to improve health and overall quality of life of hard-to-reach communities. General weaknesses of mobile clinics are a lack of funding for resources or a lack of funding for professional personnel, and occasional unwillingness of communities to use services provided by mobile clinics (Abbasi *et al.*, 2016). While unwillingness of communities can be addressed by CHWs, funding should be addressed by governments and private institutions.

Conclusion

The health of Kenyan communities can be enhanced through proper planning of community engagement techniques, and through the use of CHWs, mHealth technologies and mobile health clinics. Kenya's growing health-care demands require an affordable and sustainable health delivery model that is accessible to all populations. By appropriately defining communities with similar health issues, and engaging with key stakeholders and institutions as well as with members of the community, communities will be empowered to overcome common health concerns and take responsibility for improving their own health. Because of the diversity of communities in Kenya, recommended methods include integrating CHWs via community leaders, religious leaders or traditional healers. Within Kenyan communities, seeking eager respondents to coalesce with the traditional healers of communities will be a doorway to increase awareness of illness severity as well as an opportunity to introduce modern medicine through a trustworthy source. The implementation of mobile health clinics will serve to provide easily accessible care at a reduced cost, effectively overcoming access barriers that are prevalent in the rural areas of Kenya. The utilization of community engagement is a solution that will use primary prevention as a strategy to decrease long-term health-care costs in Kenya. The implementation of these strategies will contribute to an environment that promotes health and wellness.

In order for health-care providers in Kenya to become successful, integration into the local culture is paramount. To accomplish this, a health system must take prominent steps toward developing relationships. The most effective forms of community engagement will be realized by:

- removing or mitigating barriers to care;
- empowering the communities;
- implementing and incentivizing preventive medicine; and
- engaging the community through CHWs and mobile health care.

As the general health of the Kenyan citizens improves, the country will be able to maintain a healthier workforce, stabilize the economy and increase the overall quality of life in the country. Using community engagement as the focus of a health-care strategy in Kenya will create a lasting impact. Because the proposed solutions and suggestions presented in this paper are limited to a review of the literature, further research should include a financial case analysis, as well as an analysis of how environmental factors play into community engagement strategies for low-resource and low-income settings. Some important strategies that may help to support community engagement and human development were not included in the scope of this paper, but may fit nicely into further research, such as, women's empowerment, equality of genders in low-income settings or the use of religious leaders for community development.

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