TELEHEALTH FOR COMMUNITIES:
TOWARD ELIMINATING RURAL HEALTH DISPARITIES

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Rural Health Disparities

The National Healthcare Disparities Report (NHDR) (2007) documents issues in both quality of healthcare and access to healthcare providing information to policymakers, clinicians, administrators, and community leaders for the improvement of health. From this report it is apparent that disparities in healthcare still exist and that many opportunities for improvement remain across racial, ethnic, socioeconomic and geographical groups. One priority population is the rural, medically underserved areas. Residents of rural areas experience more health disparities than residents of urban areas (NHDR, 2007).

Barriers such as finances, sociocultural issues, structural features and geography are known to decrease access to healthcare services in rural environments leading to poor health outcomes (Eberhardt, et al., 2001). Rural areas are more likely than urban areas to have higher rates of uninsured and underinsured populations, higher rates of poverty, greater transportation barriers and limited care providers. Rural populations also experience higher rates of chronic disease and mortality. Rural areas are often identified as medically underserved areas (MUAs) and medically underserved populations (MUPs). It is well documented that poverty and lack of health care are intertwined; persons without resources cannot afford health services, and communities without resources have difficulty attracting and retaining health care providers. Furthermore, transportation can be a significant barrier to health care access for rural residents, the poor and other health disparities populations. With rising gasoline prices this problem is becoming much more significant (Eberhardt, et al., 2001).

A disproportionate burden of health disparities is great in terms of cost and disability and wreaks havoc on the infrastructure of communities. Because the health of a community is relevant to its own unique strengths and weaknesses, community-specific, disease-specific interventions are needed. Communities need to be empowered to generate knowledge and interventions to solve their own health problems and eliminate their own health disparities (Israel et al., 2001).

Heart Failure

Heart failure (HF) is the most common disease diagnosis among hospitalized adults age 65 years and older. It is estimated that about 5.7 million Americans live with HF and that there are 670,000 newly diagnosed cases, resulting in approximately 300,000 deaths each year. The estimated cost of HF (direct and indirect) for 2007 in the United States was $33.3 billion (AHA, 2010). Of concern is the projected increase in the number of US adults age 65 and older to double to 70 million over the next decade, as well as the known increases in risk factor for HF (atrial fibrillation, sclerotic valvular heart disease, obesity, diabetes mellitus, and renal
dysfunction) (Liu et al., 2010). Clinical implications point to a need for population based access to clinical treatment and prevention strategies to aid in the control and prevention of HF events.

**Telehealth**

Telehealth technology has been shown to increase access to health care and deliver cost-effective health care. Evidence from clinical trials have demonstrated the feasibility of telehealth and its potential to provide important healthcare coverage for rural areas where specialized services are lacking (Dorrian et al., 2009; Givens & Elangovan, 2003) Other studies have shown the ability of telehealth interventions to improve patient outcomes while lowering cost (Young & Ireson, 2003; Smith et al., 2001). The field of telehealth continues to advance through evidence-based research. Sufficient evidence is available to support the use telehealth technologies as an effective and efficient approach to improving healthcare access, improving both health outcomes and health status, and reducing overall cost.

**Rural Health Disparities, HF, and Telehealth**

Viewing this portrait of disparities in rural populations colored by the burden of HF on communities can increase awareness of opportunities for the use of advanced technologies such as telehealth. Integration of concepts of rural, HF and telehealth can provide a framework for communities to derive answers for their own individual health disparities. The development and application of telehealth interventions for the treatment and prevention of HF events in rural areas could be one link in a movement toward eliminating rural health disparities.

**REFERENCES**


