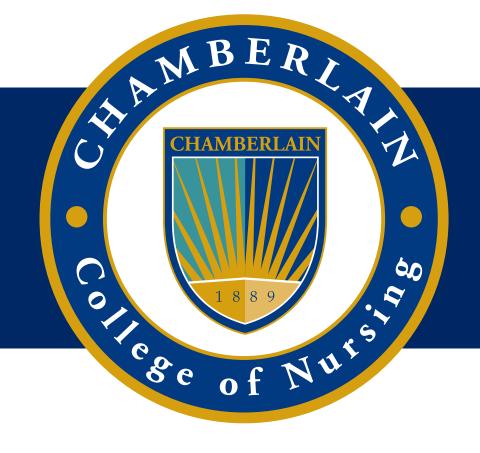
# A LOOK AT TELEHEALTH NURSING



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#### Introduction

An aging population here in the United States combined with expanded health insurance coverage is stretching our healthcare system and available resources to new limits. The Department of Health and Human Services Agency (2013) reports, by 2020 the projected shortage of physicians will be an estimated 20,400. This number may be offset by an increase in Nurse Practitioners (NP's) and Physician Assistants (PA's) but even with an increase in NP's and PA's, the estimated shortage of full-time primary care practitioners is estimated to be 6,400 by the year 2020 (HRSA, 2013).

#### **Potential Benefits**

- Telehealth nursing has the potential to decrease the strain on an already impacted healthcare system
- Telehealth nursing has demonstrated its ability to increase patient autonomy and improve healthcare outcomes

#### **Potential Barriers**

Currently, there are only 39 states that have some form of reimbursement policy for telehealth services in place. However there are limitations on who can be reimbursed, and what services are reimbursed, and who qualifies for telehealth services in the first place (Hebda & Czar, 2013).

- Another major barrier to telehealth is licensure and liability issues raise questions and concerns about which states practice standards are to be followed. Currently multi-state licensure has been the norm for telenurses and other telehealth providers but this can be expensive and time consuming (Hebda & Czar, 2013).
- Equipment may be costly, depending on the type and scope of the services in use.
   Telenursing can be done over the phone, with existing phone lines or it may require more sophisticated equipment and require high speed internet access. This raises questions of infrastructure requirements and who is responsible for providing and paying for any necessary infrastructure upgrades.
- The use of more sophisticated technology also requires more training and teaching.
   This may hinder patient compliance particularly in older adult populations who may be more hesitant to embrace technological advances.

### **Conclusion**

While there are still many kinks to be worked out, this area of nursing is expanding and growing. The use of technology to provide healthcare services has shown great potential. Nurses are in a unique position to help meet the increased demand on our healthcare systems, while enabling patients under there care to achieve maximum health benefits and independence. The telehealth system should not be viewed as a replacement or alternative to routine health care, but as a tool that can increase efficiency and improve patient outcomes.

### **Recent Studies**

A study in the UK reports that one nurse is able to monitor 180 chronically ill patients each day. Patients upload vital signs, weight and blood sugar levels through home monitoring devices. Any abnormal values are transmitted to the nurse who is able to transmit alerts back to the patients warning them and affording them the opportunity to prevent their condition from worsening. This study suggested that telenursing allows nurses to develop nurse-led services with minimal input from primary care physicians (Anguita, 2012).

A study found that at a telenursing call center, 58 percent of all the phone calls were resolved independently by the nurse, only 8 percent of the calls were handed off to primary providers. Additionally 6 percent of calls were referred back to the primary provider for follow-up, and for 22 percent of the calls required that the nurse seek consultation from the provider before resolving the call (Vinson et al, 2011).

The Whole System Demonstrator (WSD) was the largest telehealth trial. It was conducted in 2011 across the UK, it consisted of 6191 patients, 238 general practitioners at three separate sites. The patients involved all suffered from chronic illnesses such as diabetes, COPD, and coronary heart disease (Phillips, 2012). The WSD demonstrated that telehealth helped to reduce mortality rates by 45 percent. Telehealth services also decreased emergency department visits by 20 percent, elective admissions by 14 percent, and bed days by 14 percent (Anguita, 2012).

In another study patients with diabetes were monitored for six months. Patient outcomes were measured and evaluated in terms of hemoglobin A1c. The results indicated that after six months of telenursing interventions A1c levels decreased. Upon stopping the telehealth nursing interventions A1c levels rose again. The same study tracked patients with hypertension and measured their outcomes in terms of systolic blood pressure (SBP). The results indicated that combining education and health tips along with daily electronic monitoring significantly decreased SBP (Wakefield et al. 2013).

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