

# The telehealth and telenursing nursing essay



**ASSIGN  
BUSTER**

Telehealth is a continuously evolving system that encompasses the use of technology to enhance patient care in the most effective and efficient way possible. Telehealth is used in many different settings ranging from the doctor's office, hospitals, and even within the privacy of the home. Through the use of telephones, computers, videophones and other monitoring equipment, patients can enjoy specialized medical care within the comfort of their home town, or in this case, within the comfort of your own home. The elderly woman described in the case study above is an excellent example of how telehealth home care systems can benefit the patient.

According to a survey conducted by the American Association for Retired Persons in 1996, more than 90 percent of seniors over the age of 65 wanted to remain independent at home and age in a familiar place. With the baby boomers reaching retirement age, we can assume this number will continue to increase drastically. Telehealth home care systems such as the one implemented into the Mrs. C's home, can provide the patient with assurance; they can be comfortable knowing a health professional is monitoring their chronic illness regularly and not only between doctor visits. This allows for elderly patients, much like Mrs. C, to continue living an independent and fulfilling life style. Providing this sort of independence to a patient, especially elderly patients, may enhance adherence to medication and treatments. Several studies show patients using telehealth systems have a better understanding of their own disease process and also exhibit the comfort with which patients are able to manage their self-care and enjoy an improved quality of life (Suter, Suter & Johnston, 2011). Often, elderly patients can be stubborn due to the generational gap and allowing these individuals to take

control and responsibility of their care through telehealth systems may increase the overall health of these patients and thus extend life even further.

Furthermore, the most obvious advantage of telehealth home care to the patient is the dramatic decrease in hospitalizations and doctor's office visits that must be made monthly or sometimes weekly. Travel and transportation can often be difficult on elderly individuals. Many elderly patients can no longer drive themselves and must find other means of reliable transportation. Monitoring their health through telehealth equipment can aid in preventing this inconvenience. Additionally, travel and transportation can simply be too vigorous of an activity for the individual, in which case the patient is already weakened (possibly worse off than with the initial emergency) by the time they reach the appointment or hospital. This is unnecessary stress and trauma forced onto the aging body that could be prevented. Depending on the severity of the patient's chronic disease, doctor's office and hospital visits could be reduced significantly with the proper adherence to treatments and telehealth monitoring systems in place. For example, monitoring Mrs. C's vital signs at regular intervals allowed the nurse to be familiar with the patient's normal levels. As these normal levels began to drop, the nurse was alerted and able to contact Mrs. C and have her immediately transported to the hospital. The entirety of stress and trauma the embolism could have had on Mrs. C's body did not ensue because the nurse was able to treat the patient before the emergency occurred.

However, these same advantages can be seen as disadvantages for some patients. Many individuals are not interested in providing their own care and would prefer to be told when and where to administer or adhere to treatment. Within the geriatric population especially, we must evaluate each individual on their capabilities to care for themselves before implementing telehealth home care. Though a health care professional is monitoring the patient's medical status, a physical being is not always available to provide the patient with specific care directions and the patient must be fully aware and accepting of this fact. It is easy to become accustomed to the assurance and comfort of telehealth, but patients must be reminded to maintain awareness of their own health status too. This is especially important with the decrease in doctor's office and hospital visits that telehealth offers.

While some patients may enjoy less face-to-face interaction with so many health care professionals, others prefer one-on-one interaction with their health care team. A disadvantage of telehealth is the elimination of these regular interactions with doctors and nurses. Patients often need to feel a personal connection with their health care providers in order to cooperate and trust them. Without trust, it is nearly impossible to convince a patient to adhere to medical treatments and recommendations. When implementing telehealth systems into the home, nurses must pay close attention and recognize whether the patient is satisfied with this type of care, or whether they would be better off with conventional means of care.

· As telehealth and telenursing continue to be integrated into healthcare, what are the advantages and disadvantages from a nurse's perspective?

In addition to increasing effectiveness and efficiency of care to the patient, Telehealth has also helped the nursing profession evolve. Telenursing refers to the use of telecommunications and information technology for providing nursing services to patients (McGonigle & Masterian, 2012). The most progressive area of telenursing is within home telehealth care, similar to that provided in our case study.

There are advantages in telehealth for all health professionals, but especially for today's tech savvy nurses. Telehealth equipment such as videophone, computers, and telephones allow nurses to effectively double the number of patients seen per day while decreasing the over-all work load of the individual nurses on a unit. The nurse is able to do this without leaving the hospital or doctor's office and thus save substantial amounts of time. Additionally, nurses are able to use these tools to alert the patient of possible problems, continuously educate patients of their disease processes as they progress, and maintain a constant and consistent data base of the patient's normal vitals, medications, etc. The beauty of telehealth is that it allows the nurse to stay in one stationary location, where he/she can be located, contacted, and informed immediately without the hassle of 'chasing down' a busy bodied nurse when interventions are required.

Under staffing of nurses is a constant battle within the profession. One specific advantage to telehealth is the number of patients that can be effectively cared for per nurse. McGonigle and Mastrian provide an example: in conventional home health care, depending on the distance of travel involved, one nurse is able to visit up to seven patients per day. Using telenursing, however, one nurse can remotely visit or televisit 12-16 patients

in the same amount of time using interactive telehealth tools (2012).

Telehealth can aid this by implementing telenursing care into homes for patients who are ideal candidates for the technology. Telenurses would be able to care for these individuals and prevent unnecessary hospitalizations while other health care professionals would be able to focus on patients admitted with emergencies. Patients would receive better care and the nursing staff would be more satisfied with the job they are doing. A study by the Pennsylvania Homecare Association and Penn State University in 2004 looked at how telehealth can be used to address this matter. The study indicated use of telehealth systems may enhance nurses' job satisfaction and aid in retaining nurses in their current position. By using this new and ever changing technology, nurses can double the number of patients seen per day, significantly increasing the number of lives saved, emergencies prevented, and satisfied nurses.

However, just as with patients, the advantages to telehealth can also be seen as disadvantages. The registered nurse is trained to use all of our senses and to be constantly observant of our surroundings. Often, something as simple as a specific scent is enough to aid in detecting a bacterial infection, or sometimes a nurse can hear or observe certain mannerisms of a patient that may be indicative of a possible medical issue. These changes could be altered or not observed at all when viewing/talking to the patient via videophone or telephone. Telehealth and its computer monitoring equipment do not allow the nurse to use these naturally occurring alert systems. There is a certain aspect of intuition a nurse often implements that is gathered from previous experience and evidence-based practices, but this

feature of nursing is difficult to implement through a monitor screen. Related to this is the disadvantage and loss of personal interactions with individual patients. Much of the success of nursing is held within the relationship between the nurse and patient. Face-to-face interactions allow the nurse to observe and become familiar with the patient's personality, while also providing the nurse with a chance to discuss personal issues that may prevent the patient from adhering to medical advice. The nurse works as an advocate for the patient when discussing the case with other health care professionals and can often be the key individual in convincing a patient to listen to his/her doctor. For telehealth and telenursing to work effectively, these aspects must be addressed with the patient to ensure ideal patient care.

- Discuss the possible outcomes for this patient had she not been on a home telemonitoring system?

If Mrs. C had not been on a home telemonitoring system, the likely hood of mortality is high. This is an unfortunate reality for many individuals without home telehealth systems. A pulmonary embolism is the result of a thrombus located somewhere else in the body. The embolism traveled up into Mrs. C's lungs, causing a severe decrease in oxygen saturation levels of the blood. However, infarction of the lung is not likely due to profusion by bronchial arteries and oxygen from the alveoli (Porth, 2011). If Mrs. C's embolism was small, it was likely clinically silent and may have continued to go unrecognized until it eventually traveled into her heart or brain, resulting in a myocardial infarction or stroke. If the embolism had not been detected prior or symptoms occurring, Mrs. C would have begun presenting with

tachycardia, rapid and shallow SOB, slight fever, and blood-streaked sputum (Porth, 2011). The odds of Mrs. C's survival after these symptoms have become apparent are low. The embolism could continue to grow in size and become fatal. The embolism may have also risen from a thrombus caused by deep vein thrombosis. If the small embolism had not been detected, and DVT was present, a larger embolism may have easily broken off and continued on to the brain or heart, resulting in death. Through the telemonitoring system, the nurse was able to detect the low oxygen levels and prevent any of these symptoms from occurring. The nurse had Mrs. C transported to the hospital with plenty of time to dissolve the embolism and assess for any additional complications.

- Imagine that you are in the position of justifying home telemonitoring to an insurance provider. Using this case scenario, identify potential costs and cost savings of home telemonitoring.

In an age when health care costs are increasing at a rapid rate, ways to decrease unnecessary spending is crucial. According to the Centers for Medicare and Medicaid Services, health expenditures in the U. S. neared 2. 6 trillion dollars in 2010 (Kimbuende, 2010). This number is expected to continue to increase as the baby boomers reach retirement and elderly age. It is now more important than ever that we develop a new clinical model for health care that allows technology to be implemented. “ Telehealth technology should be included to fill the gap resulting from an overabundance of patients and a scarcity of healthcare providers” (McGonigle and Mastrian, 2012). For example, doctors and nurses can visit with nearly twice the number of patients when travel time is not a factor.

<https://assignbuster.com/the-telehealth-and-telenursing-nursing-essay/>



Figure 19-1 in McGonigle and Mastrian depicts this gap in a logical fashion. As the population and costs continue to increase, the number of individuals working in healthcare continues to decrease. These results in an enormous gap between the number of healthcare workers available and the population in need of treatment; a predicted shortage of 1.2 million nurses and 4.2 trillion dollars in healthcare costs in 2020.

Through implementation of home telemonitoring systems, we can begin promoting health prevention instead of illness. Telehealth can improve the overall quality of care provided and reduce insurance and hospital costs by decreasing the number of hospital stays and ER visits (Philips, 2008). For example, in this case scenario, Mrs. C was rushed to the hospital but she did not require the amount of emergency interventions (airway maintenance, EKGs, additional medications, various labs/tests, etc.) that would be required if the embolism not been detected early. Mrs. C's hospitalization, though still expensive, will have significant cost-saving benefits. She will be able to recover much sooner and thus her stay will be substantially shorter. Also, Mrs. C will not need to attend regular doctor's appointments to follow up because her telehealth monitoring system will provide the data to the nurses for her. When individuals are not being unnecessarily hospitalized, this relieves many extra supplies and inventory that would have been used. Though implementation of home telemonitoring systems can be quite expensive, the cost-savings from inventory, preventable hospitalizations, and health promotion will counteract the expense.