



The nurse's role in the implementation of medical regimens is also accomplished using telehealth. The electronic implementation of medical protocols or guidelines to achieve certain client health outcomes is an established delivery model. Nurses are expected to use professional judgment to carry them out by assessing what can be safely omitted from or added to medical orders, and by getting appropriate and timely responses from physicians in order to monitor and ensure the quality of health care practices. Interactive video technology using high speed infrastructure is used by nurses manipulating electronic sensors and interacting with a physician at a remote site to carry out such delegated medical functions as taking X-rays, suturing wounds and setting fractures. BONs and the medical practice must collaboratively identify the responsibility and accountability of practitioners in this interactive practice.

Another example of telehealth nursing practice is the use of interactive video devices via high speed Internet by home health care nurses to provide a means to detect any early warning signals for client complications. The nurse can use remote visual, auditory and tactile sensors, manipulated by the client or family members, to assess the client. Complications, such as breakdown and deterioration, can be anticipated or detected early, prior to confirming diagnostic signs. The data are transmitted electronically so the nurse can detect and document significant changes in a client's condition. Crisis televideo hotlines are used by nurses to identify and manage client crises until other assistance is available.

Often the client is located in one state and the nurse in another jurisdiction. What are the regulatory concerns for practice across state lines? Does the nurse need to be licensed in both states? The functional domains described thus far are examples of how nurses use telecommunications technology to deliver cognitive nursing care. Data are collected, interpreted and analyzed to develop a working diagnosis and plan. The plan is initiated by instructing the client how or where the treatment should occur.

The potential to administer and monitor therapeutic interventions and regimens is significant. Robotic range of motion may be implemented by continuous passive motion devices applied by the client or family member and remotely electronically controlled. Intravenous therapy may be similarly implemented. Through means of mobile broadband and cellular connectivity a client in a rural area is able to automatically transmit data from the client's insulin pump to a computer in a medical center. The data are compared with the client's blood sugar level, the pump's output is recalibrated and the new data are transmitted to the computer chip in the pump. This same technology is used to administer medications accurately and safely, and to monitor untoward effects, reactions, therapeutic responses, toxicity and incompatibilities.

These examples of telehealth nursing practice presented are not intended to be definitive of nursing practice, but rather are descriptive of how the practice of nursing may be carried out electronically using telecommunications technology. This list provides examples of telehealth nursing practice and is not intended to be exhaustive. Telecommunications is advancing at such a rapid rate that its application to health care delivery and nursing practice will continue to emerge and evolve.

Telecommunications and information technology have brought forward new situations and challenges to nursing regulators. The first step in resolving these regulatory concerns is to answer the question, "Does the provision of nursing services through electronic transmission constitute the practice of nursing?" Affirmatively, "Yes." The delivery of nursing services through the Internet or any other electronic channels constitutes the practice of nursing.

*Telehealth is the remote delivery of healthcare services and clinical information using telecommunications technology. This includes a wide array of clinical services using internet, wireless, satellite and telephone media.*

*-American Telemedicine Association, 2014*