

Title:

The Integration of Virtual Monitoring Technology to Empower Advanced Practice Nurses to Optimize Health Outcomes

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Session Title:

Technology in Practice

Slot:

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Scheduled Time:

1:15 PM

Keywords:

advanced practice nurse, disease monitoring and technology

References:

American Nurses Association. (1999). Core principles on telehealth. Washington, DC:ANA.

Brantley, D., Laney-Cummings, K., & Spivack, R. (2004). Innovation, demand, and investment in telehealth. Retrieved Nov 10, 2016, from the U.S. Dept of Commerce, Technology Administration, Office of Technology Policy at www.technology.gov/reports/TechPolicy/Telehealth/2004Report

Abstract Summary:

Computer technologies have opened the door to many new healthcare monitoring approaches for patient care in the home. Explore how Advanced Practice Nurses are bridging the care gap between patients and providers to reduce hospitalizations and improve quality of life.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Discover how to use information and technology to communicate, manage knowledge, mitigate error, and support decision making in the care of a patient at home.	The theory is that better chronic care management will keep costs down. In addition empower patients in self care to manage conditions such as diabetes and heart disease better outside of the hospital, and reducing costly major medical episodes occur while improving quality of life.
Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems.	Demonstrated remote patient monitoring that has significantly reduced readmission by heading off small problems before they become critical and the integrate of the best current evidence with clinical expertise and

	patient/family preferences and values for delivery of optimal health care.
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Abstract Text:

BACKGROUND: The use of virtual monitoring in Homebased Primary Care through technology enhanced patient reporting provides automated environmental monitoring to monitor symptoms and medication compliance is an effective way for Advanced Practice Nurses to provide timely care, practice to full scope of practice and serve populations with limited access.

OBJECTIVE: This program aimed to implement the feasibility and acceptability of virtual symptom and compliance management systems with patients in rural communities receiving Home Based Primary Care, Assessment in the changes of patient outcomes from baseline and implementation of the virtual monitoring will be evaluated for effectiveness, cost reduction and hospitalizations.

METHODS: Repeated patient measures, chart abstractions, interviews and completion of reported outcomes measures at baseline and annually are assessed and provider survey and interviews.

RESULTS: Dramatic improvements were seen in the continuity of care, compliance with medications, and significant reduction in hospital admissions. Clinical improvements in patient blood pressure, glucose, Drug levels, anxiety, and self-care self-efficacy were also observed. Clinicians perceived the use of "real-time" monitoring data and risk algorithms positively contributing to improved clinical care and improved time efficiency and satisfaction. Reducing the complexity of the system was seen as important to promote the utility of technology by both patients, families and providers.

CONCLUSIONS: The connection between the Advanced Practice Nurse, clinical staff and the patient is critical to the success of the virtual monitoring program in Home Based Primary Care. Integrating monthly visits to the home into the clinical program reinforces the importance of using the virtual monitoring equipment to the patient. The results annually suggest that monitoring patient symptoms using technology, computer or mobile based is feasible in rural communities and acceptable in practice.

IMPLICATIONS FOR PRACTICE: Future research would be most beneficial if the use of this technology expanded the number of applications and expanded the scope of the system to encompass a wider range of supportive care needs. Opportunities for a limitless number of technology enhanced applications.