

EXPLORING THE UTILITY OF A HEALTH MONITORING DASHBOARD FOR RESIDENTS IN LONG-TERM CARE

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Introduction

The aging population has led to a shortage of staff to meet the demand for care givers in long-term care facilities. To supplement the work of caregivers, technology is being explored as a solution to provide efficient and effective care. One potential solution is a resident monitoring dashboard that can monitor all residents from a centralized location.

Resident monitoring dashboards can benefit long-term care facilities by providing a streamlined approach to patient care. Caregivers can monitor multiple patients at once, freeing up time for other important tasks. This technology has the potential to enhance the quality of care provided to the elderly population.

The focus group study conducted at an Omaha long-term care facility aimed to gather opinions on the usage and impact of resident monitoring dashboards. The study highlights the significance of comprehending the requirements and designing a dashboard for long-term care facilities to improve resident care.

Research Questions

- 1. What are the most important health parameters that are considered while monitoring a resident's health?
- 2. What features did you find helpful in the dashboard examples for monitoring resident health?
- 3. How do you think these features can be utilized to improve resident outcomes?
- 4. What are the barriers to implementing an application such as a dashboard for monitoring a resident's health and using the dashboard in your organization?

Methodology

Three caregivers (Occupational Therapist, Licensed Practicing Nurse, A Doctor) participated in the focus group study.

Participants were asked questions regarding typical health concerns, activities, and other health data that are usually monitored daily.

Participants were shown examples of monitoring dashboards that display and track patient health data to understand their likes and dislikes about existing products.



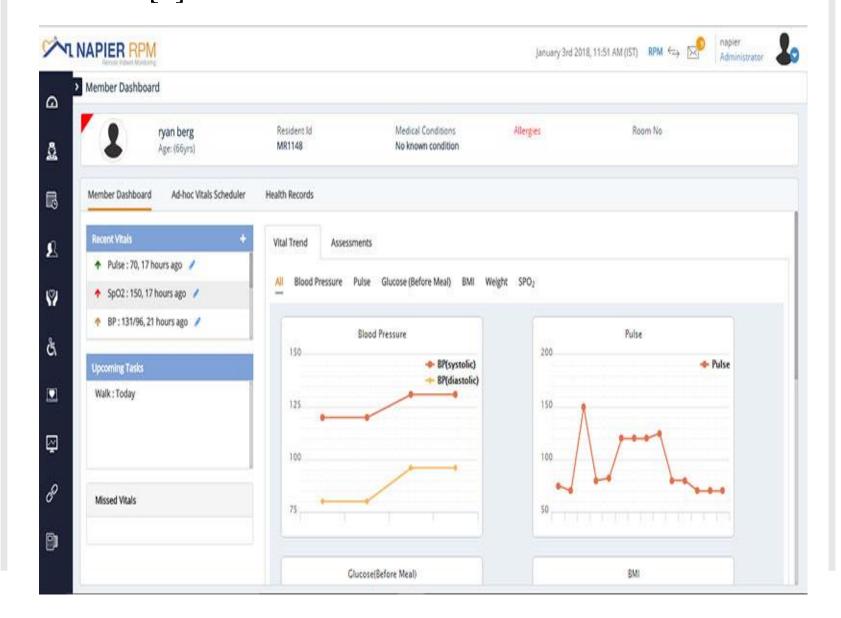
Results/Discussion

The participants identified several key parameters that require daily monitoring, including oxygen levels, blood pressure, pulse, temperature, glucose levels, and medication administration.

Participants found that one of the existing dashboard had the most desirable features. These features included the ability to map required vitals, define customization thresholds, track patient vitals, and manage individual resident care, as shown in Figure 1.

Figure 1:

Real time updates of vital trend Comprehensive health record Alerts and reminders on upcoming tasks Assessments results. [1]



These features can help healthcare providers identify potential health issues earlier, tailor treatment plans to individual patient needs, improve patient engagement, and facilitate communication between healthcare providers, all of which can lead to better patient outcomes.

Implementing a dashboard for monitoring a patient's health requires consideration of various barriers. These include patient privacy, reduced interaction between care giver and resident, family leadership and people's perception.

Properly addressing these barriers can help ensure effective implementation and enhancing the quality of resident care which can improve resource management for healthcare professionals.

Findings

The results section of the study highlights the key parameters that require daily monitoring in long-term care facilities. These parameters include:

Oxygen levels: Oxygen levels can be monitored using a pulse oximeter that measures the oxygen saturation in the patient's blood.

Blood pressure: Blood pressure can be monitored using a blood pressure cuff that measures the force of blood against the walls of the arteries

Pulse: Pulse can be monitored using a heart rate monitor that measures the number of times the heart beats per minute.

Temperature: Temperature can be monitored using a thermometer that measures the patient's body temperature.

Glucose levels: Glucose levels can be monitored using a blood glucose meter that measures the amount of glucose in the patient's blood

Medication administration: Medication administration can be monitored using a medication management system that tracks when medications are given to patients.

The desirable features of a monitoring dashboard identified by participants include mapping required vitals, customization thresholds, patient vitals tracking, and individual resident care management.

Mapping required vitals: Defines and displays vital signs to be monitored, helping the dashboard to display relevant data.

Customization thresholds: Allows setting individualized vital sign thresholds to alert healthcare professionals of changes in patient health data.

Tracking patient vitals: Monitors and tracks patient vitals over time, identifying trends and patterns in health data for display on the dashboard.

Managing individual resident care: Customizes care plans for individual patients and displays personalized data on the monitoring dashboard.

Adopting a health dashboard for resident monitoring offers several advantages to healthcare providers, including identifying potential health issues earlier, personalizing treatment plans, improving patient engagement, and enhancing resource management.

However, careful attention is required to address potential barriers, such as privacy concerns, reduced interaction between caregivers and patients, and the need for family involvement, to ensure successful implementation and enhance resident care quality.

Overall, adopting a health dashboard can be a beneficial strategy for improving patient outcomes and optimizing resource management, with proper planning and consideration of potential barriers.

References

1. Remote Patient Management – Napier Health Care. (n.d.). https://www.napierhealthcare.com/home/remote-patient-management

Acknowledgements

Funding for this study is supported by UNO's BIG Idea: Transforming Wellness and Aging through Business, Informatics and Gerontology (Advisors: Ann Fruhling, PhD, and Julie Boron, PhD.) and the UNO Public Health Informatics Lab. IRB #0537-21-EX

Thank you, Karina I Bishop, MD, (Family Medicine Geriatrics, UNMC) for your invaluable help and support in this study.

