Time spent on remote patient monitoring in a Hospital at Home program

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Background and Aims

Hospital at Home (HaH) programs provide acute inpatient level care in a patient's home. Many HaH programs incorporate continuous remote patient monitoring to support delivery of care. Our goal was to characterize the level of effort required to virtually monitor HaH patients, and to assess the frequency of clinical escalations to hospital clinicians.

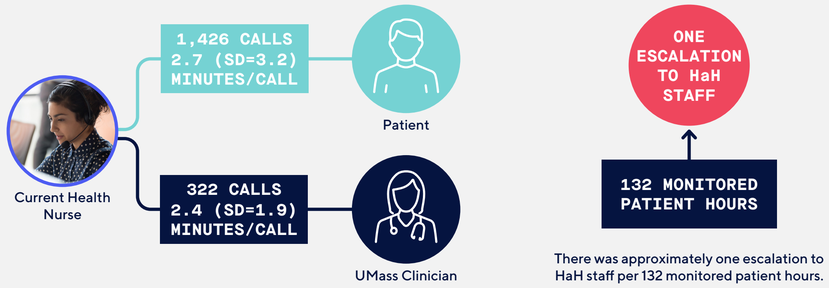
Methods

Patients enrolled in a HaH program using the Current Health virtual care platform were monitored 24/7 via a wearable that continuously transmitted vital signs.

Current Health nurses reached out to patients based on concerning vital sign trends, responded to patient concerns, and triaged vital sign alarms in accordance with clinical protocols, escalating to covering clinicians as appropriate. The logs of video and phone calls made to patients and providers from 1/1/2022 - 6/31/2022 were downloaded on 8/11/2022 and analyzed. Admission metrics and calls were summarized and the average call duration was determined.

Results

1. **311 patients were monitored for a median of 108.3 hours (IQR 69.0 - 173.3)**
2. **Wearable adherence was 93.4% (IQR 87.5 - 96.7)**
3. **Wearable generated 3,951 vital sign and 1,259 technology adherence alarms**
4. **Total virtual nursing time with patients was 64.5 hours, or 2.2 min per 24 monitored patient hours**



There was approximately one escalation to HaH staff per 132 monitored patient hours.

Conclusion

Most alarms did not require patient contact because the patient had previously been contacted or alarms were considered redundant. Expert virtual nursing in a HaH environment can reduce alarm fatigue, efficiently supervise patients, and significantly reduce demands on program staff. Evaluation of the outcomes of escalation to HaH staff will enable further optimization.

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