



**SOUTH DAKOTA
STATE UNIVERSITY**

Mobile Electronic Observation Record

Robert Baune, BSN

Robin Arends, DNP, CNP, FNP-BC, PMHNP-BC, CNE, FAAN, FAANP

Dannica Callies, DNP, CNP, FNP-C, CNE

College/Department of Graduate Nursing

INTRODUCTION AND PURPOSE

- Suicide occurs on behavioral health units more than any other unit in the inpatient hospital setting. From 2014 to 2015, 73.9% of hospital suicides occurred on inpatient behavioral health units (Williams et al., 2018).
- In order to prevent suicide on inpatient behavioral health units, routine observations are completed every fifteen minutes and documented on a paper-based observation record (Jacobs et al., 2003; McLoughlin et al., 2021).
- The Joint Commission assesses hospitals on their compliance with routine observations in the allotted 15-minute interval (Paul et al., 2022).

REVIEW OF LITERATURE

- Paper charting cannot timestamp the observation, which can lead to inaccurate or even falsified documentation (Adaba & Kebebew, 2016; McLoughlin et al., 2021; Sefton et al., 2016).
- Paper charts do not have the ability to electronically alert the caregiver when it is time to do a round (Lehtovuori et al., 2020; Mikhael et al., 2019; You et al., 2021).
- Mobile electronic observation records improves efficiency by increasing the accuracy and speed of documentation when compared to paper-based charting (Sefton et al., 2016).
- Using a paper chart to document observations is not interoperable with other EHR systems, requiring the need for transcription from a paper format into a digital format and thus increasing time spent documenting (Howden, 2022; Schuler et al., 2016).
- Paper charts do not have the technological safeguards in place to protect patient health information (PHI) from improper disclosure or destruction (Department of Health and Human Services, 2007).

METHODS

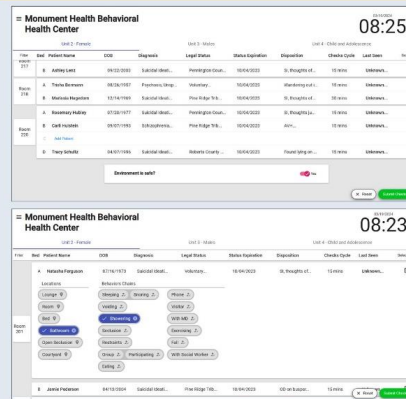


Figure 1 & 2: Screenshots of electronic observation record Hyperchecks utilizing mock PHI. For more pictures visit <https://hyperchecks.com/gallery>

- Paper charts were audited for instances of improper charting for a two-month period using paper chart and video monitoring.
- Improper charting is designated as not being done within the ordered fifteen-minute time interval.
- Safety check observations were inputted into a mobile electronic observation record for two months and then audited for instances of improper charting.
- The electronic observation record provided alerts reminding staff to complete a check as well as electronic timestamps that provide exact timing when the observation was completed.
- Safety check compliance was compared pre and post pilot.

FINDINGS

- Mobile electronic observation record had a compliance rate of 90%
 - (n = 2880 observations)
- Paper-based observation record had a compliance rate of 75%
 - (n = 2130 observations).
- The observation compliance rate was significantly higher while using the mobile electronic observation record compared to the paper-based observation record (p = 0.003).

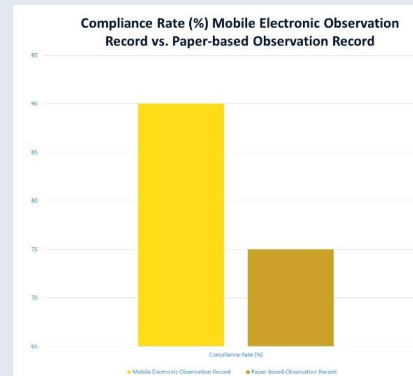


Figure 3: Compliance rate (%) of mobile electronic observation record versus paper-based observation record.

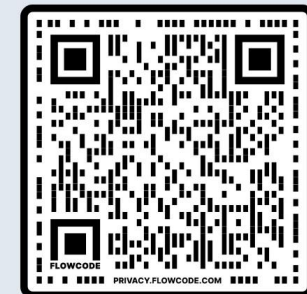
CONCLUSIONS

- Confirms the advantage of using a mobile electronic observation record and its effect on increasing observation compliance.
- Demonstrates interoperability between mobile electronic observation record with hospital's electronic health record



Figure 4: Example of interoperability connecting the EHRs of various disciplines and technologies (Solomon, 2015).

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