

Background & Purpose

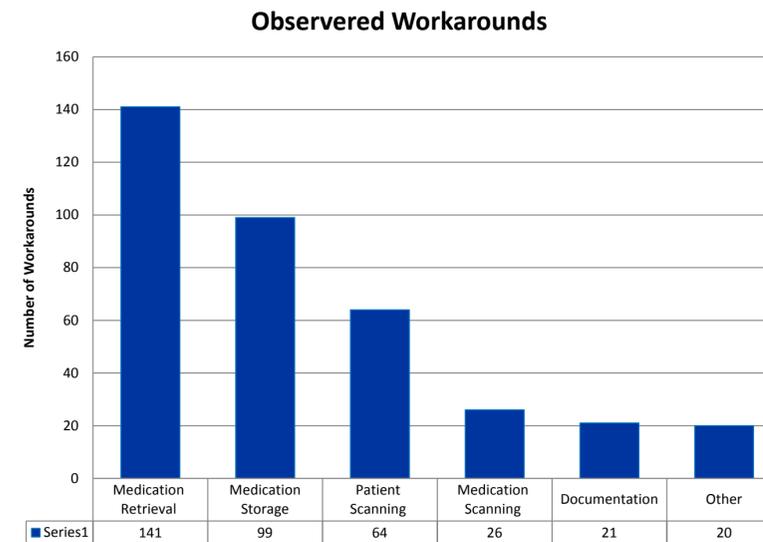
- Barcode Medication Administration (BCMA) effectiveness is contingent upon consistent compliance with best-practice protocols₁
- Behavioral compliance with BCMA best-practice is impacted by factors related to tasks, technology, patients, organizational policies, and the environment₁.
- The psychiatric population presents additional challenges to adhering to BCMA best-practice recommendations that are not present in other patient populations
- The purpose of the project was to:** evaluate BCMA use in the psychiatric setting to identify BCMA workarounds and associated factors that negatively impact BCMA compliance.

Methods

- BCMA use in a 24-bed in-patient psychiatric unit was evaluated by directly observing medication administration episodes and we created visual diagrams to depicting workflows.
- Visual diagrams were compared to the BCMA Checklist₂ and deviations were deemed workarounds.
- The 5 Whys RCA methodology was used to determine workaround causes and guide policy revisions, workflow redesigns, and end-user education programs.

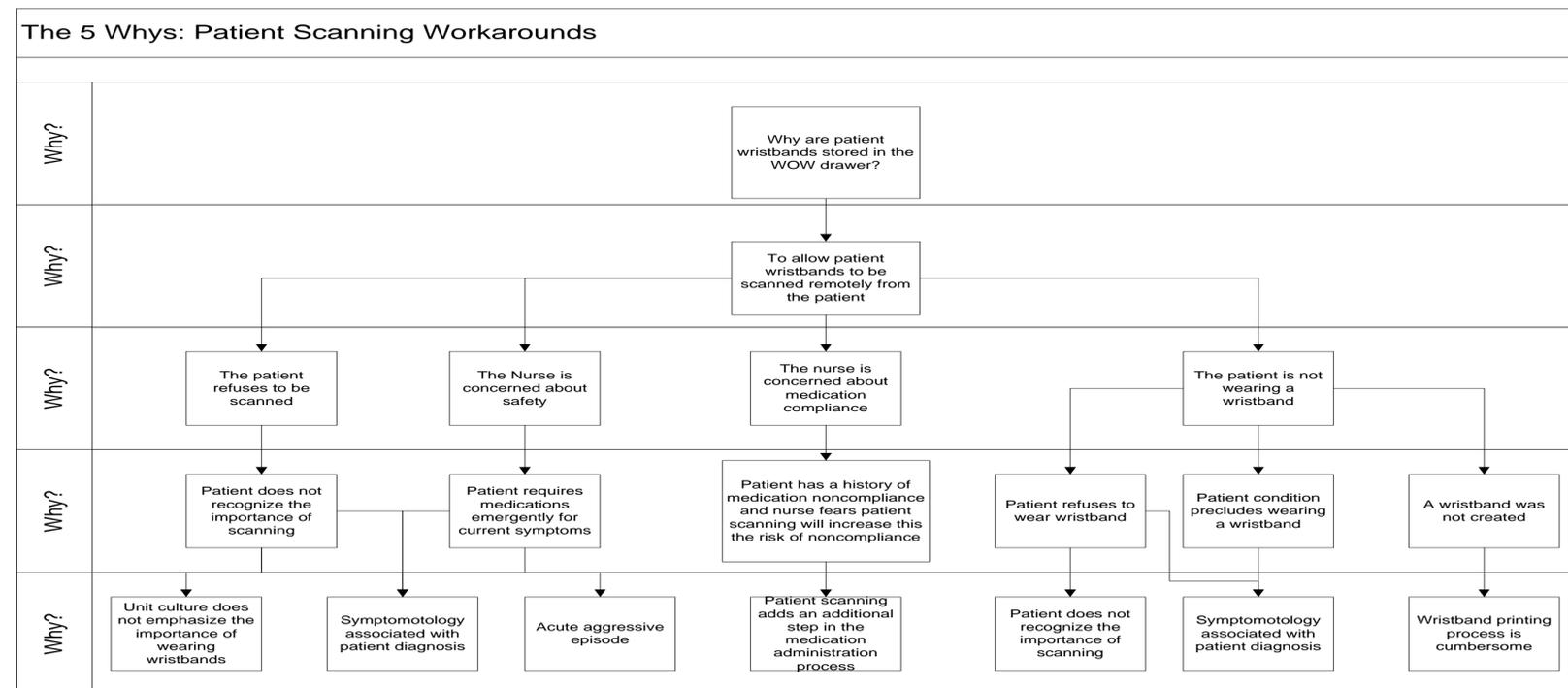
Results

Observed Workarounds



- 374 workarounds were identified during the 94 observed medication admission episodes
- 6 workaround categories identified: Inappropriate medication retrieval workarounds (n=141, 38%); Medication storage workarounds (n=99, 26%); Patient scanning workarounds (n=64, 17%); Medication scanning workarounds (n=29, 8%); Documentation workarounds (n=21, 5%); Other workarounds (n=20, 5%)
- Patient specific challenges were the most common cause of patient and medication scanning workarounds

Workaround Analysis



Population Challenges to BCMA Use

- Severely disorganized, delusional, or paranoid patients were frequently observed not wearing wristbands and/or refusing to be scanned.
- Use of workstations on wheels when caring for aggressive patients
- Burdensome workflows related to the mobile nature of psychiatric patients.

Implications & Future Research

- Psychiatric symptoms including paranoia, disorganized thought patterns, aggression, and delusions, as well as concerns related to medication compliance present additional challenges that impact best-practice BCMA use.
- Although adherence to BCMA protocols remains integral to medication safety, patient specific considerations need to be considered when developing BCMA protocols.
- Additional research is needed to determine how to account for these challenges to assure medication safety in the psychiatric population.

Selected References