

Implementing Bedside Medication Verification (BMV) in a Pediatric Rehabilitation Hospital

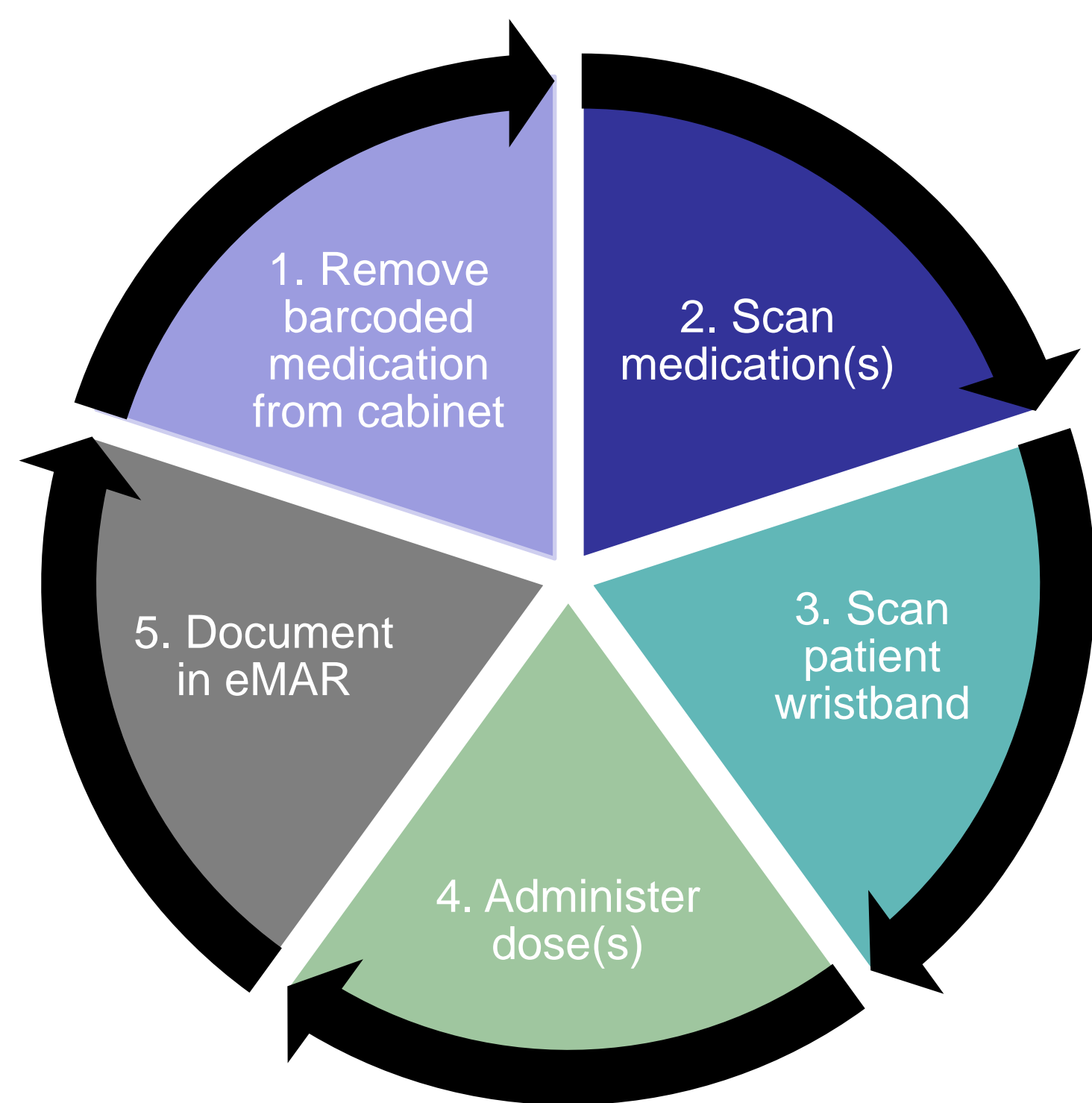
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Background

Bedside Medication Verification (BMV) is currently best practice for medication administration and part of a closed loop medication management system. It involves scanning the medication package and verifying it against the client's ID armband. It is the last step before the medication reaches the client and will alert the nurse if there is a medication discrepancy.

Purpose

The aim of implementing BMV is to align with the best practices of the healthcare system, improve pediatric medication safety, optimize pediatric client care with a safe and effective medication use system within a pediatric rehabilitation hospital.



Methods

The impact of BMV expanded across the interprofessional teams including physicians, nurse practitioners, pharmacists, pharmacy technicians, respiratory therapists, nurses, nursing students, and information management and technology teams.

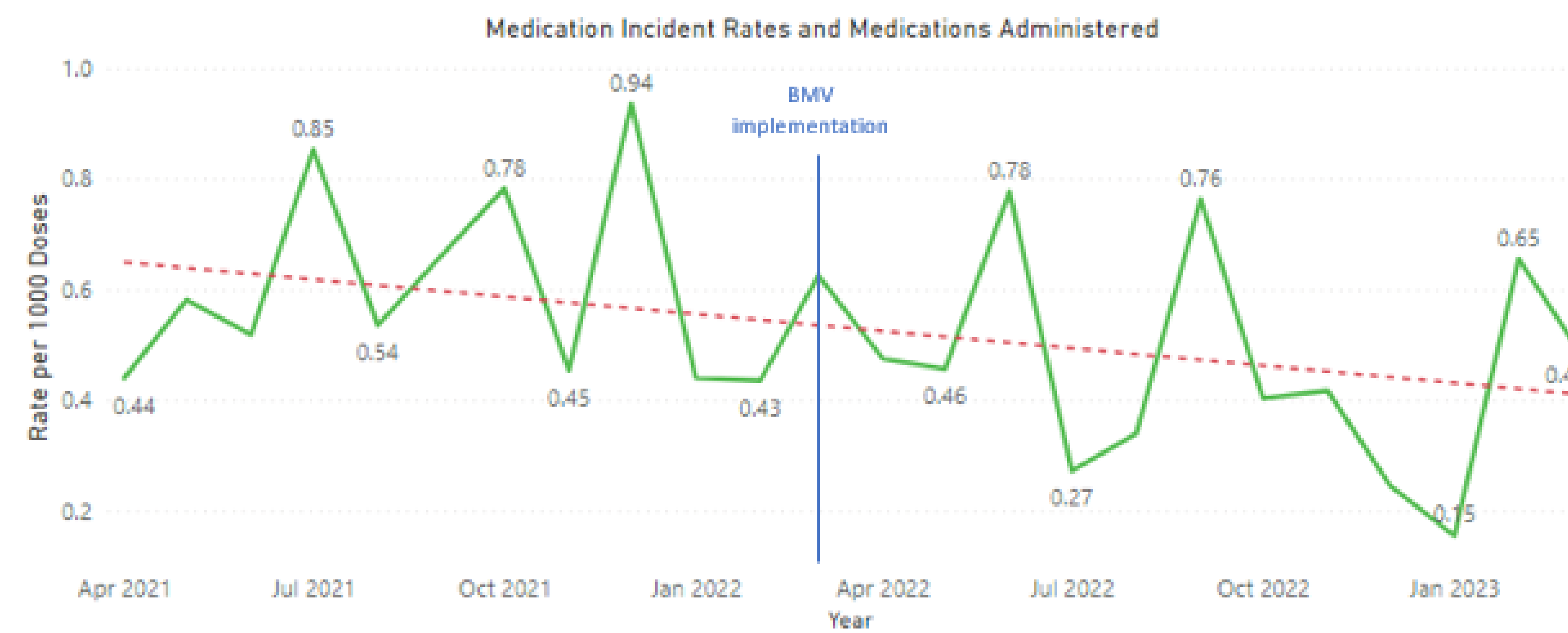
The working group explored the current and future state using BMV. Nursing champions from each patient care unit facilitated the education roll out and supported fellow nurses during frontline clinical care.

There was a 4-hour education that was provided for all staff impacted by BMV facilitated by the working group. It allowed staff to simulate the new workflow using the various devices.

Outcomes

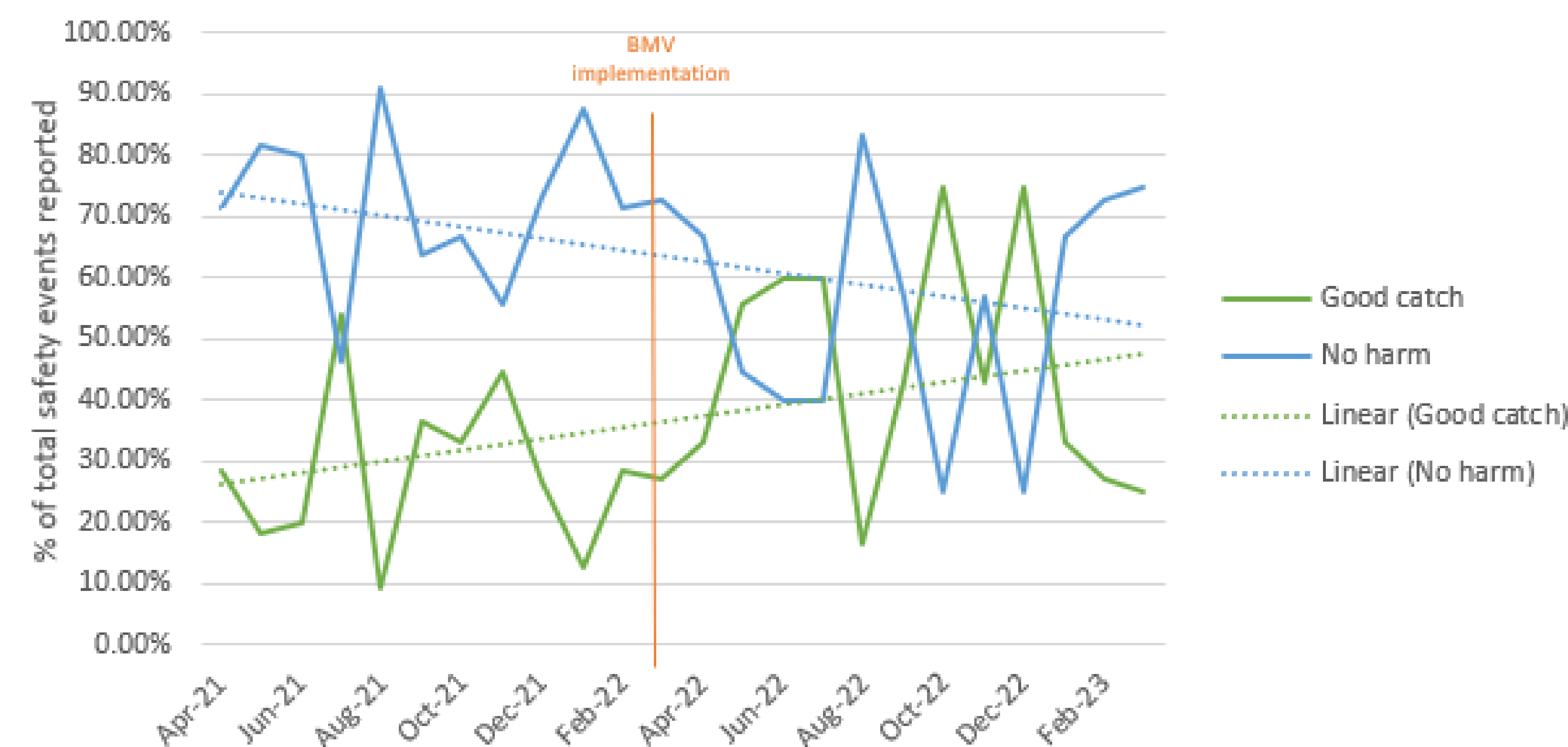
100% of full-time and part-time nurses and respiratory therapists attended the in-person four-hour BMV education session.

Overall, the number of incident reports have decreased since implementation of BMV.



Prior to implementation, a medication safety event reached our clients once every 3.83 days. Post-implementation, a medication safety event reached our client once every 5.85 days.

Event severity as percentage of total safety events reported

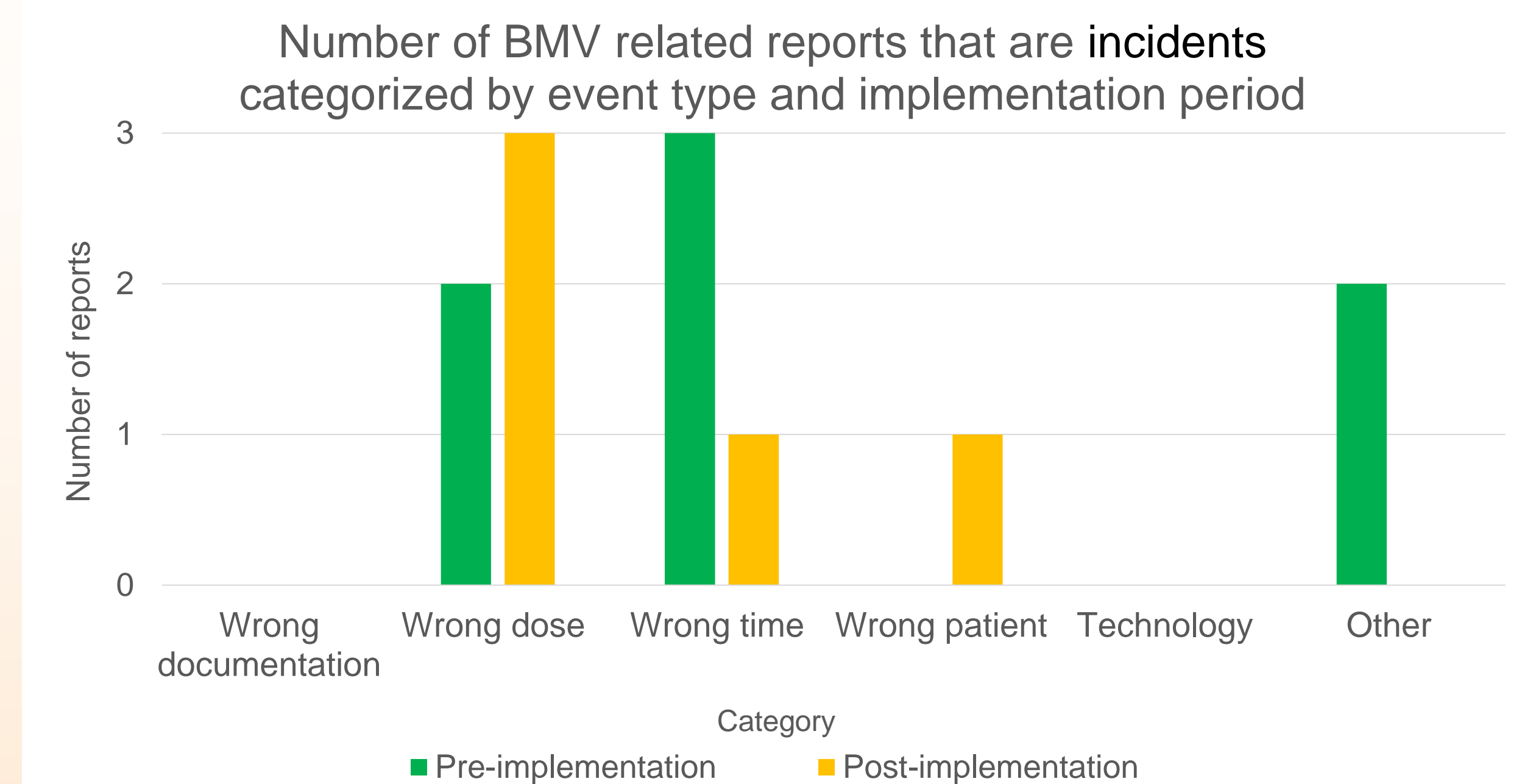


Of the incidents reported there has been an increase in good catch safety events and a decrease in no harm events as indicated above with the linear dotted line.

Additionally, one year post implementation of BMV, 90% of client's ID band are being scanned and 93% of medications are scanned.

Conclusion

The initiation of BMV at a pediatric rehabilitation hospital has shown to be effective. The most significant observation is that the rate of harm incidence and the number of incident reports related to medication administration have been reduced post-implementation.



For the BMV related data above, post-implementation reports are a result of BMV not being used appropriately as the team became proficient with the new workflows and technology. No actual harm has reached our clients when BMV is utilized correctly which captures the safety impact of this best practice.

We continue to strive for at least 90% compliance rates for both scanning clients and scanning medications. We are exploring potential barriers that are impacting scanning of client ID bands and medications by completing ongoing compliance reports.

As we collect more data over time, future implications for more in-depth analysis and interpretation of data will allow us to visualize the direction of trends post-BMV implementation.

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