



# Utilizing Technology to Automate and Standardize Patient Education

Sarah Wentz, PhD, RN-BC  
M Health Fairview Minneapolis, MN

## Introduction

Discharge education is an important part of post-surgical care. Perianesthesia nurses play a vital role in reviewing instructions with the patient and family/accompanying responsible individual prior to discharge. Inclusion of relevant, up-to-date, and consistent information is essential for patients and families to appropriately care for themselves at home.

Decreased recollection and retention of information after surgery can result from the amnesic effects of medications given to patients, along with patient discomfort and anxiety. Providing both written and verbal instructions is needed <sup>(1,2)</sup>. Exploring ways to automate aspects of written instructions can help reduce nurse burden and ensure appropriate information is provided at discharge.

## Acknowledgements

Special thanks to the informatics, pharmacy, patient education and anesthesia teams for their work and support with the project.

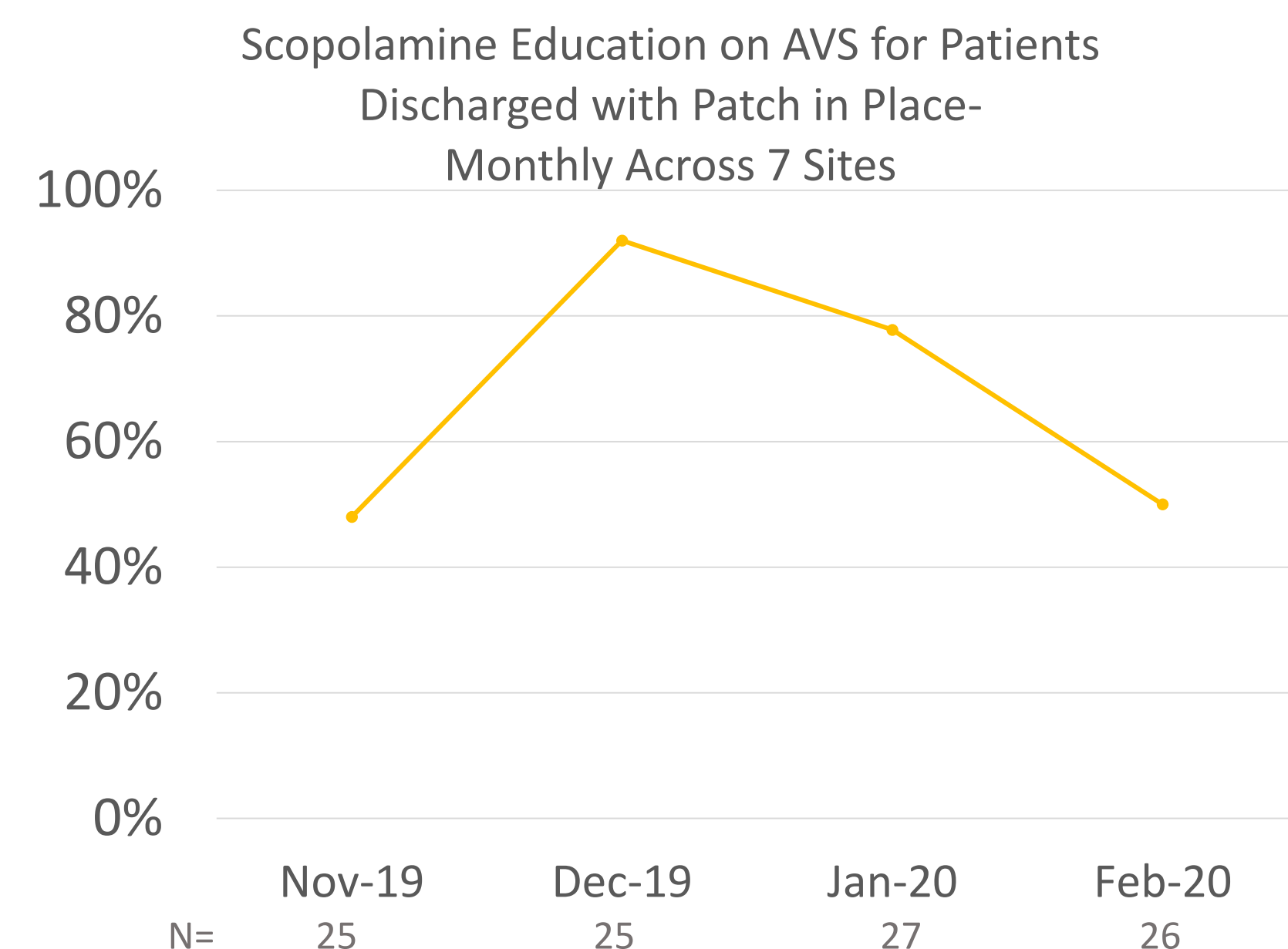
## Background

- Perianesthesia nurses across a large healthcare system were manually entering discharge education in the electronic health record (EHR) for patients discharged with a Scopolamine patch in place.
- Nurses identified the manual process was nurse dependent and required additional work.
- Audits revealed the instructions were not always on the After Visit Summary (AVS) given to the patient at discharge.
- When working on automating the process, variations in Scopolamine education content was found across the health system.

*The purpose of this project was to standardize and automate printed instructions for surgical patients discharged with a Scopolamine patch.*

### Audits Prior to Implementation

**\*\*A small number of charts were audited each month to verify gap and may not be fully representative of compliance**



## Methods

Key stakeholders included:

- Anesthesia
- Nursing
- Pharmacy
- Patient Education
- Clinical Informatics
- Information Technology

Process:

- All discharge education was gathered and a crosswalk was conducted
- Current evidence was reviewed and utilized to update Scopolamine patient education for post-operative N/V
- Patient education experts edited content to meet health literacy and formatting standards
- Content edited and approved by pharmacy and anesthesia
- Nursing worked with the informatics team and pharmacy to verify correct medication and patient population were used for automated process
- Informatics team built and tested process
- Communicated automated process change to leaders and frontline staff via email and meetings

## Outcomes

- Prior to the project, eight variations in Scopolamine patient education were used with patients discharged after surgery. Content is now standardized across the system.
- Nurses reported satisfaction with the new process.

- Scopolamine discharge education is now automatically populated to the AVS for Same Day Surgery patients. This automatic process flows from nurse documentation of the patch on the medication administration record. The process was verified after implementation and no ongoing audits were performed.

## Conclusion & Implications for Nurses

Interdisciplinary partnership and optimal use of EHR capabilities resulted in:

- Reduction in nurse time and burden to enter instructions
- Standardized patient education across a large healthcare system
- Patients provided with appropriate and consistent instructions at discharge
- Nurses should continue to explore and identify opportunities to improve the discharge education process to ensure patients receive relevant printed discharge instructions.
- Partnering with technology leaders in your organization to investigate automated processes may help eliminate manual entry of instructions by nurses.
- This automated process has been applied to one additional medication, with two more in consideration.

### References

1. American Society of PeriAnesthesia. PART FOUR: PRACTICE RECOMMENDATIONS PRACTICE RECOMMENDATION 2. Components of Assessment and Management for the Perianesthesia Patient. In: 2021-2022 Perianesthesia Nursing Standards, Practice Recommendations and Interpretive Statements; 2020.
2. The Joint Commission on Accreditation of Healthcare Organizations. Comprehensive Accreditation and Certification Manual. Joint Commission Resources; 2015