

# Evaluation of Automated Education Reminders for New Medications

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## Introduction/Background

The majority of RNs believe it is important to provide patients with information on new medications. A recent Epic electronic health record system upgrade introduced functionality that prompts nurses to educate patients about medications that are considered new to them. First-dose patient education functionality includes an icon on the Medication Administration Record (MAR), and automation of a medication-specific education point to the Patient Education Activity. The intent is to streamline the documentation of medication administration and patient education.

## Methods

Three functionality configuration options were considered: enable for all medications, enable for a subset of medications, do not enable. Nursing informatics leaders evaluated the options and the pros and cons of each option. A conference call was organized with another Epic customer who had implemented first-dose patient education functionality for all medications to gather feedback and learn how they applied it. Most agreed on an all-or-nothing approach. The final decision was to implement the functionality for all new medications.

## Results

Within a month of implementation, feedback was unfavorable. The negative impact of system configurability limitations and workflow considerations was realized. Patients had many first-dose education points. Most were not accurate or relevant and persisted on the patient record as the patient moved throughout the health system. Staff reported minimal value of the functionality given the new burden of keeping the patient education list meaningful. A month after implementation, the majority of points persisted on patient records with a status of not started. The medications with the highest rates of first-dose education documentation correlated with those ordered most frequently, including IV fluids, and over-the-counter pain and bowel regimens. Two medications that warrant first-dose patient education for successful self management with high rates of education documentation were Enoxaparin Sodium and Oxycodone.

**Table 1: Status of first dose education points documented against at discharge**

Status	Percentage
Not Started	74%
Done	21%
In progress	5%

## Discussion/Conclusion

Any efficiency gained by automating education points for medications considered new to a patient was outweighed by the burden of documenting against or deleting points that were not relevant. Nursing informatics leadership evaluated the feedback and data and endorsed a proposal to restrict the functionality to a strategic subset of medications, those that a patient will likely be discharged on to self-manage a complex medical condition. The refined list will only result in a few points being automated for each patient. The change will provide meaningful decision support to nurses regarding new medications the patient should be taught about while reducing workload and the need to reconcile first-dose education points that are not appropriate for the patient.

## References

1. Bowen, J.F., Rotz, M.E., Patterson, B.H., Sen S. Nurses attitudes and behaviors on patient medication education. *Pharmacy Practice*, 2017; 15(2) 1-5. <https://doi.org/10.18549/PharmPract.2017.02.930>.