

Utilizing the Epic Narrator to Streamline the Injection Process in an Outpatient Musculoskeletal Clinic



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Background

The University of Texas Southwestern Medical Center (UTSW) outpatient musculoskeletal clinic injection procedure workflow involved multiple steps and lacked standardized documentation of the entire procedure workflow including one-step medication ordering which allow clinicians to document a medication administration in one step and in real time. As a result, providers and staff had to document across several tabs within the encounter. Clinical staff would pend medication orders in advance for provider review and during the injection visit they would need to record medication NDC, lot number, and expiration date in the Medication Administration Record (MAR).

During a high volume, fast-paced clinic day, these tasks were not always completed in real time and lead to breakdowns in the information being documented. Additionally, any missing information or mistakes resulted in emails from the revenue cycle department with instructions to retrospectively correct the documentation, adding additional time spent outside of direct patient care.

The Procedure Narrator tool in EPIC allows for customization and integration of toolboxes that include frequently used medications for injection procedures. Providers and clinical staff can easily access the Narrator to select and document medication administration in a single, streamlined step, ensuring real-time accuracy. By automatically logging medication details such as NDC, lot numbers, and expiration dates directly into the Medication Administration Record (MAR), the Narrator reduces the risk of errors and omissions. Minimizing the need for retrospective corrections typically prompted by the revenue cycle department, thereby decreasing documentation-related burdens on staff and providers.

Aim Statement

The goal of this Quality Improvement (QI) project is to enhance clinic efficiency and reduce documentation errors through customization of the Procedure Narrator tool for injection procedures by November 2025. By tailoring the tool to meet the specific requirements of injection procedures, we aim to streamline workflows, eliminate redundancies, and support real-time, accurate documentation, ultimately improving both staff satisfaction and patient care outcomes

Design

Collaborated with Clinical Informaticist and Epic analyst team to tailor and implement the Procedure Narrator tool in Epic to support the medication order/documentation process for injection procedures.

The Procedure Narrator provides the team with a single activity in Epic to document injection procedures. The narrator contains three key elements:

- One-step medications so clinicians can document the administration of the 14 most common medications in one step and in real time
- A narrative of all actions that take place during the procedure encounter including procedure start and end times within the Event Log
- Flowsheets for vitals and pain assessment

Desired outcomes included decreasing charting time and medication documentation errors and enhancing provider and staff satisfaction, visit volumes per session, and wRVUs.

- Measured provider and staff satisfaction level of injection procedure workflows through pre and post implementation satisfaction surveys.
- Measured clinic volumes, number of revenue cycle emails requesting corrections pre and post implementation of Procedure Narrator tool.

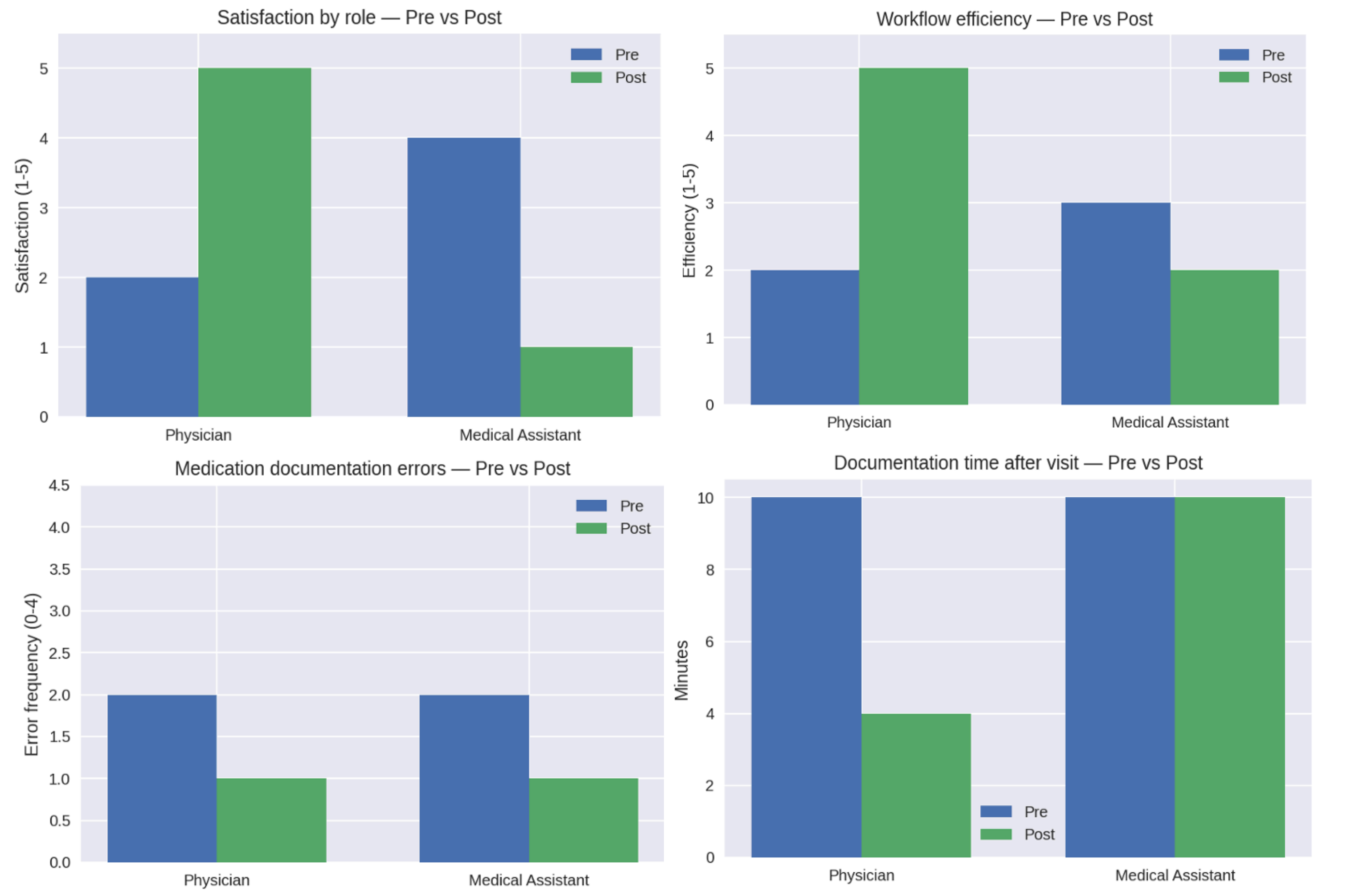
Results

Pre- and Post Implementation Satisfaction surveys for provider and medical assistant:

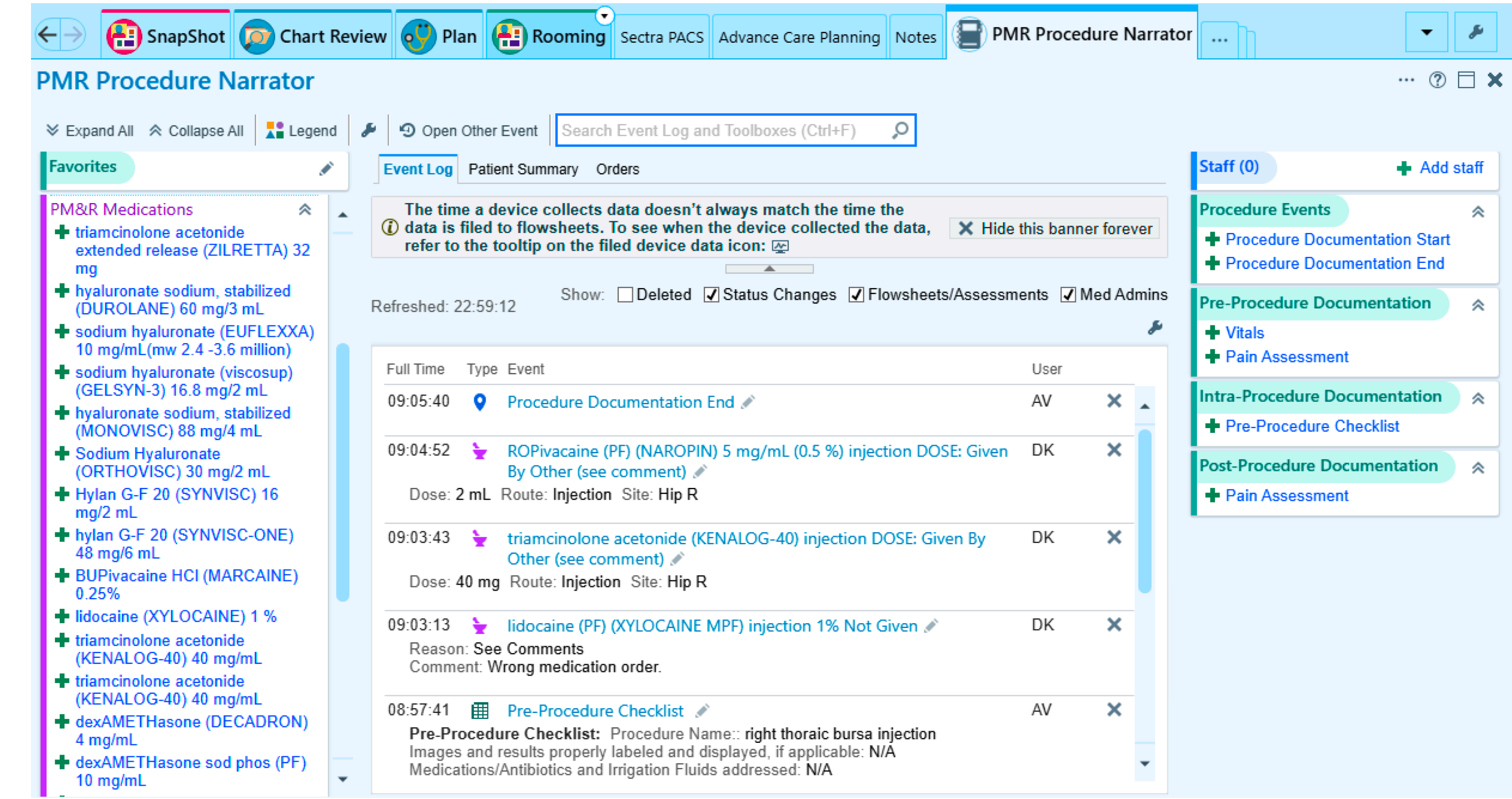
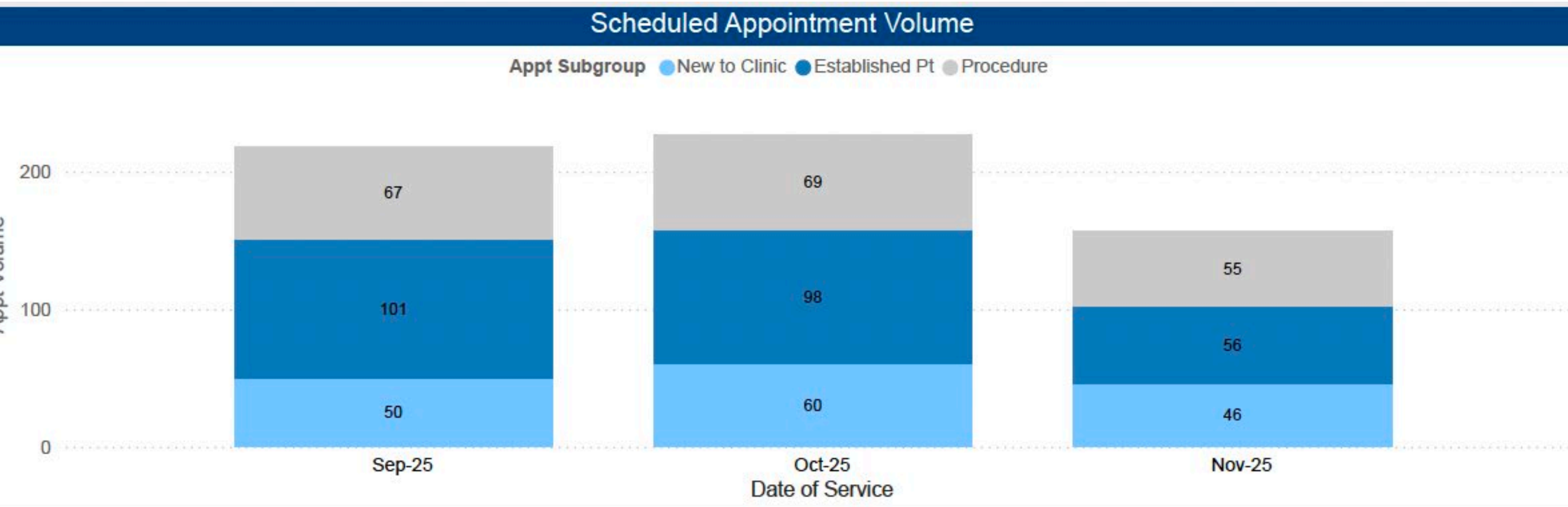
- Provider satisfaction of the process and perception on workflow efficiency increased, while these parameters decreased for the medical assistant.
- Medical documentation errors were perceived to be less by both the provider and medical assistant.
- Post-visit documentation time: provider improved from 5–10 min to <5 min; Medical Assistant remained at 5–10 min.
- Billing clean-up improved, email frequency moved from “Occasionally” to “Rarely” for both roles, and medical assistant’s weekly time correcting billing-identified errors improved from 30–60 min to <30 min.
- Provider burnout impact improved from “Significantly contributes” to “Slightly contributes”, and available patient care time shifted from “Significantly reduces” (pre) to “Slightly increases” (post).

Number of Revenue Cycle Emails Received:

- Pre-Implementation (Average per Week): September- October 2025 1 to 2 discrepancy emails
- Post- Implementation (total): November 2025- 2 emails, December 2025- 3 emails



Appointment volumes pre- and post-implementation of the procedure narrator: In September 2025, there were 218 visits, and in October 2025, visits slightly increased to 227. Following the implementation, November 2025 recorded 157 visits. It's important to note that the provider was on vacation for a week in November, which meant that the average number of visits per clinic session remained consistent despite the overall decrease.



Discussion

- Provider experience improved substantially, but medical assistant experience worsened on workflow and clinic flow.
- The Procedure Narrator tool seemed to decrease the documentation burden for the provider and did the opposite for the medical assistant. This likely represents a transfer of the medication documentation burden from the provider to the medical assistant. Additionally, the process required the medical assistant to remain in the patient room the entire procedure visit which decreased available time to manage patient throughput and maintain clinic flow.
- Documentation time after the visit did seem to decrease with the Procedure Narrator, but clinic volumes remained relatively unchanged. This is likely due to the small sample size of only one provider and the decrease in available clinic time due to the provider being out of the office over the Thanksgiving holiday.
- Medication record discrepancies remained about the same post-implementation of the Procedure Narrator which can be looked at as a positive given the troubleshooting usually expected with a new process.

Conclusions

- The Procedure Narrator is a single user-friendly activity that streamlines procedure documentation of medications administered, and injections performed at the University of Texas Southwestern Medical Center (UTSW) outpatient musculoskeletal clinic.
- Overall, the Epic Narrator appears to be a promising tool to optimize administrative tasks associated with injection procedures in our outpatient musculoskeletal clinic. There is some fine tuning to be done, however, and the post-survey results emphasize the importance of taking into account how new processes may affect the role of all stakeholders.

Future Directions

- Continue utilizing Procedure Narrator while no longer requiring the medical assistant to stay in the room once initial documentation has been completed. Procedure end time would be logged when the physician leaves the room.
- Addition of new toolboxes to the Procedure Narrator to incorporate imaging orders
- Analyze impact to billed collections and patient experience to analyze the metrics with and without the Epic Narrator.
- Expanding Procedure Narrator to additional providers and implementing for a longer period will increase the sample size and clarify any other positive and negative effects in clinic flow utilizing the Narrator.