

IMPROVING EMERGENCY DEPARTMENT CARE FOR PATIENTS WITH SICKLE CELL DISEASE AT HUMBER RIVER HEALTH



Linda Jorgoni, NP, BScN, MScN; Dr. Leon Rivlin, MD; Rosa Spataro, RN, BScN, CNA-Emergency; Elizabeth Taylor, RN; Ledor Babatinca, RN, MN; Benish Qaiser, RN, BScN, MScN; Dr. Marko Erak, MD, CCFP; Amanpreet Ghuman, BScN, MScN

DESCRIPTION

Sickle Cell Disease (SCD) is a chronic, life-threatening condition predominantly affecting individuals of African, Caribbean, Middle Eastern, and South Asian descent. Patients often present to the emergency department (ED) with acute vaso-occlusive pain crises (VOC), requiring prompt assessment and effective pain management. However, systemic bias, clinical variability, and inconsistent protocols often contribute to care delays and patient distress. To address these challenges, Humber River Health (HRH), in collaboration with Evidence2Practice (E2P) Ontario, implemented a standardized SCD care pathway to improve timeliness, promote equitable care, and enhance the overall patient experience.

OBJECTIVE

To standardize SCD management in the ED by implementing a care pathway and order set, improving timeliness, consistency, and compliance with best-practice recommendations.

ACTIONS TAKEN

The ED leadership team:

- Engaged patient partners to integrate lived experience into workflow redesign.
- Adopted best-practice recommendations and templates from E2P Ontario.
- Developed a standardized SCD ED care pathway and vaso-occlusive pain order set with explicit pain management protocols.
- Introduced an SCD triage flag to prioritize assessment for SCD patients.
- Implemented real-time audit dashboard to track performance metrics.
- Provided interdisciplinary training for ED staff to ensure compliancy in change management. Topics included: SCD quality standards, racism and anti-black racism, stigmatization, and vaso-occlusive acute pain episodes.

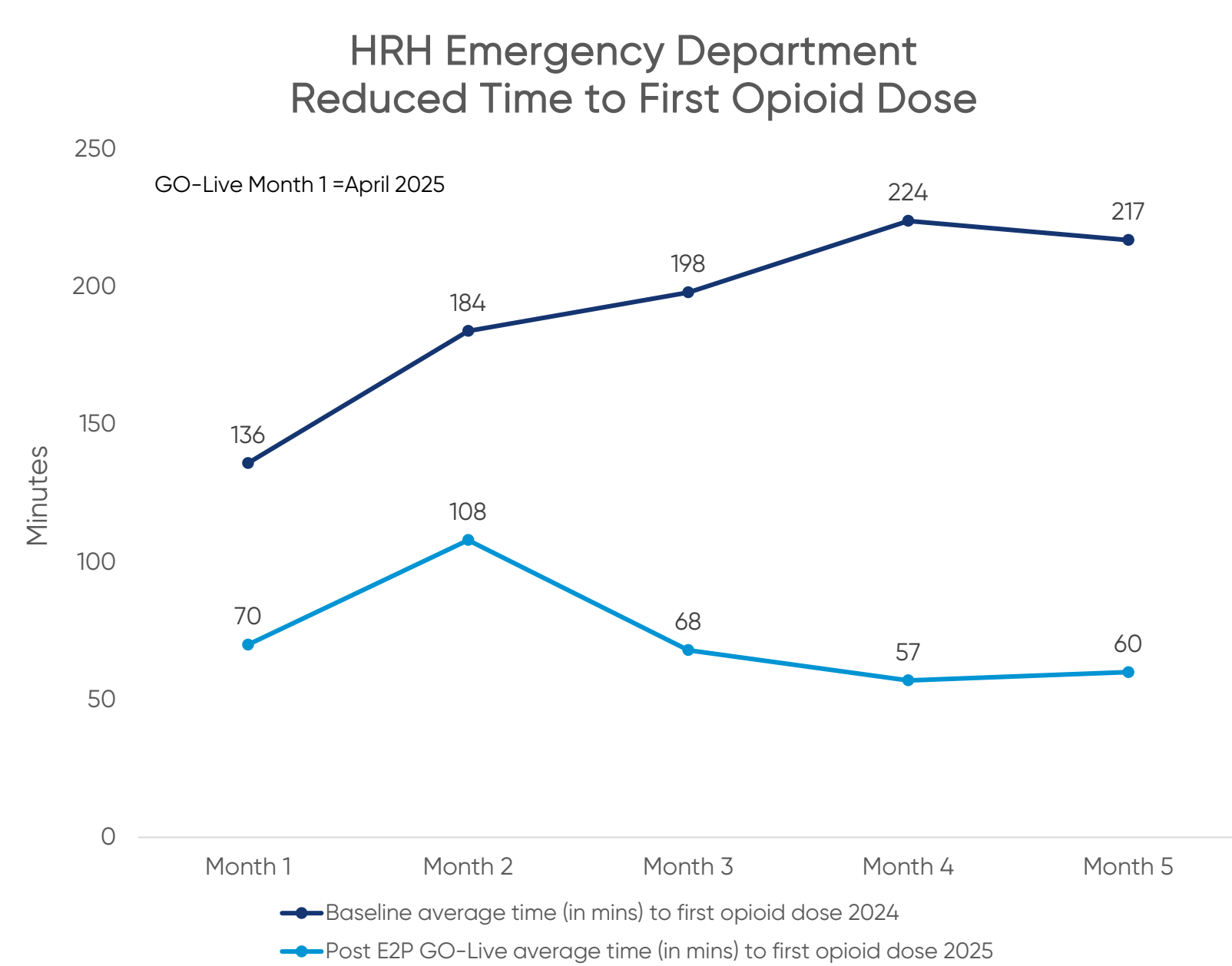


Figure 1. HRH Emergency Department saw a reduction of time to first opioid dose from baseline (2024) of 192 minutes to 73 minutes after E2P GO-Live.

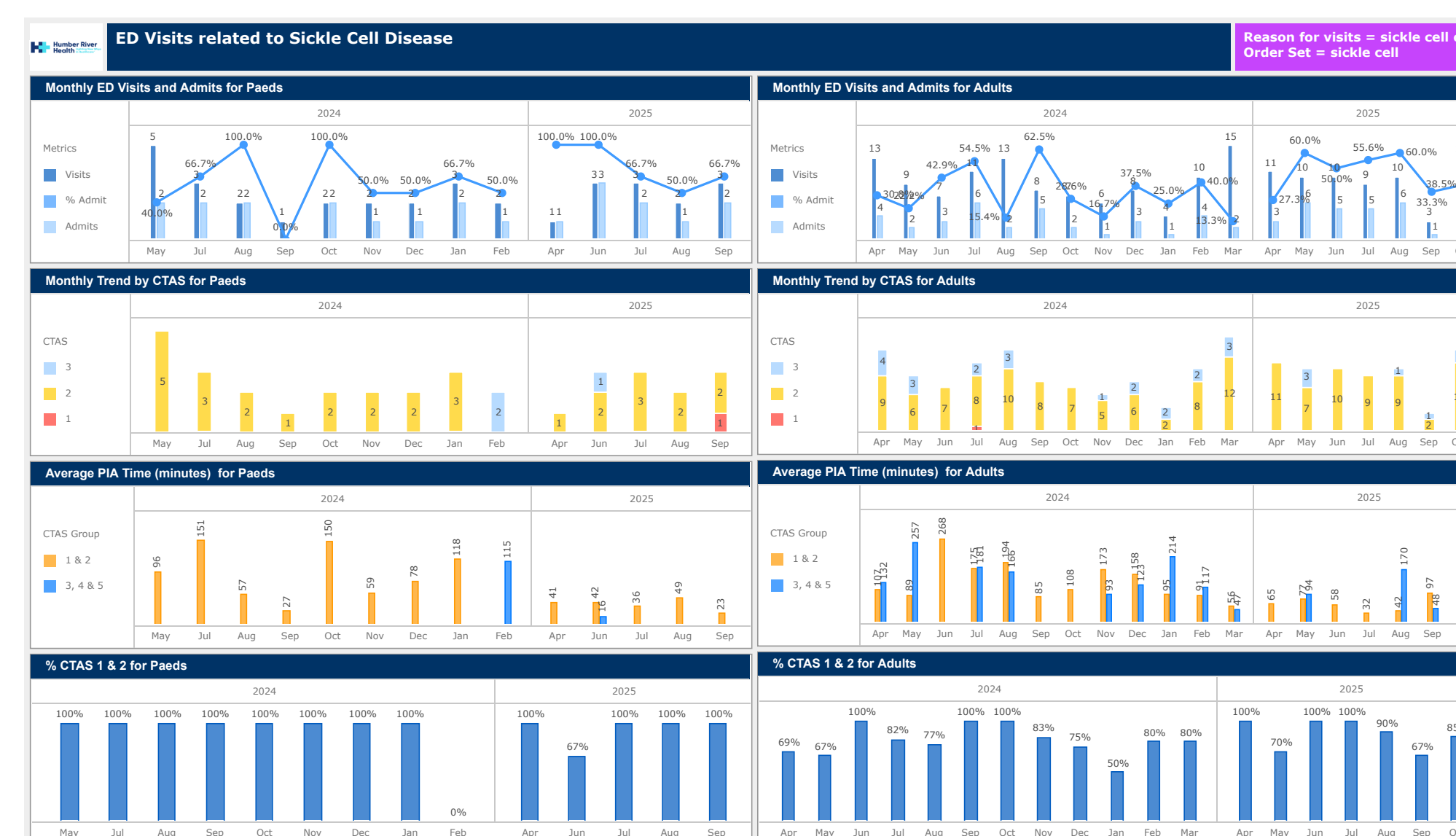


Figure 2. Example of the ED Sickle Cell Disease Daily Dashboard.

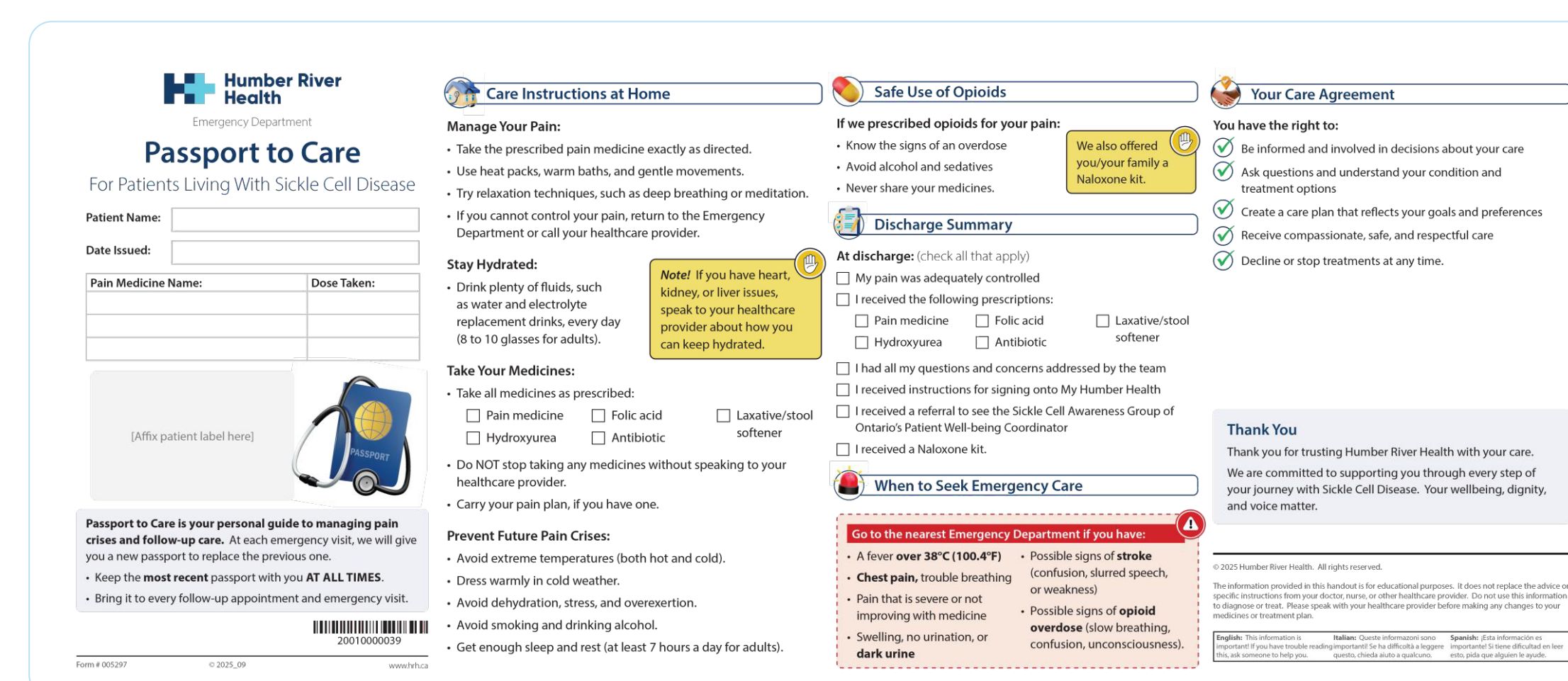


Figure 4. Patient education material given to SCD patients in the ED.

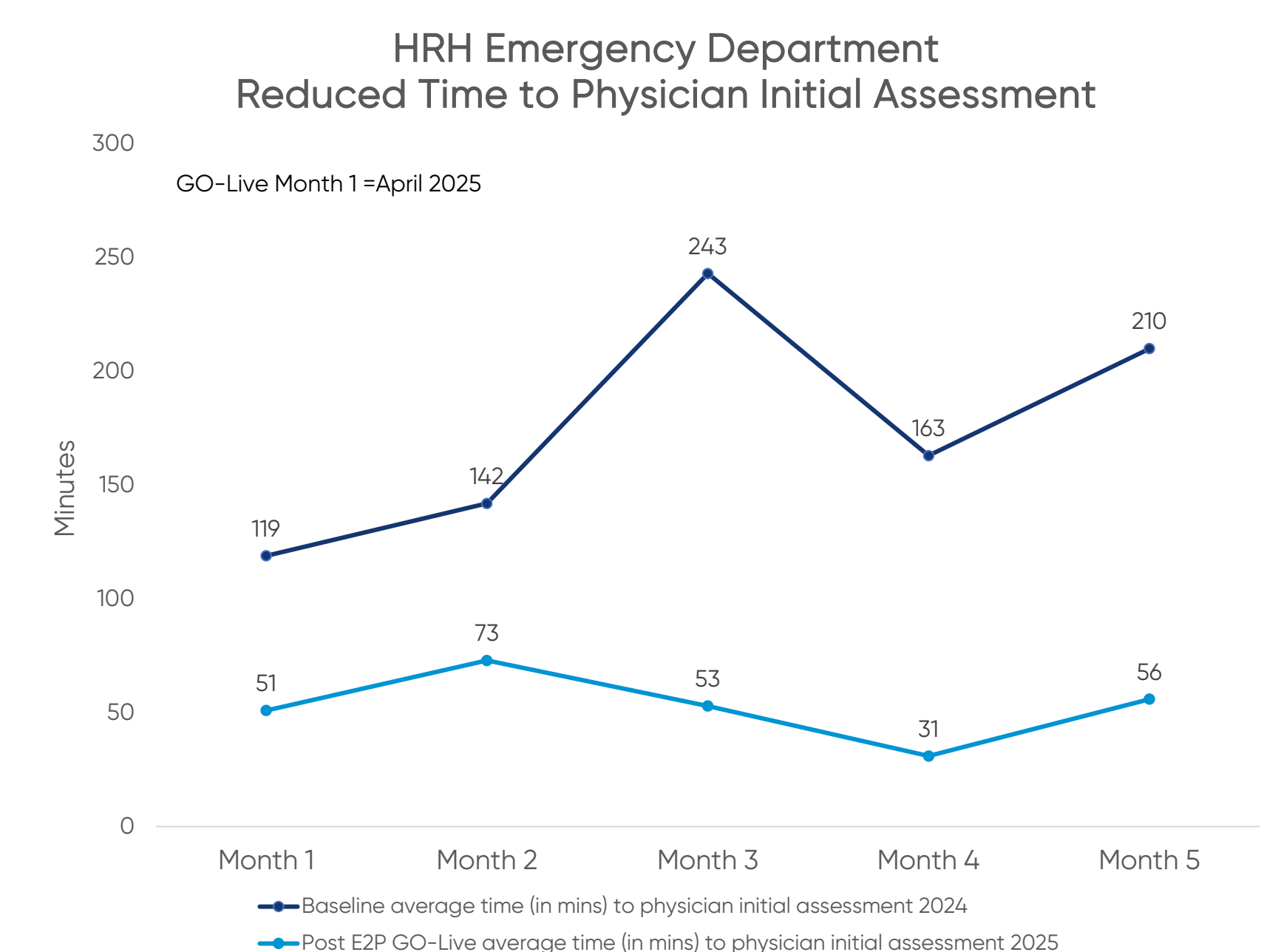


Figure 3. HRH Emergency Department saw a reduction in physician initial assessment time with baseline (2024) at an average of 175 minutes to 53 minutes after E2P GO-Live.

SUMMARY OF RESULTS

- Average Physician Initial Assessment (PIA) Time reduced from 175 minutes in 2024 (pre-implementation) to 53 minutes in 2025 (post-implementation).
- Time to First Opioid Dose reduced from 136 min in January 2025 (pre-implementation) to 60 min in August 2025 (post-implementation). The fastest month was July 2025 at 57 min.
- Order set use increased from 11% in January 2025 to 78% in August 2025 and has sustained >75% usage rate since.
- Canadian Triage and Acuity Scale (CTAS) 1-2 Triage assignment increased in both adult and pediatric patients.
- Real-time transparency improved responsiveness and patient experience.
- Recognized with an Equity, Diversity, and Inclusion Excellence Award.

LESSONS LEARNED

Engaging patients as partners and transparent data sharing are critical in driving sustainable change and ensuring equitable, empathetic, patient-centered care. Strong leadership and interdisciplinary collaboration on creating a standardized pathway with consistent staff training significantly improves timeliness, reliability, and trust in SCD management across the ED.

