

# RETURN VISITS TO THE EMERGENCY DEPARTMENT FOR HIP AND KNEE REPLACEMENTS

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## DESCRIPTION

Post-operative Emergency Department (ED) returns following total joint arthroplasty place a significant burden on patient well-being and system resources. An audit of unilateral total hip and knee replacement discharges from August to October 2024 identified ED return rates of 8.5% for hips and 11.8% for knees, with 42% of these visits related to wound concerns. Analysis revealed post-op gaps in discharge education, leaving patients uncertain about accessing care with resultant visits to the ED. The average wait time in the ED was 7 hours and 13 minutes. Process mapping revealed bottlenecks in timely access to outpatient wound support. Change ideas focused on direct orthopedic follow-up at the Fracture Clinic, bypassing the ED.

## OBJECTIVE

To reduce ED visits for post-operative wound concerns from 42% to less than 10% through a proactive, patient-centred care model incorporating enhanced discharge education and direct orthopedic follow-up.

## ACTIONS TAKEN

- Visual discharge instructions developed, outlining wound appearance thresholds and self-care expectations.
- Implemented “no-appointment-needed” access to the Fracture Clinic for urgent wound assessments.
- Various measures used to evaluate change management include:
  - Outcome: Percentage of patients returning to the ED for post-op wound concerns.
  - Process: Percentage of patients attending the Fracture Clinic for post-op wound issues using “walk-in” model.
  - Balance: Patient satisfaction.

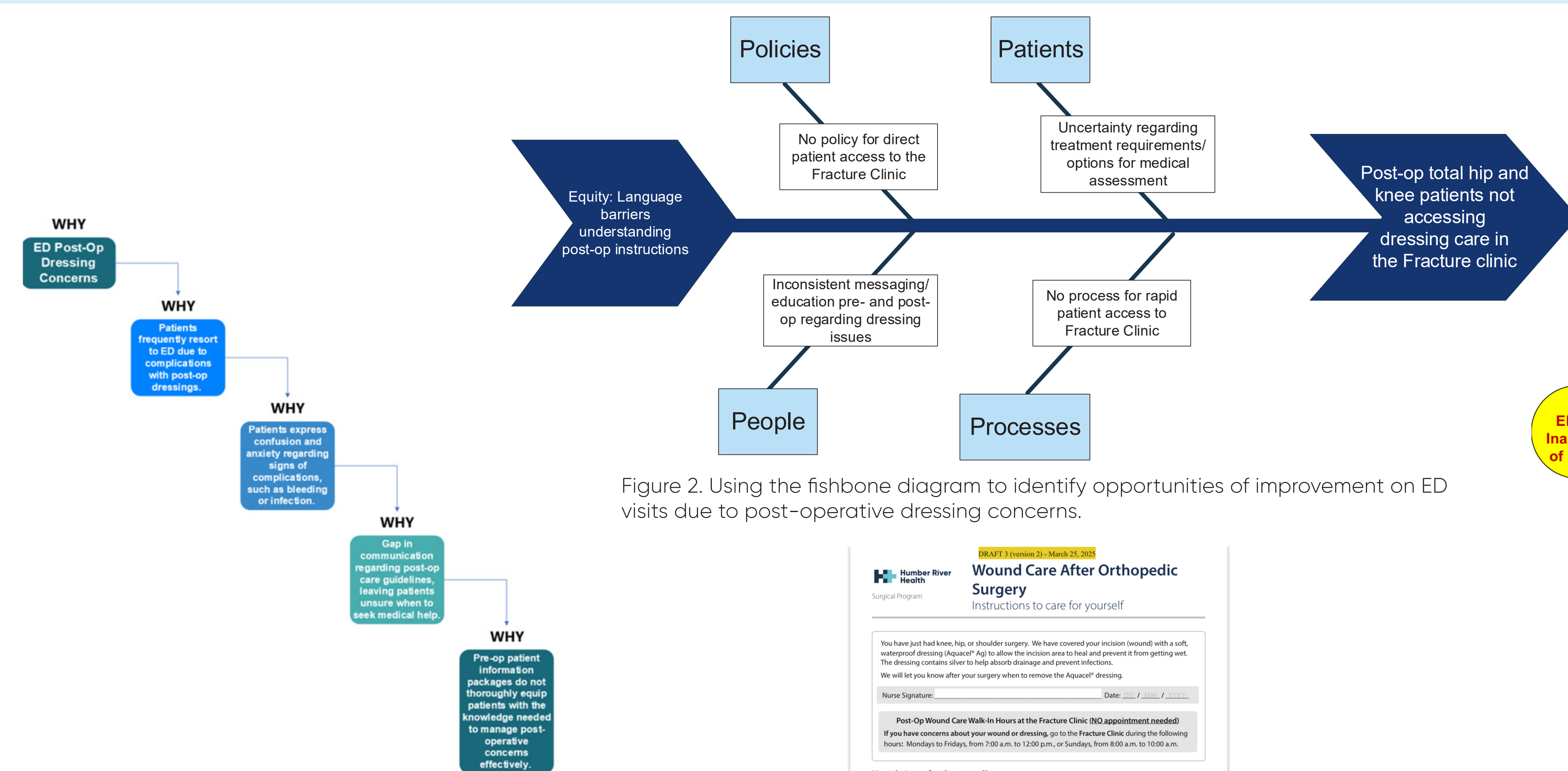


Figure 2. Using the fishbone diagram to identify opportunities of improvement on ED visits due to post-operative dressing concerns.

Figure 1. Using the 5 Whys to identify opportunities of improvement on ED visits due to post-operative dressing concerns.

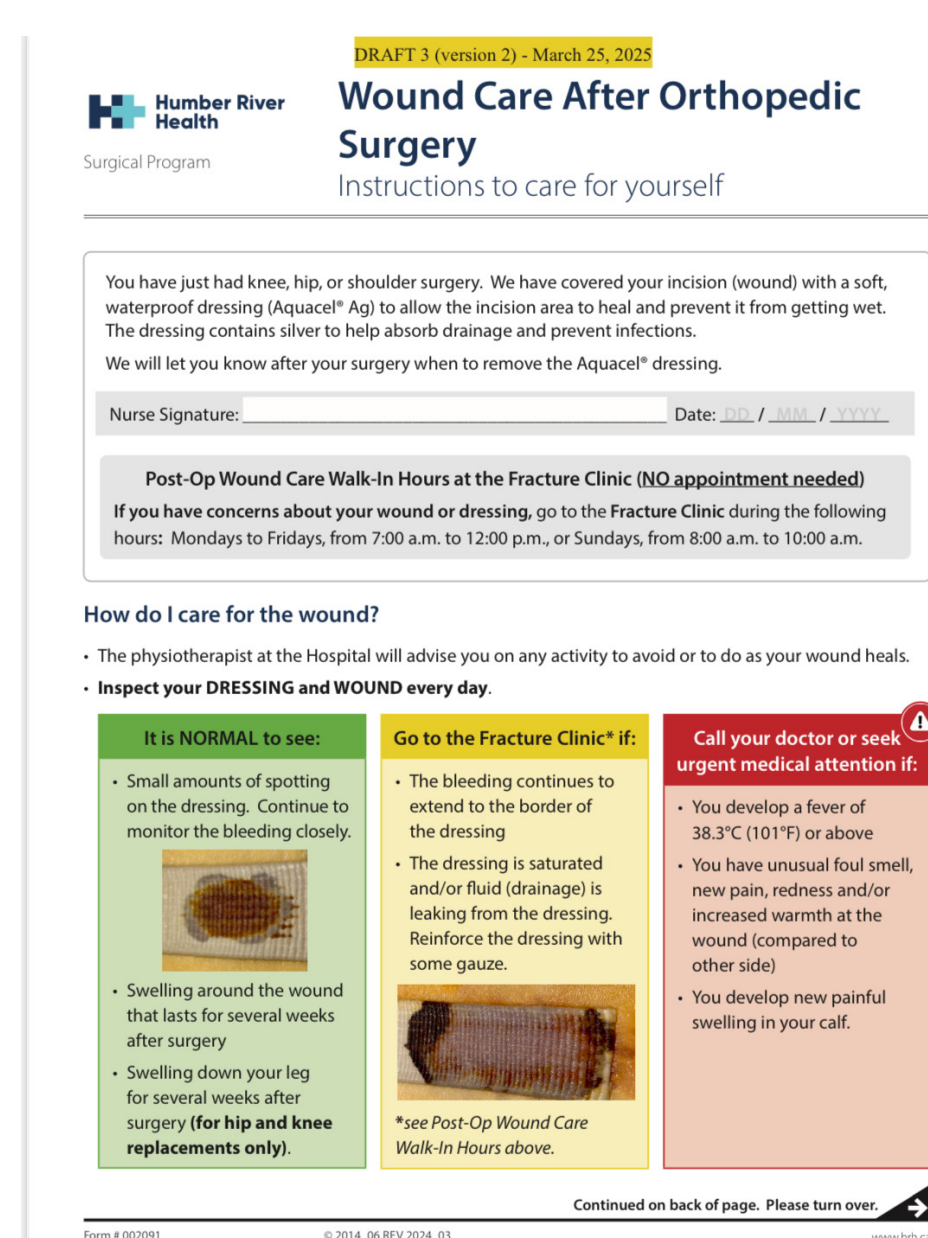


Figure 4. Patient discharge education material on “Wound Care after Orthopedic Surgery” with visual instructions.

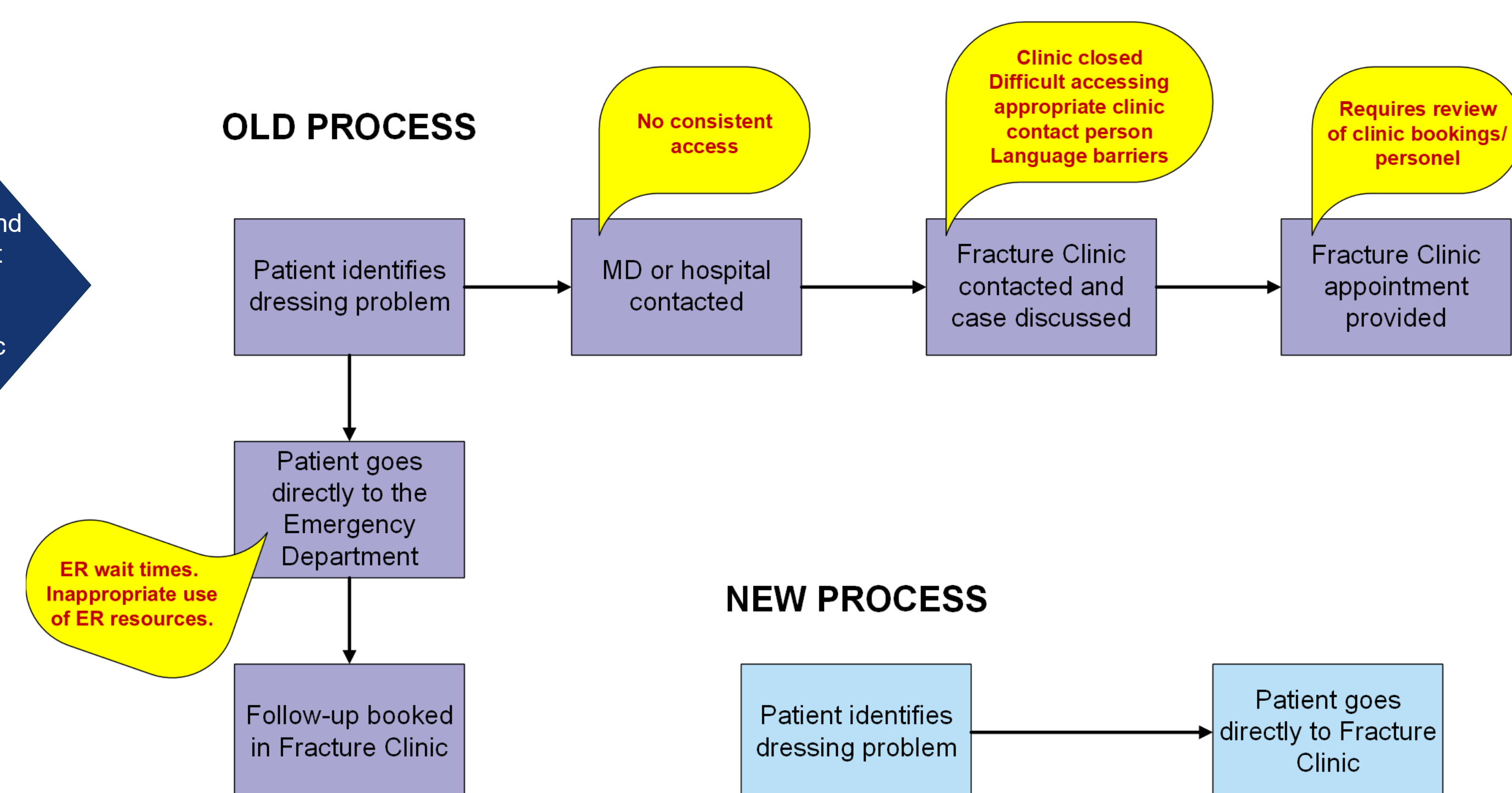


Figure 3. Processing mapping on the original process was used to identify opportunities of improvement on ED visits due to post-operative dressing concerns. A new process was created to facilitate timely and accessible access to this patient population.

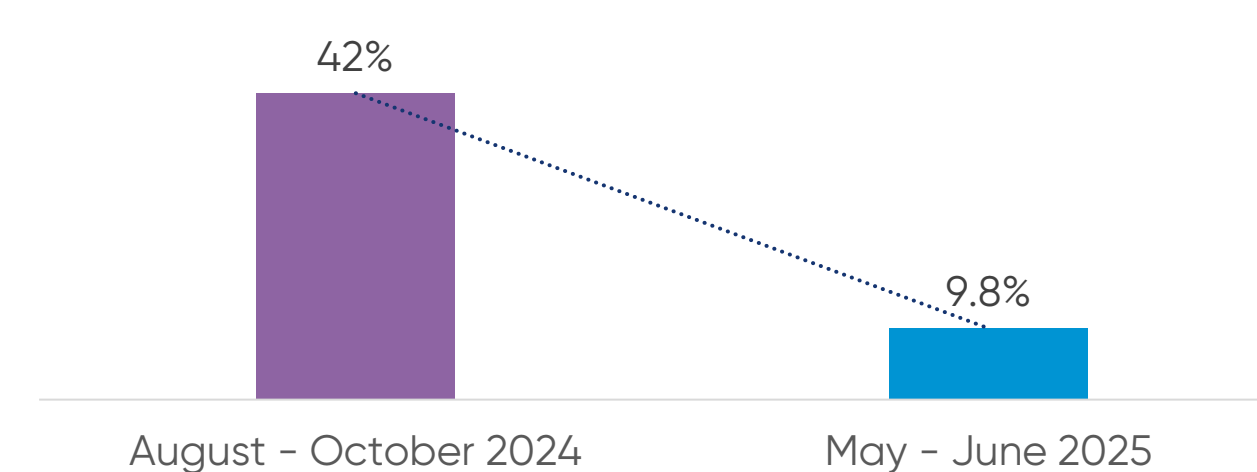


Figure 5. Of patients returning to the ED following unilateral total hip and knee replacements, those with post-op wound related concerns reduced from 42% in August to October 2024 down to 9.8% during May to June 2025.

## SUMMARY OF RESULTS

Through reviewing existing workflows and identifying opportunities to streamline patient care, there has been a reduction in patients visiting the ED for post-op wound related care. Between August to October 2024, ED return visits were 8.5% for unilateral total hip and 11.8% for knee replacements, with 42% of these visits being related to wound concerns. Following implementation from May to July 2025, ED return visits decreased to 5.9% for unilateral total hips and 8.6% for knees, with 9.8% of these visits due to wound concerns. Since April 2025, 55 patients were able to access the fracture clinic directly for wound concerns. Survey data showed that 96% of patients found the instructions they received were clear and 96% of patients were highly satisfied in their experiences with the fracture clinic.

## LESSONS LEARNED

The initiative emphasized the importance of health literacy and patient empowerment in reducing unnecessary ED visits. Sustainability and expanded access to Fracture Clinic resources remain priorities. Future steps include spreading the model to other surgical services and evaluating long-term impacts on ED utilization and patient experience.

