Weekend Matters: A QI Project to Improve Post-Operative Reviews in Elective Lower Limb Arthroplasty

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Introduction

- Early post-operative review after elective lower-limb arthroplasty is essential to:
  - **Detect complications** (i.e. bleeding, infection) [1]
  - **Reduce morbidity** + **length of stay** [2]
- Local trust practice (UHBW) aligns with national **Seven-Day clinical standards**, which mandate daily clinical review, including weekends [3]
- Departmental feedback suggested that weekend reviews were not consistently performed or documented, ***raising patient-safety concerns.***
- This aligns with the recognised **'weekend effect'** [4]- the observation that patients receiving care over weekends experience:
  - **Delayed assessment**
  - **Poorer documentation**
  - Higher **complication** or **mortality** rates

Objectives

- **Aim 1:** **Baseline audit** to assess whether elective lower-limb arthroplasty patients on Knightstone Ward received and had documentation of the required daily weekend post-operative reviews.
- **Aim 2:** Identify gaps in weekend review documentation and introduce a **targeted intervention** to improve handover clarity and weekend team awareness.
- **Aim 3:** **Re-audit** after implementing the intervention to determine whether weekend review documentation improved across post-operative days 0–3.

Methods

Baseline Audit (Oct – Nov 2023)

- *Patient identification:*
  - All Knightstone ward patients operated Thus-Sun identified via *Bluespier;* physical notes retrieved
- *Data collected:*
  - Assessment of notes to determine whether patients were 'seen' by a doctor from the orthopaedics team on Day 0/1/2/3 (inc. weekend overlap)
  - Day 1 bloods taken/requested
- *'seen'=*
  - Pink proforma sheet completed OR a dated continuation sheet entry matching post-op day
  - AND Signed by a doctor (name/bleep)

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Intervention

- Operating team to flag weekend-review patients on handover list
- Weekend T&O FY2s to confirm patients needing review with ward team
- Process reinforced at departmental induction

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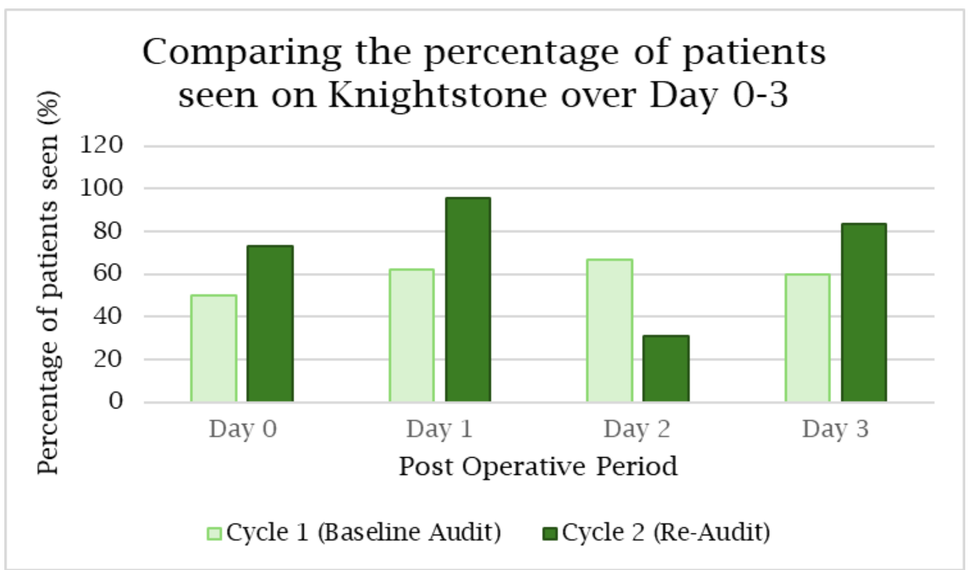
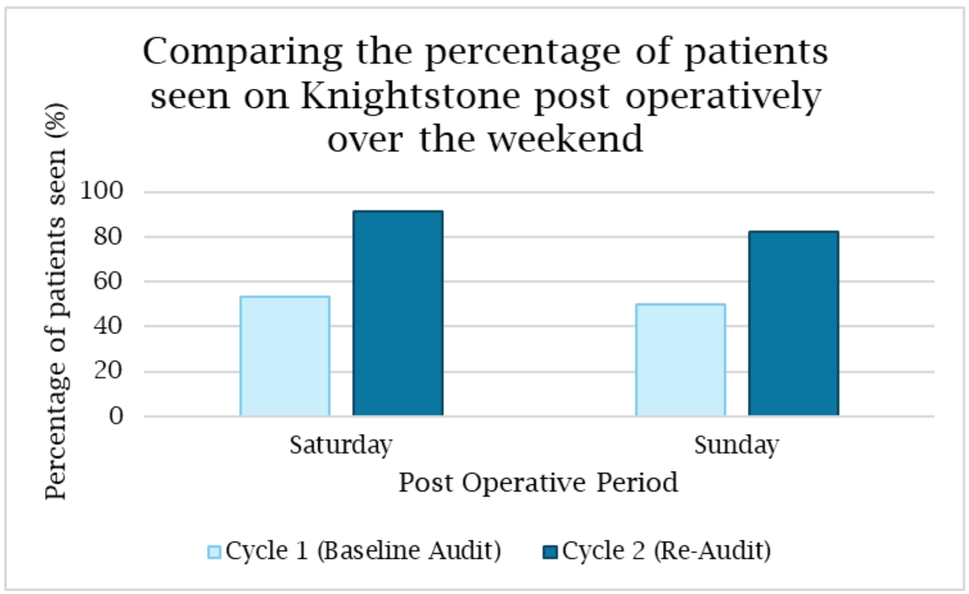
Re-audit (Apr-Jun 2024)

- Same inclusion criteria (Knightstone ward; Thurs-Sun)
- Same documentation review methodology

Results





Conclusions

Main Findings

- Weekend post-operative reviews for elective lower limb arthroplasty patients were deficient.
- Targeted intervention (improved handover + weekend team awareness) markedly improved review rates across most post-op days.
- Day 2 remained comparatively low.
- No day achieved 100% compliance.

Limitations

- Reliance on *Bluespier* being accurate for patient location
- Incomplete notes access (59%)
- Small sample size (n=28 Baseline Audit; n=26 Re-Audit)

Next Steps

- Clarify whether routine weekend reviews are required for patients already MFFD.
- Strengthen handover or clear documentation of patients needing Day 0 reviews.
- Continue auditing to drive full 7-day standard compliance.

References

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2. Soffin EM, YaDeau JT. Enhanced recovery after surgery for primary hip and knee arthroplasty: a review of the evidence. British Journal of Anaesthesia. 2016;117:iii62-iii72.
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4. Smith SA, Yamamoto JM, Roberts DJ, Tang KL, Ronksley PE, Dixon E, et al. Weekend Surgical Care and Postoperative Mortality: A Systematic Review and Meta-Analysis of Cohort Studies. Med Care. 2018;56(2):121-9.