Improving Surgical Safety: What Trauma and Orthopaedics Can Learn from CORESS Reports?

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Introduction

- **Adverse incidents**, errors and "near misses" **occur regularly in surgery.**
- Over **80%** of "never events" in England are **Surgical** Incidents[1].
- Learning from error and **effective dissemination of lessons** is essential to prevent recurrence and improve patient safety.
- The Confidential Reporting System for Surgery (CORESS) provides a national platform for reporting and learning from surgical adverse events and near misses.
- Reports are submitted anonymously and undergo **structured analysis** before dissemination *(Figure 1).*
- CORESS shares lessons across surgical specialties to promote **safer clinical practice through thematic feedback**[2].
- Trauma and Orthopaedic (T&O) surgeons contribute relatively **fewer reports compared with general surgery**, but lessons from the wider dataset remain highly relevant to orthopaedic practice.
- This study presents a **combined analysis** of CORESS reports, focusing on: contributory factors, recurring themes and implications for T&O practice.

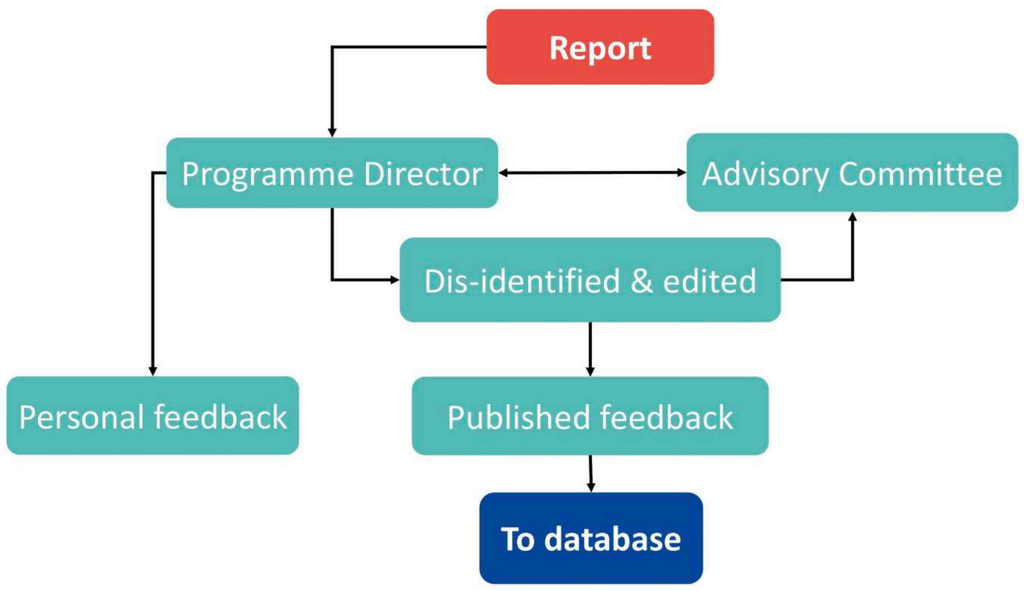


Figure 1. CORESS analysis process

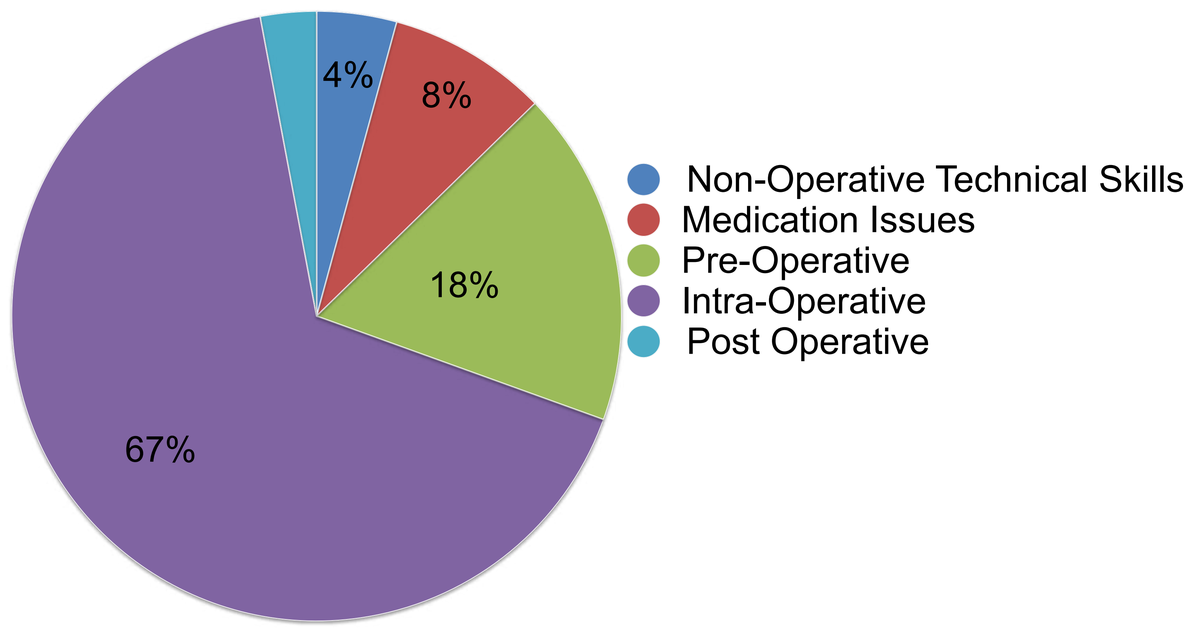
Methodology

- **All CORESS case reports** published online from January 2010 to June 2024 were screened.
- Reports with insufficient clinical detail were excluded.
- **Descriptive coding** was used to identify:
  1. Subspecialty distribution
  2. Contributory factors
  3. Recurrent case types
- **Iterative thematic analysis** was performed using anonymised, publicly available reports.

Results

- A total of **264 reports** were available for review, with General Surgery accounting for 145 (55%) and T&O by 10 reports (4%).
- The **CORESS database** describes each case report as a "Type", identifying the main theme in the reported scenario. While there are over 40 different "Types" described, some have over-lap in their given description (e.g "WHO Checklist" and "Checklist").
- **Primary Themes** were streamlined as: intra-operative (n=157), pre-operative (n=70), medication-related (n=20), non-technical skills (n=10), and post-operative (n=7) (*Figure 2).*
- **Secondary Themes** involved delayed diagnosis, communication failures, decision-making errors, and system-level gaps.

Figure 2. Factors & Themes Related to CORESS Safety Reports



Conclusion

- **Recurring factors** contribute to patient harm across all surgical specialties. In 2023–2024, NHS Resolution paid £2.9 billion in claims, with a further £58.5 billion reserved for future liabilities[3].
- **Lessons identified** from CORESS reports are **directly applicable** to Trauma & Orthopaedic practice.
- Standardised frameworks for analysing **contributory factors** may strengthen future surgical safety initiatives.
- Consider **submitting your own cases** to CORESS to support shared learning!

Figure 3. 'QR' Link To CORESS Reporting

References

1. NHS England. Provisional Publication of Never Events Reported as Occurring Between 1 April and 31 March 2023. Available online.
2. CORESS - A Confidential Reporting System for Surgery to disseminate lessons learnt from unexpected or adverse incidents. Brown R, Waugh D, Corbett H et al. (September, 2025). Volume 13 (Issue 3). The Journal of the British Orthopaedic Association.
3. NHS Resolution Annual Report and Accounts 2023/24 [Released July 2024]. Available Online.