

Audit of OPAT (Out-Patient Parenteral Antimicrobial Therapy) Service Efficiency: Time to Treatment Initiation

Authors & Affiliations

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Introduction

- From the patient's perspective, OPAT services decrease patient hospital stay duration, reducing their risk of nosocomial infections (Richterman, Meyerowitz and Cevik, 2020). From the Hospital's and institution's perspective, OPAT frees hospital beds for other potentially sicker patients (Staunton et al., 2021).
- The aim of this study was to examine the service efficiency for referrals made to the OPAT service in TUH retrospectively from October 2024 to December 2024.

Methods: Referrals to the OPAT service between October and December 2024 were analyzed (n=30). Results were recorded and analyzed using Excel, with further statistical analysis performed on IBM SPSS Statistics v29.

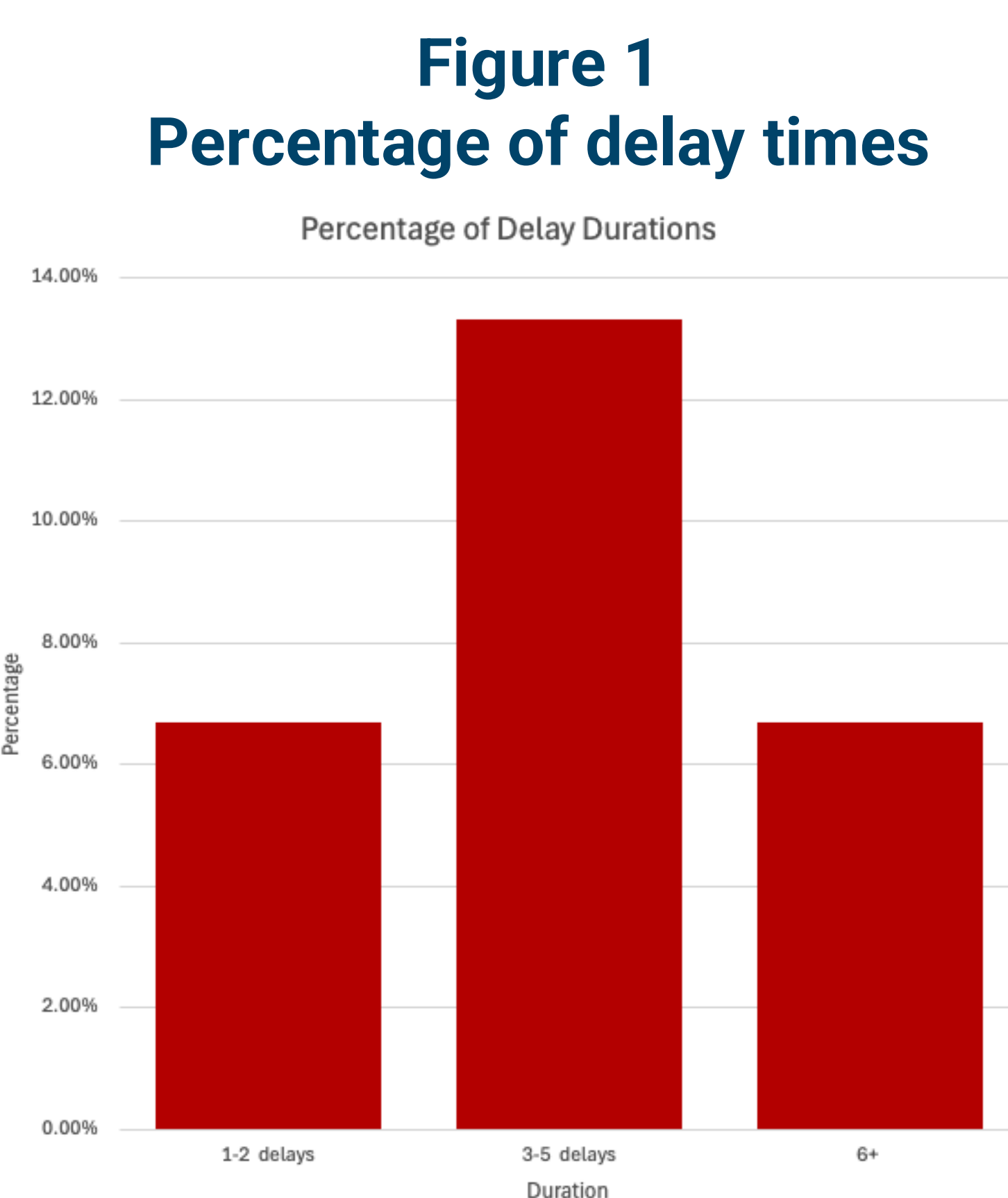


Figure 1 refers to the percentage of OPAT referrals that were classified as delays of varying time periods. The most common length of a delay was 3-5 days.

Figure 2
Proportion of Referring Specialties

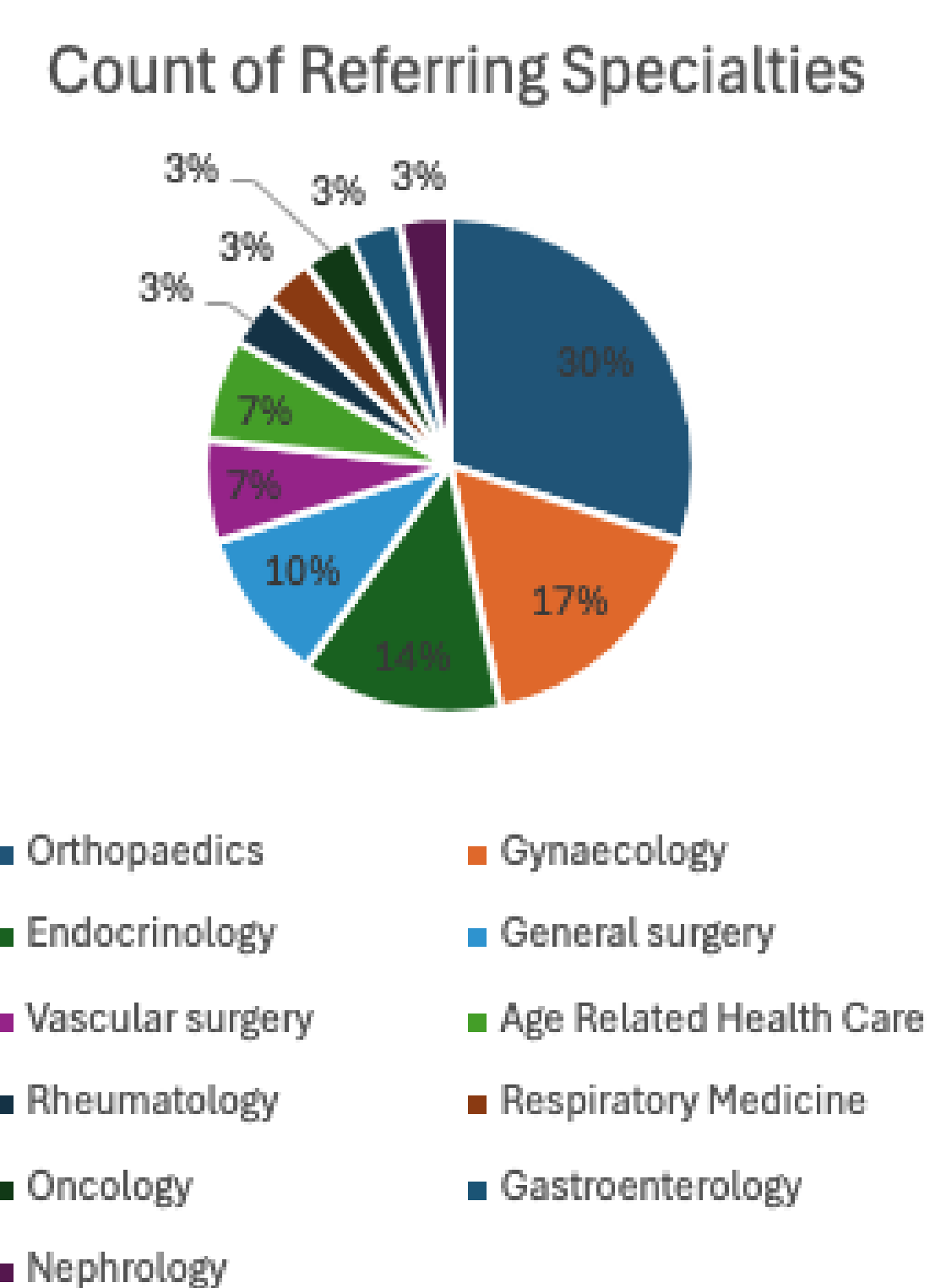


Figure 2 refers to the number of referrals to OPAT by various specialties. Orthopaedics was the most common referring specialty.

Figure 3
Proportion of Reasons for Delay

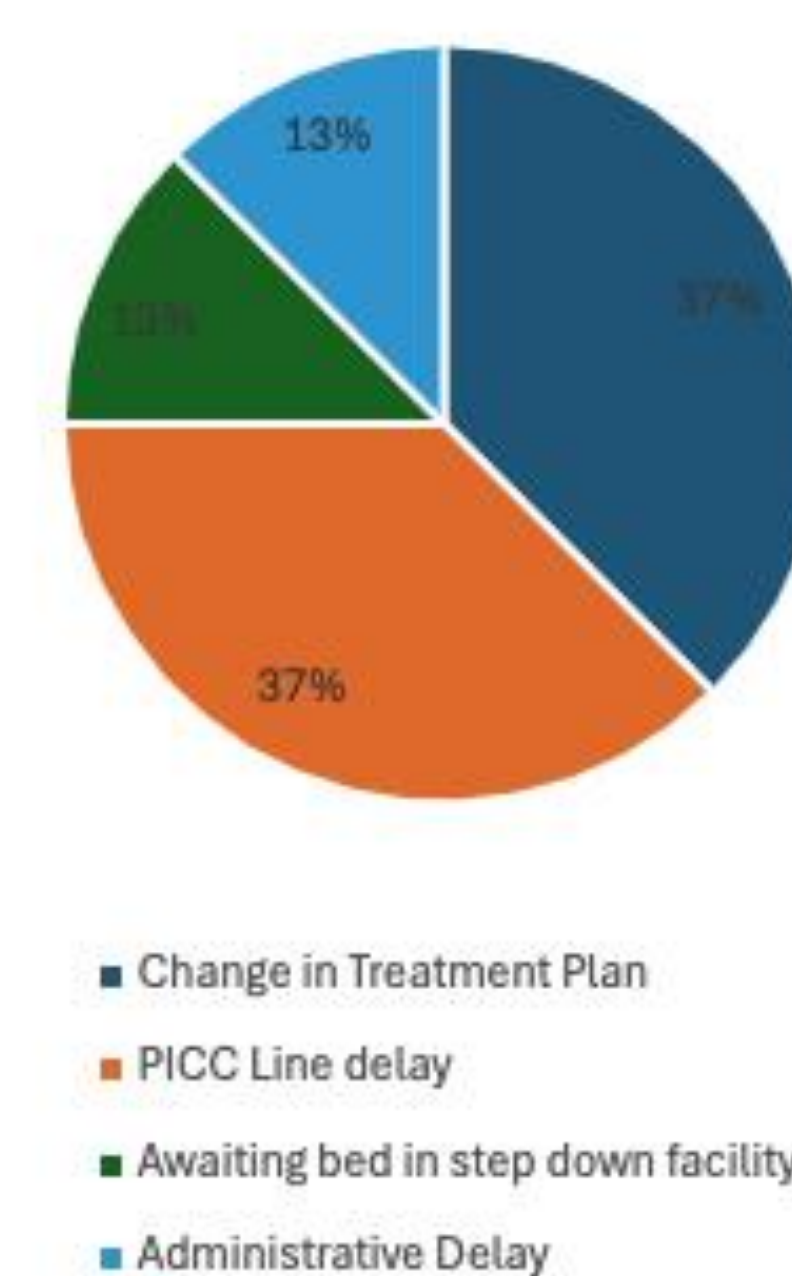


Figure 3 details the reasons for delay in OPAT referral cases. Changes in treatment plan alongside PICC insertion delays were the most common causes of delay.

Discussion

- Delays occurred in 26.7% of the patients reviewed (n=8).
- Thirty-one additional hospital bed days were attributed to these delays, (estimated cost = €27,807), which suggests inefficient allocation of resources (Anderson, 2020).

Limitations

- We looked at three months of data (n=30), a small sample size and may not be reflective of population trends.
- Our study was retrospective and there is a potential for biases. Prospective, longitudinal studies are needed to better understand the delaying factors.

Conclusion

TUH OPAT service is relatively efficient when compared to other hospitals (Mean Time to OPAT Commencement = 2.03 days) (Staunton et al., 2021; Bianchini et al., 2019; Tan et al., 2023; Pybus, 2023). Like other institutions, PICC line insertions requests are prioritized (Mean time to PICC Insertion=1.58 days), allowing clinically stable patients to be discharged and started on OPAT as soon as possible (Staunton et al., 2021).

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