

# TURNAROUND TIME OF OUTPATIENT PARENTERAL ANTIMICROBIAL THERAPY (OPAT) : A STUDY IN CORK UNIVERSITY HOSPITAL AND MERCY UNIVERSITY HOSPITAL, FROM DEC 2023 TO JAN 2024

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## INTRODUCTION

The concept of Outpatient Parenteral Antimicrobial Therapy (OPAT) was introduced in literature in 1974 and has since become a widely accepted standard of care due to its safety, cost-effectiveness, and positive patient feedback. The national OPAT program, established in 2011, has provided standardized care pathways and guidelines to ensure optimal safety monitoring and follow-up for patients receiving OPAT upon discharge.

**MCC:** Management Control Centre for national Programme.

**Turnaround time** is Time of referral sent to MCC to time of confirmation of OPAT set-up received.

This study aims to evaluate the turnaround time of OPAT at Cork University Hospital and Mercy University Hospital, with the goal to further guide OPAT service development in Ireland.

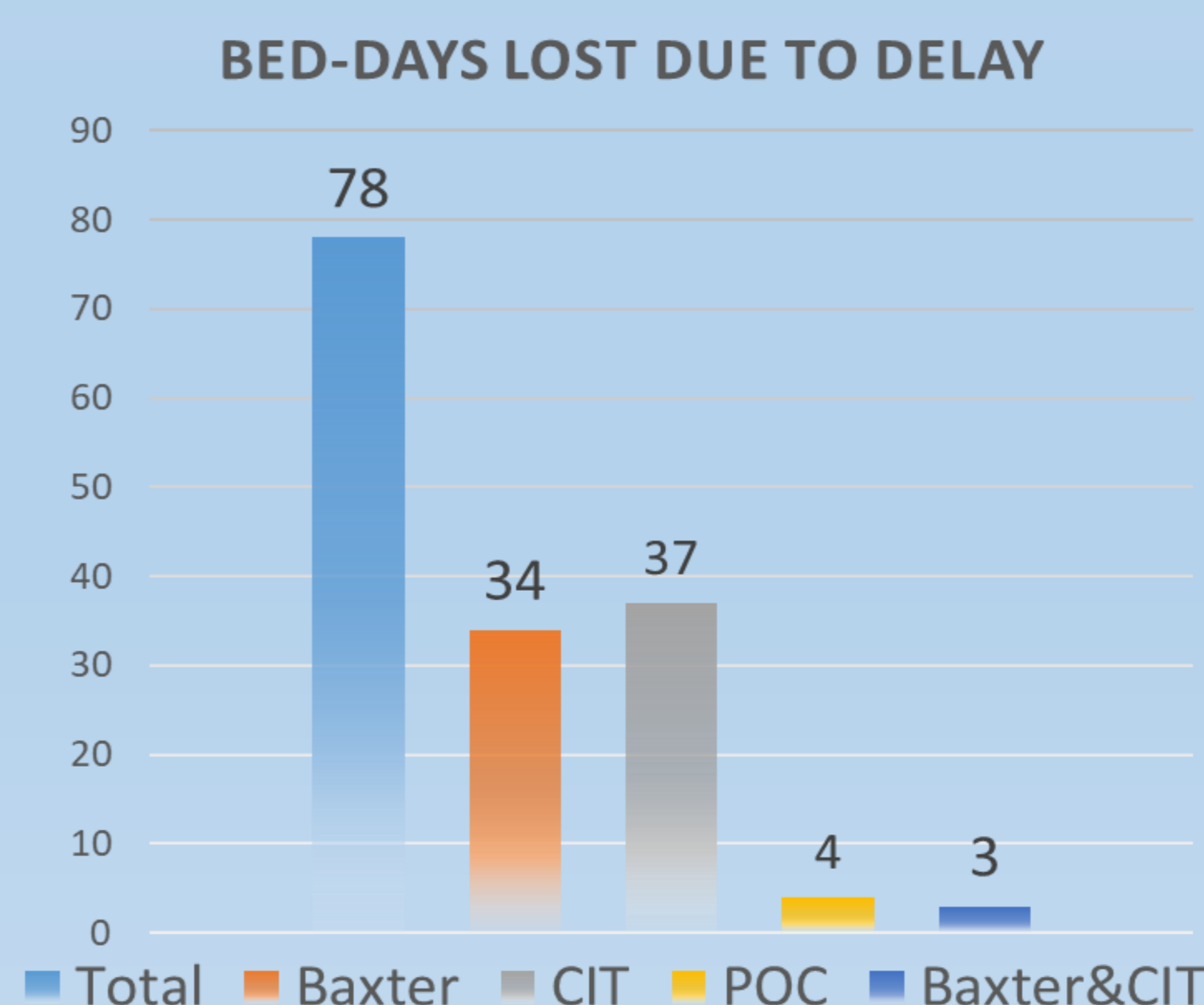
## OBJECTIVES

1. To assess the current turnaround time of Outpatient Parenteral Antimicrobial Therapy (OPAT) at Cork University Hospital and Mercy University Hospital
2. To identify factors contributing to any delays in the OPAT process
3. To propose recommendations for improving the efficiency of OPAT delivery at both hospitals.
4. To contribute to the enhancement of OPAT services and patient care in Ireland through data-driven insights and recommendations.

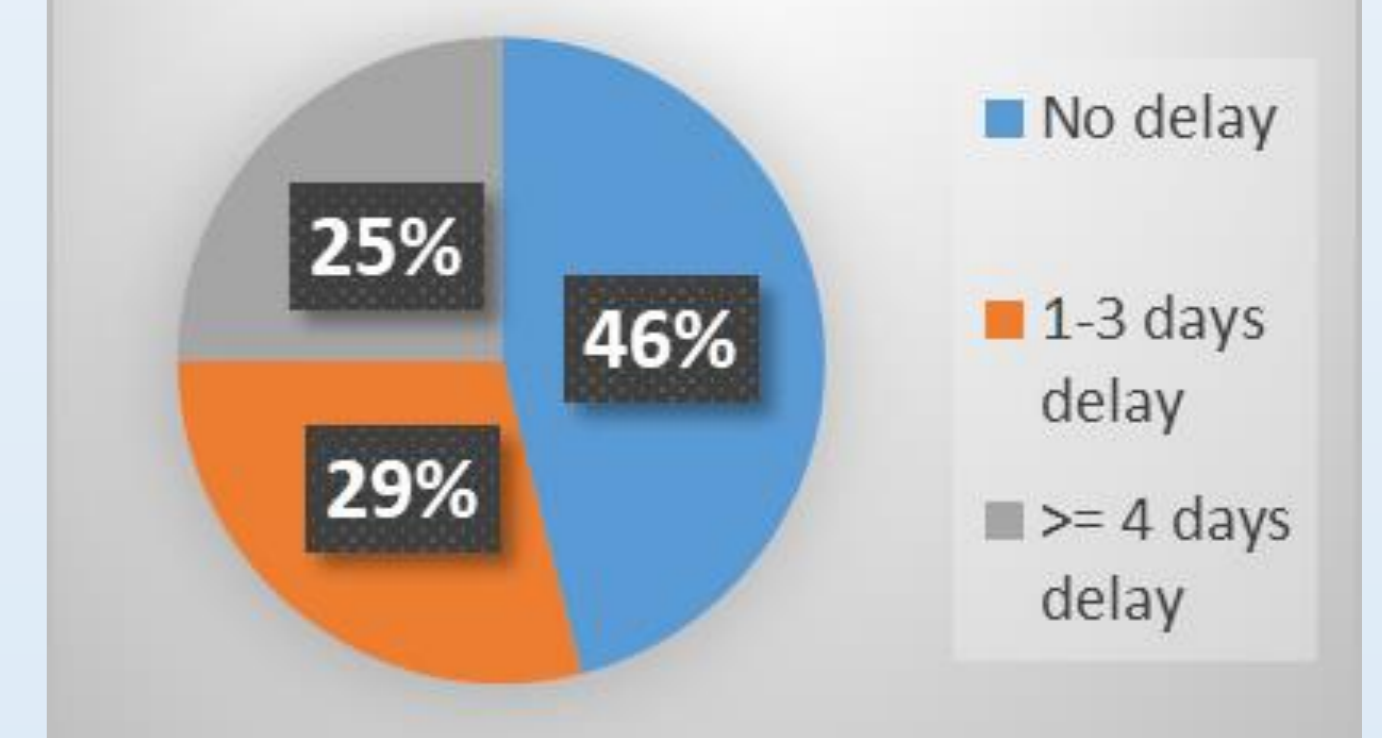
## MATERIALS AND METHODS

- **Study Design:** Prospective
- **Data Source:** Electronic archived data from CUH and MUH, Cork, Dec 2023 to Jan 2024
- **Data Collection:**
  - Patient information: initials, MRN, DOB
  - OPAT details: type, prescribed antimicrobial
  - Referral details: date and time sent
  - Prescription start date
  - Confirmation of OPAT setup from MCC: date and time received
  - OPAT delivery date and commencement
- **Data Analysis:**
  - Quantitative analysis: assessing time intervals
  - Qualitative analysis: identifying causes of delays
  - Turnaround time for OPAT initiation was computed excluding Saturdays and Sundays
- **Results**
  - A total of 35 referrals were recorded, with 29 originating from CUH and 6 from MUH.
  - Among these, 14 were for Self-admin OPAT (S-OPAT), while 21 were for Healthcare-OPAT (H-OPAT) including 4 for continuous infusers.

Turnaround Time	Time in hours
Average turnaround	24 hours
Minimal turnaround	3 hours (6 referrals under 6 hours)
Maximum turnaround	78 hours (1 referral as initially CIT unable to accept due to capacity)



## PERCENTAGE OF REFERRALS



## CONCLUSION

The audit conducted as part of the Irish National OPAT program's quality improvement efforts revealed that delays in commencing OPAT treatment resulted in the loss of 78 bed-days, primarily due to medication manufacturing and nurse availability. This highlights the need for increased capacity in Baxter, CIT and points of care (POC) to minimize delays and ensure optimal care for OPAT patients.

## RECOMMENDATIONS

- Enhance timely communication and increase capacity to accommodate OPAT patients.
- Explore strategies to prioritize OPAT patient care within the hospital setting.
- Share audit findings with the local OPAT team and the National OPAT program for further action and improvement initiatives.

## REFERENCES

- Registry of OPAT cases- MUH and CUH, Cork
- Muldoon EG, Allison GM, Gallagher D, Snyderman DR, Bergin C. Outpatient parenteral antimicrobial therapy (OPAT) in the Republic of Ireland: results of a national survey. *European Journal of Clinical Microbiology & Infectious Diseases* : Official Publication of the European Society of Clinical Microbiology. 2013 Nov;32(11):1465-1470