

Introduction

A quality improvement project on theatre efficiency was conducted at Hammersmith Hospital to address the growing demand for elective surgeries and underestimation of theatre session overruns. The objectives included identifying surgical specialties with frequent overruns, analysing contributing factors, and optimizing resource allocation. The project aimed to improve theatre efficiency and boost operational effectiveness.

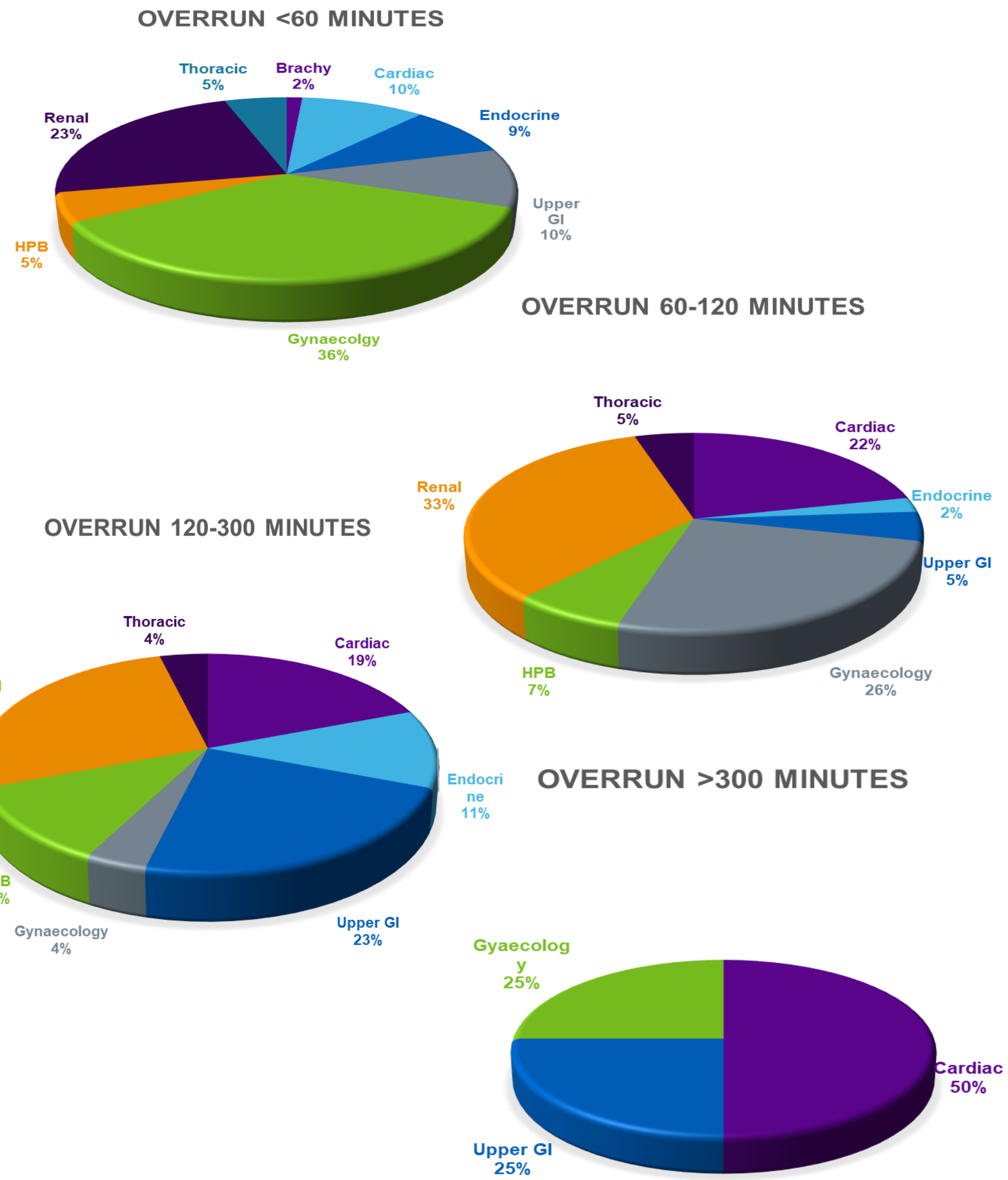
AIM Statement

- Aim of the project included:
- 1. Recognition of theatre overrun problem and it’s scale
 - 2. Estimation of out of hours extracontractual anaesthetic work

Benchmark Data

A retrospective audit analysed elective main theatre cases from 1/11/23 to 29/12/23 (excluding weekends, bank holidays, and emergency cases). Of 338 cases, 150 (44%) had overruns, with a mean overrun of 84 minutes. The longest overrun was 485 minutes (cardiac case). Data was categorized by surgical specialty, overrun time and causes. Overruns were categorised and distributed as follows:
<60min (52%), 60-120min (28%), 120-300min (17%), >300min (3%).

Category	Number of occasions	Percentages
<60 minutes	78	52%
Between 60-120 minutes	42	28%
Between 120-300 minutes	26	17%
>300 minutes	4	3%



Intervention Description

- Recommendations from this project focus on improving theatre efficiency by establishing:
1. Routine monitoring of overrun times and identifying root causes (e.g., delayed briefings, unavailable staff, unprepared theatres).
 2. Implementing targeted interventions such as regular audits and feedback to ensure reduce overruns and continuous improvement on patient care delivery.

Post Intervention Results/Outcomes

Theatre overruns are not routinely monitored. Our audit found that overruns affect 44% of elective cases, with most under 120 minutes unrecognized. This equates to 42 weeks additional consultant anaesthetist work annually. (282session/year).
Reasons for overrun not documented;

References

- 1.M. Charlesworth and J. J. Pandit.Rational performance metrics for operating theatres, principles of efficiency, and how to achieve it. Department of Anaesthesia,Oxford University Hospitals NHS Foundation Trust, Oxford, UK
- 2.Simon Roberts, Adnan Saithna, Rob Bethune. Improving theatre efficiency and utilisation through early identification of trauma patients and enhanced communication between team