



Ecological study of the English regional variation and trends in Cancer diagnosis: A focus on Gynaecology

Lucy Petit – Medical Student, University of Nottingham (mzylp8@nottingham.ac.uk)
Colin Crooks – Supervisor (Colin.Crooks@nottingham.ac.uk)

Introduction

- In 2018 patients with ovarian cancer waited a median of 59-88 days between initial referral and commencement of treatment - some of the longest intervals in England (1)
- Gynaecological cancers impact 19,000 women a year and is 6th most common cause of cancer in women (1)

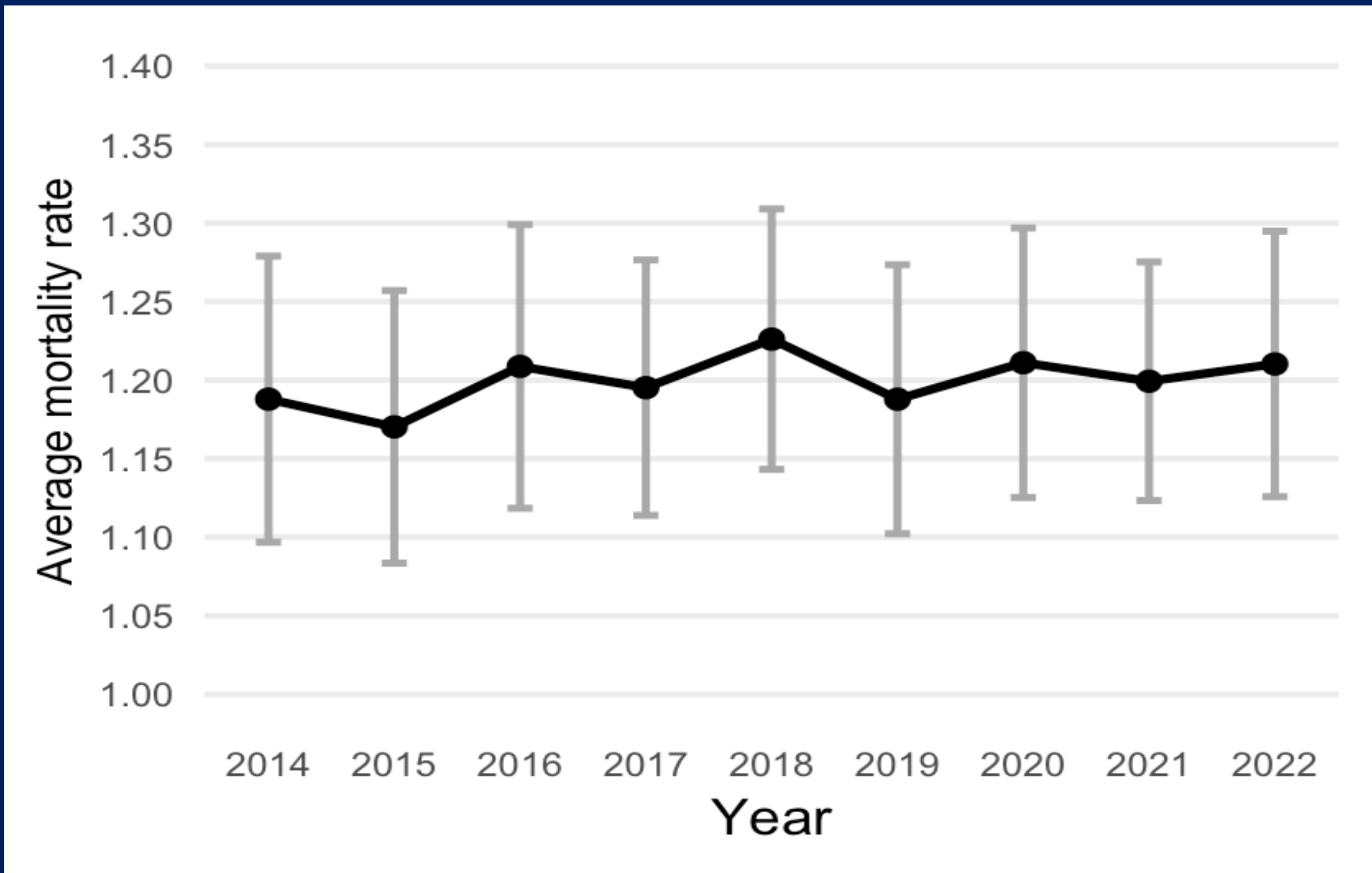
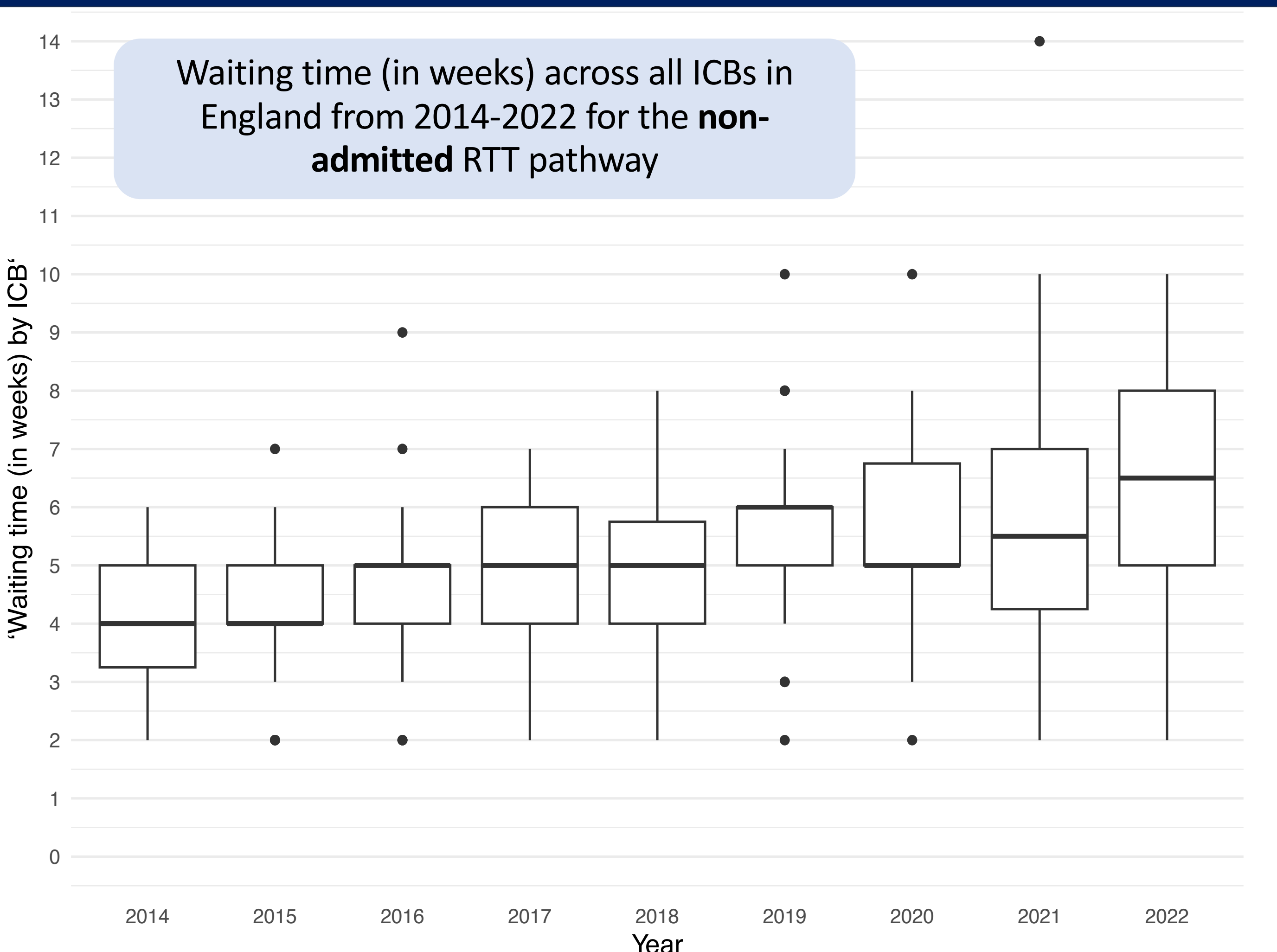
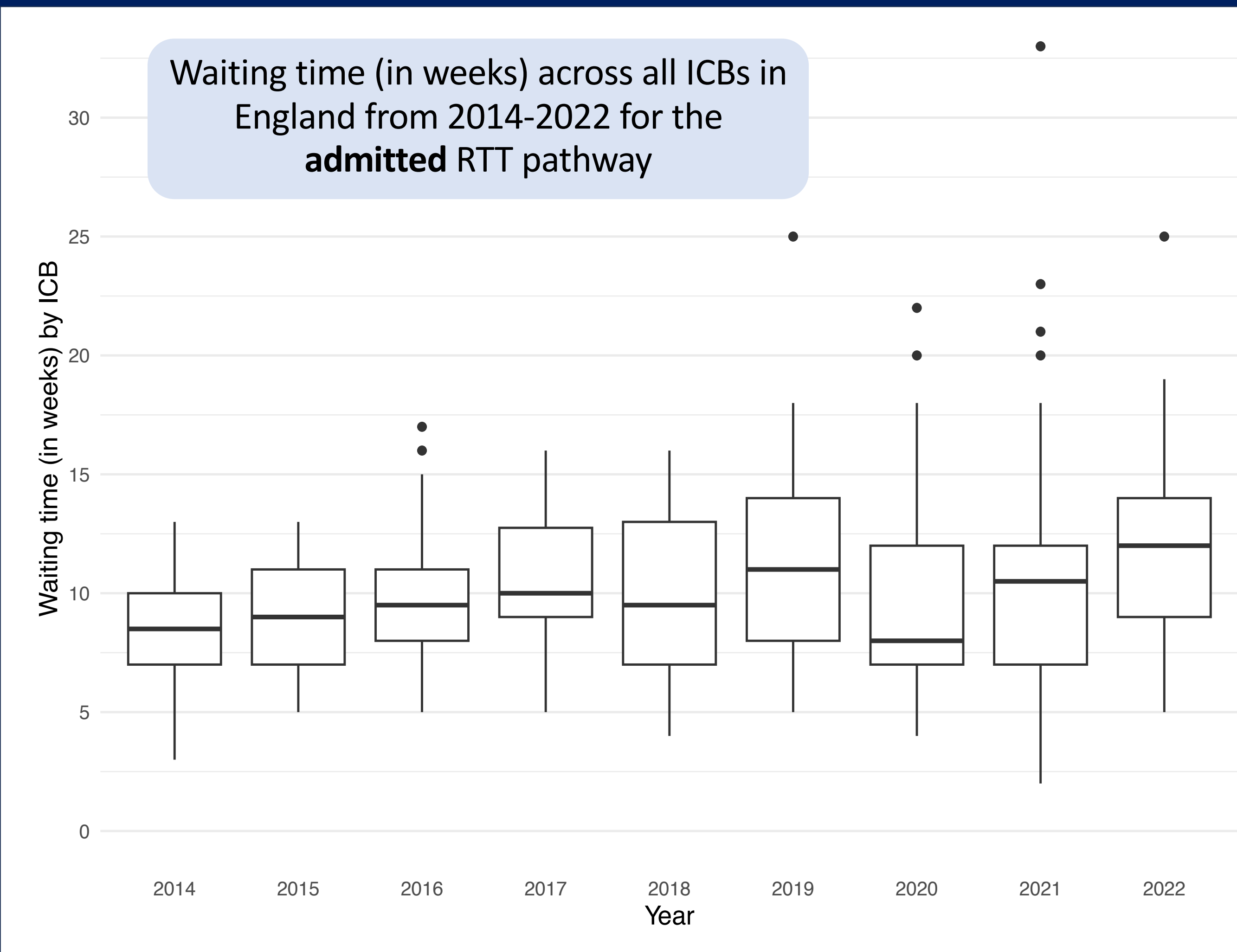
Objectives

- To explore the regional variation in waiting times for diagnosis and mortality for gynaecological cancers across England
- Explore if age and year are confounding factors
- Highlight the trends over time, and the impact of COVID-19

Methods

- Study population includes all females across the 42 Integrated Care Boards (ICBs) in England between the years 2014-2022
- ICB median waiting times of Admitted and Non-Admitted Referral to Treatment (RTT) pathways were correlated with the ICB mortality rate of gynaecological cancers (2,3,4,)
- Standardised Mortality Ratios (SMR) were calculated to adjust for age as a confounding factor

RESULTS



	Admitted pathway	Non-Admitted pathway
Mortality rate	0.105 [95% CI = 0.00465-0.205, P-value = 0.0411]	0.0192 [95% CI = -0.0751-0.119, P-value = 0.710]
SMR	0.0192 [95% CI = -0.0792-0.118, P-value = 0.710]	0.00658 [95% CI = -0.0880-0.101, P-value = 0.899]

Spearman rank correlation coefficients, 95% Confidence Intervals (Cis), P-values for the admitted and non-admitted RTT pathways with the mortality rate of gynaecological cancers and SMR

Key findings

- Increase in both the median waiting times and the variation in waiting times between ICBs
- Increase in mortality from gynecological cancer between 2014 - 2022
- Significant correlation between ICB median waiting times on the admitted pathway and the ICB mortality rate from gynecological cancer
- Adjusting for age reduced this association

(1) England, N. (2023). Implementing a timed gynaecological cancer diagnostic pathway.
(2) England, N. (2024). "Referral to Treatment (RTT) Waiting Times." Retrieved 12th November, 2024, from <https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/>.
(3) Nomis (2023). "Mortality statistics - underlying cause, sex and age." Retrieved 12th November, 2024, from <https://www.nomisweb.co.uk/datasets/mortsa>.
(4) (2024). Estimates of the population for England and Wales. Office for National Statistics.