

Administrative data in health economics research: the case study of a Scottish Colorectal Cancer data repository

Elizabeth Lemmon

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 @ElizabethLemm16



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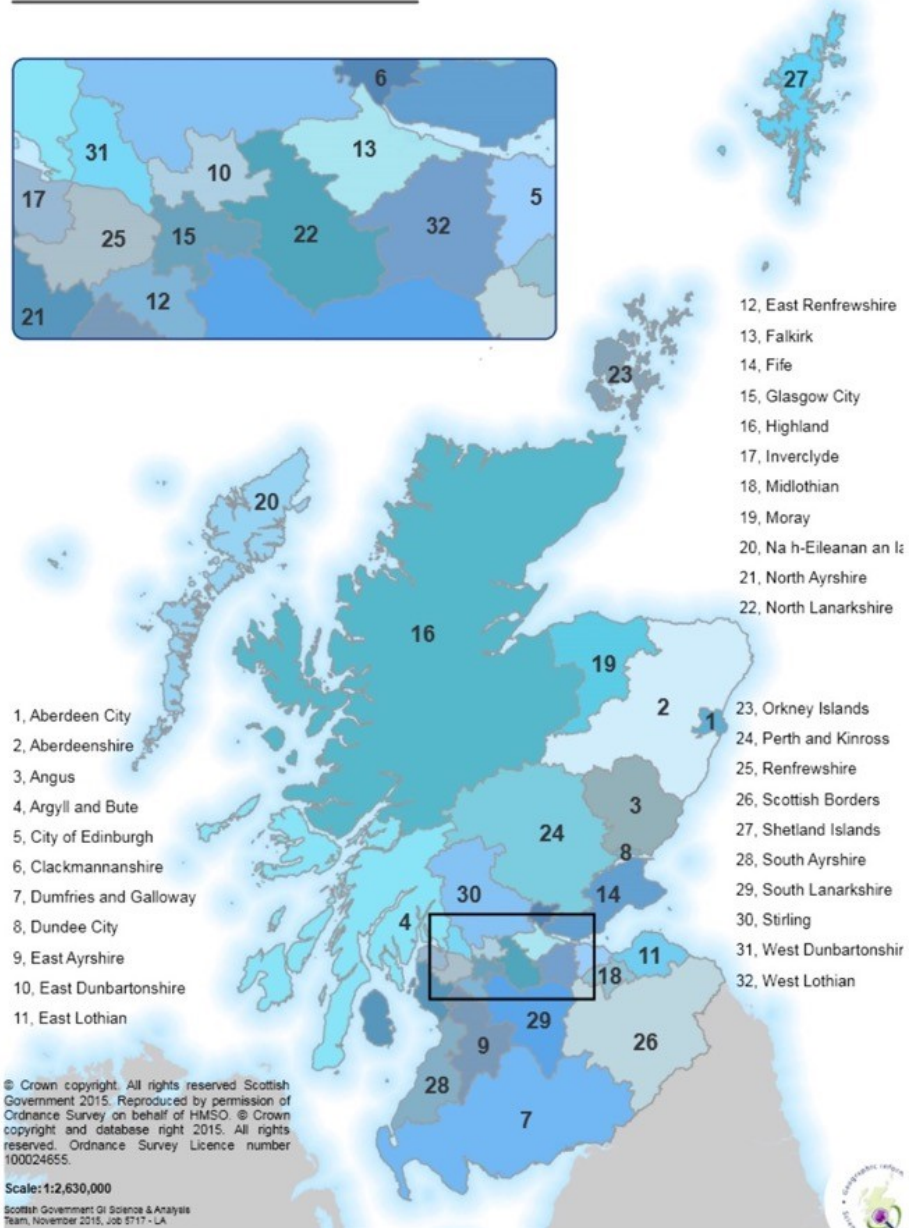
Outline

- Administrative data in Scotland
- My administrative data journey
- Colorectal cancer case study:
 - The economics of CRC
 - The potential of a Scottish CRC data repository
- Australia and Scotland comparisons

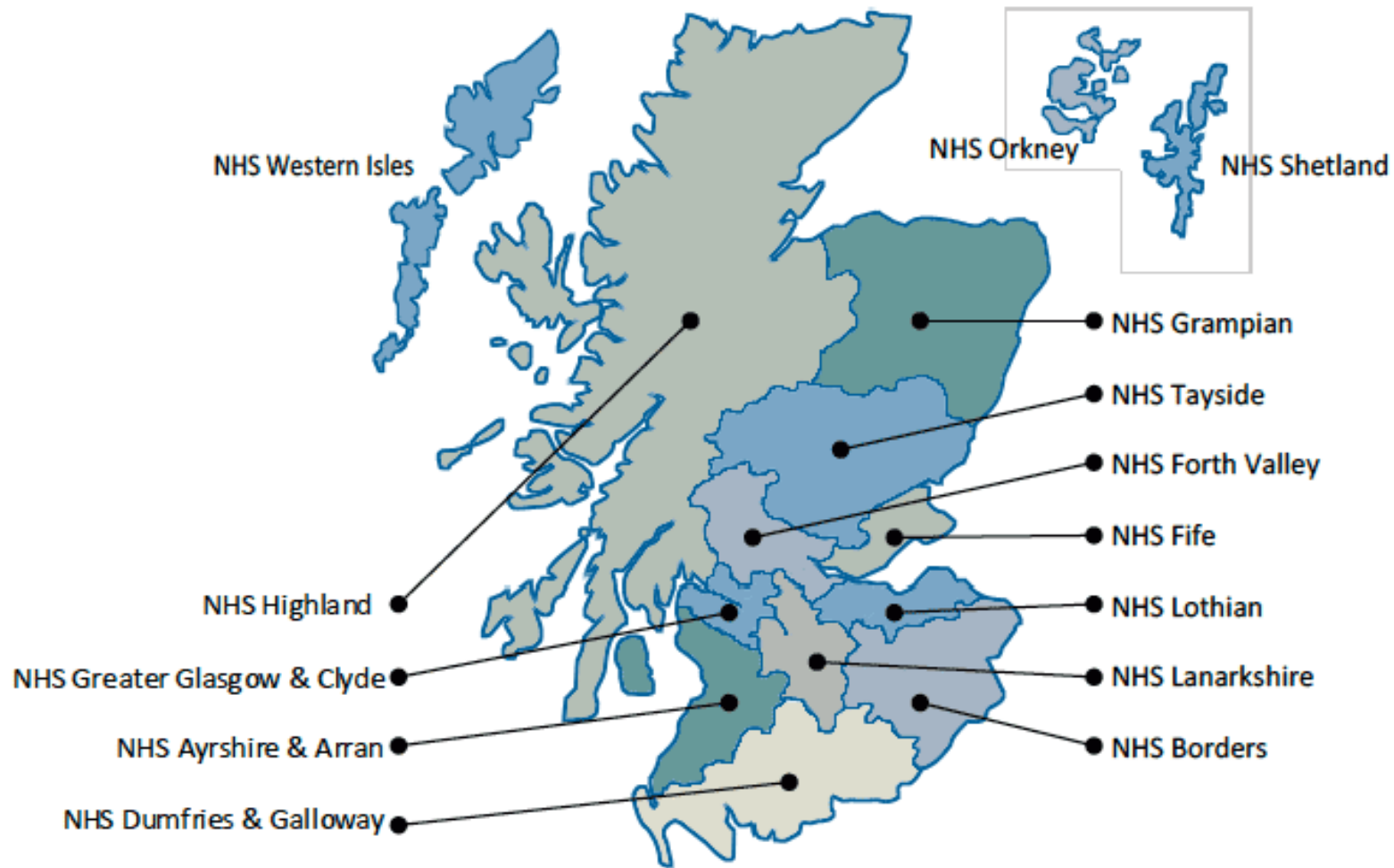
Administrative data in Scotland

- Health
 - Inpatients, Outpatients, Cancer registry, Prescriptions, Accident and Emergency, Ambulance, Mental health, Maternity
- Social Care
- Education
- Crime
- Huge potential

Scotland's local authorities



Scotland's Health Boards



My administrative data journey

Research

- Variation in personal care services across Scottish local authorities
- Relationship between unpaid care and personal care services
- The effect of unpaid care on Standard of Living
- CRC project

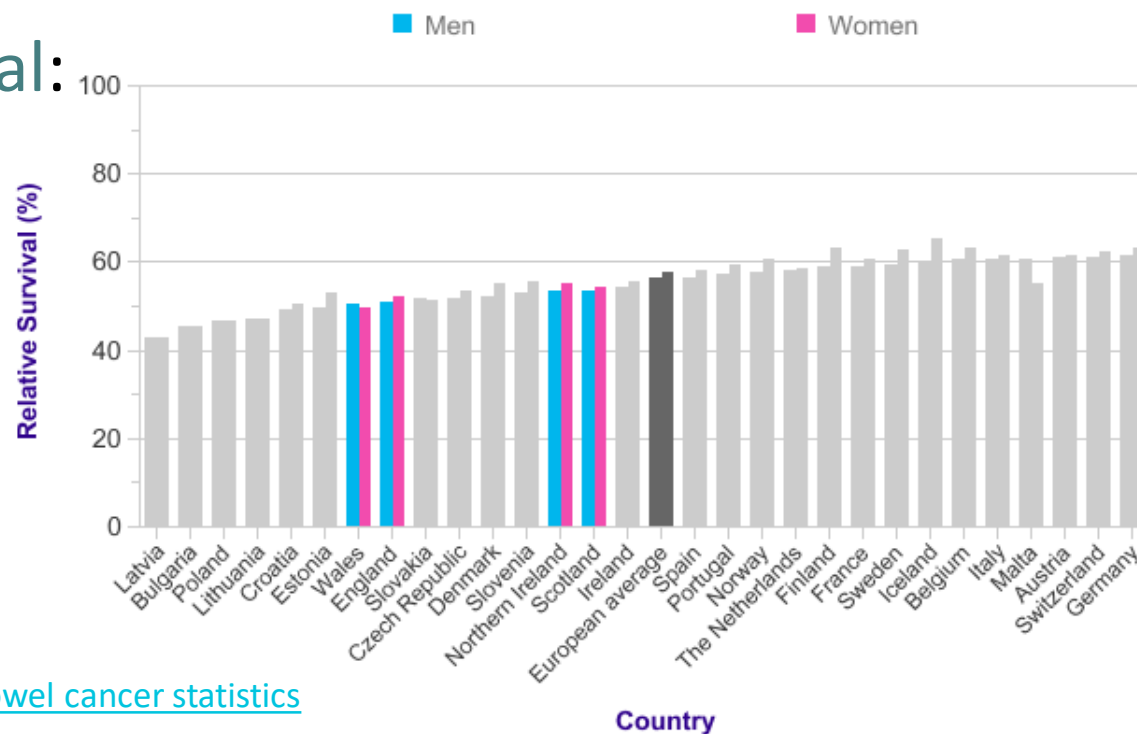
Challenges

- Data access
- Data quality
- Data capability
- Early Career Researchers Using Scottish Administrative Data ([eCRUSADers](#))

A colorectal cancer (CRC) case study

CRC in Scotland

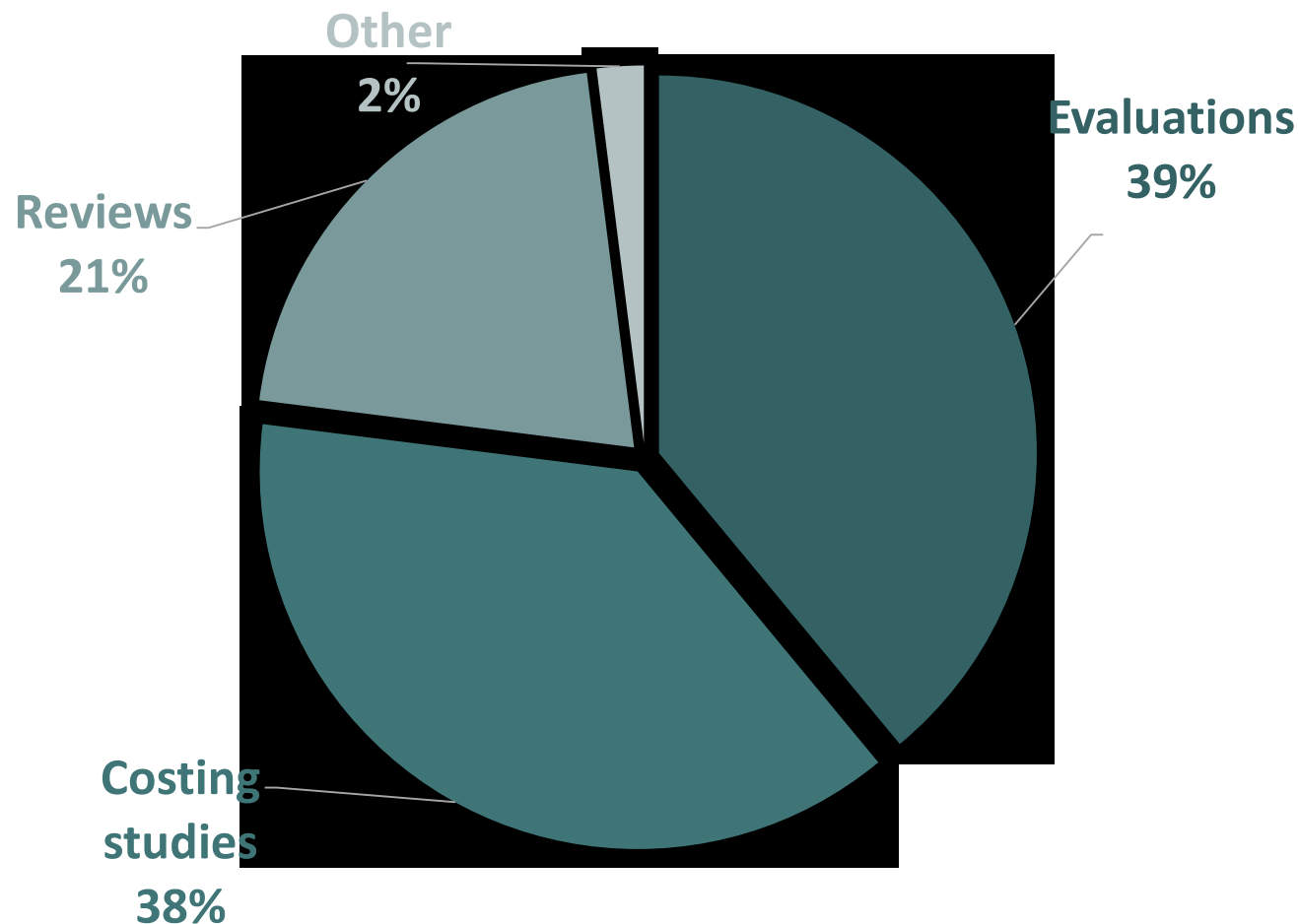
- Incidence (per 100,000): 72 versus 69 in England
- Mortality (per 100,000): 33 versus 26 in England
- Screening uptake: 58% versus 55% in England
- 5 year survival:



The economics of CRC

- Summarise the current landscape of the existing evidence and research into the economics of CRC, paying particular attention to how administrative data feature.
- Identify gaps in the evidence base to establish where a Scottish CRC data repository could help to fill those gaps

Review of UK and EU literature 2009-2019



Review of UK and EU literature 2009-2019

- Included N = 34 studies
- Economic evaluations (n = 19)
 - Screening
 - Treatment
- Costing studies (n = 18)
 - Cost of illness
 - Cost comparisons

Presence of administrative data

- Use of administrative data:
 - Commonplace
 - Costing studies more likely to use it
 - EE's more likely to draw more heavily on other sources
- Sources of administrative data:
 - Cancer registries
 - Screening programmes
 - Routine hospital records
 - Costs databases

Findings

- Administrative screening data have been powerful
- Emergence of costs data bases for reimbursing hospitals
- Not as used to capture entire population as initially thought
- Scotland barely features
- Capturing patient outcomes
- Costing methodologies
- Wider system level costs

Potential for a Scottish CRC data repository

- Use Scottish data to offer evidence on Scotland
- Capture entire population
- Capturing patient outcomes-
- Costing methodologies- PLICS system
- Wider system level costs- link to social care records

Current progress

- Application for data approved October 2018
 - Review undertaken
 - Review written up
 - Data analysis...
- Data extraction
 - Data linkage
 - Data cleaning
 - Data access.....

Australia and Scotland comparisons

- Incidence: **lower** at 57
- Mortality: **lower** at 19
- Screening uptake: **lower** at 41%
- 5 year survival: **higher** at 70%

Thank you!

Elizabeth.lemmon@ed.ac.uk