Realising the value of data for public good – Scottish experience

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What has been helpful in Scotland

- Alignment with interests’ of stake holders
- Searching for new data sources
- Linking through time
- Finding natural experiments
Understanding the nursing workforce
Alignment with interests’ of stakeholders
Working with NHS and NMC

- Registration, Every 3 year revalidation
- NMC felt that they would gain much
- Understanding the NHS workforce
Searching for new data sources
<table>
<thead>
<tr>
<th>No.</th>
<th>Name and Surname</th>
<th>When and Where Died</th>
<th>Sex</th>
<th>Age</th>
<th>Name, Surname, &amp; Rank or Profession of Father, Name, and Maiden Surname of Mother</th>
<th>Cause of Death, Duration of Disease, and Medical Attendant by whom certified</th>
<th>Signature &amp; Qualification of Informant, and Residence, if out of the House in which the Death occurred</th>
<th>When and where Registered, and Signature of Registrar</th>
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</thead>
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<td>100</td>
<td>Alexander Moragibank, Mary McCallum</td>
<td>1915</td>
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<td>Alexander Moragibank, Mary McCallum</td>
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<td>At home</td>
<td>1915</td>
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<td>Helen McCallum</td>
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<td>30 AM</td>
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Archive materials made machine readable
Linked data in the 1936 Birth Cohort Study

- 1936 (0) - Registration data for the Cohort members and household members
- 1939 (3) - New Entrants to National Register: migration into Scotland
- 1947 (11) - Cognitive ability: Moray House Test (MHT)
- 1970 (34) - Vital Events: marriages, deaths, and widowhood
- 1991 (55) - NHS Health Data: cancer registry, hospital admissions, maternity, etc.
- 2001 (65) - NHSCR Data: migration history (migration into and out of Scotland, changes of Health Board) and mortality (date of death)
- 2011 (75) - Census information for the Cohort members and household members

Scottish Centre for Administrative Data Research

Alastair Baird
PM$_{2.5}$ concentrations in 1935
Youth organisations, social mobility and health in middle age.

Linking through time
53% higher odds of excellent health – comparison ‘other clubs’
Does cycling to work benefit mental health?

Finding natural experiments
-16.1\% reduction in risk of a mental health prescription.