

Analysis of Administrative Data Sets for possible use in Small Area Population Estimates

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Purpose of the Analysis

ONS research project to investigate feasibility of producing small area population estimates on a nationally consistent basis for England and Wales

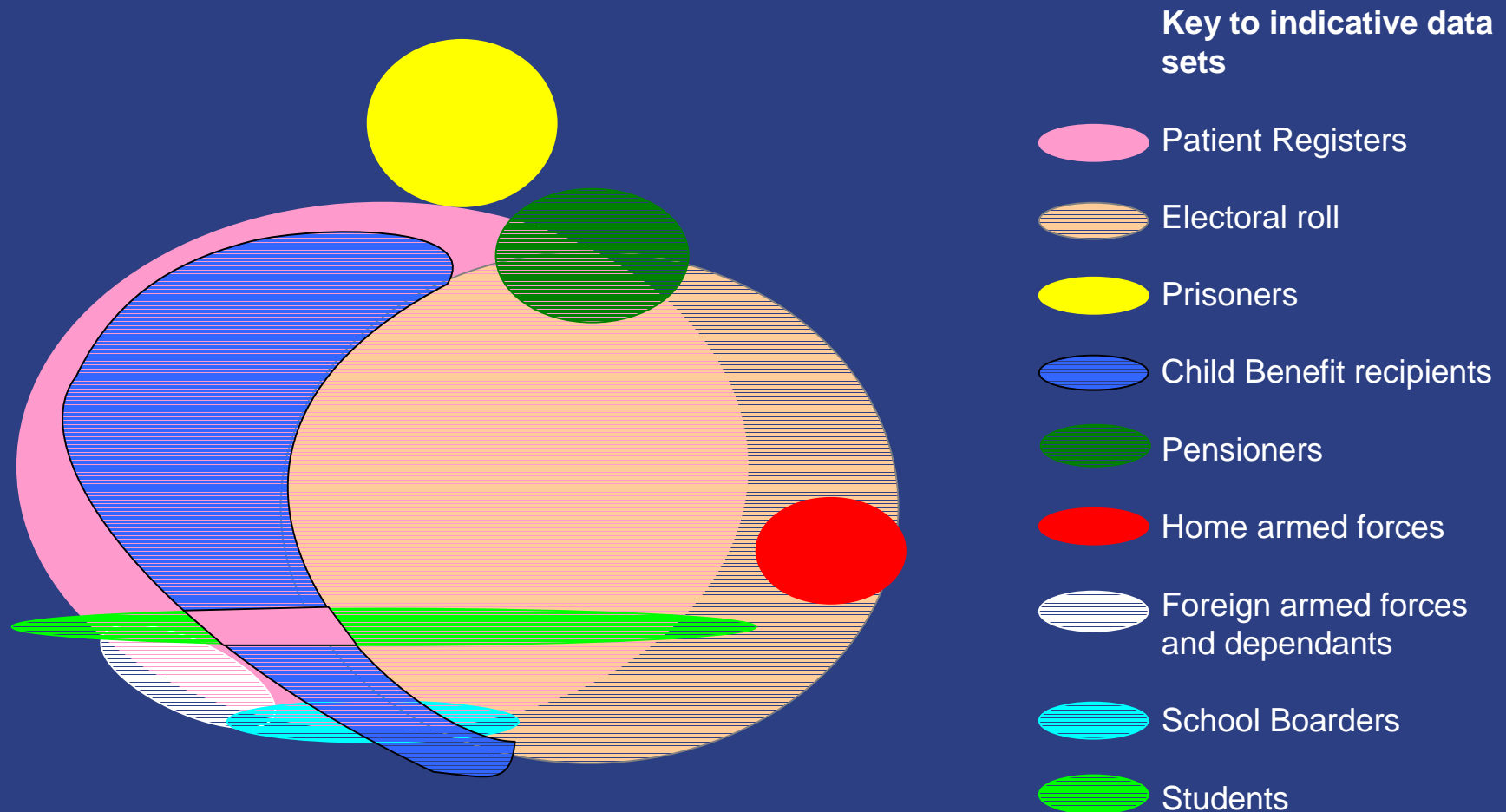
Two strands:

- investigate possible methods
- investigate suitability of nationally available administrative data sources for use within estimation methods

Key Data Sources

- Patient registers - counts by postcode
- Child Benefit - children of claimants by ward
- Retirement Benefits - benefit recipients by ward
- Electoral Registers - adult electorate by ward
- How well do the data represent the true population?
- Consistency across areas, consistency over time
- Is the quality of data as received adequate?

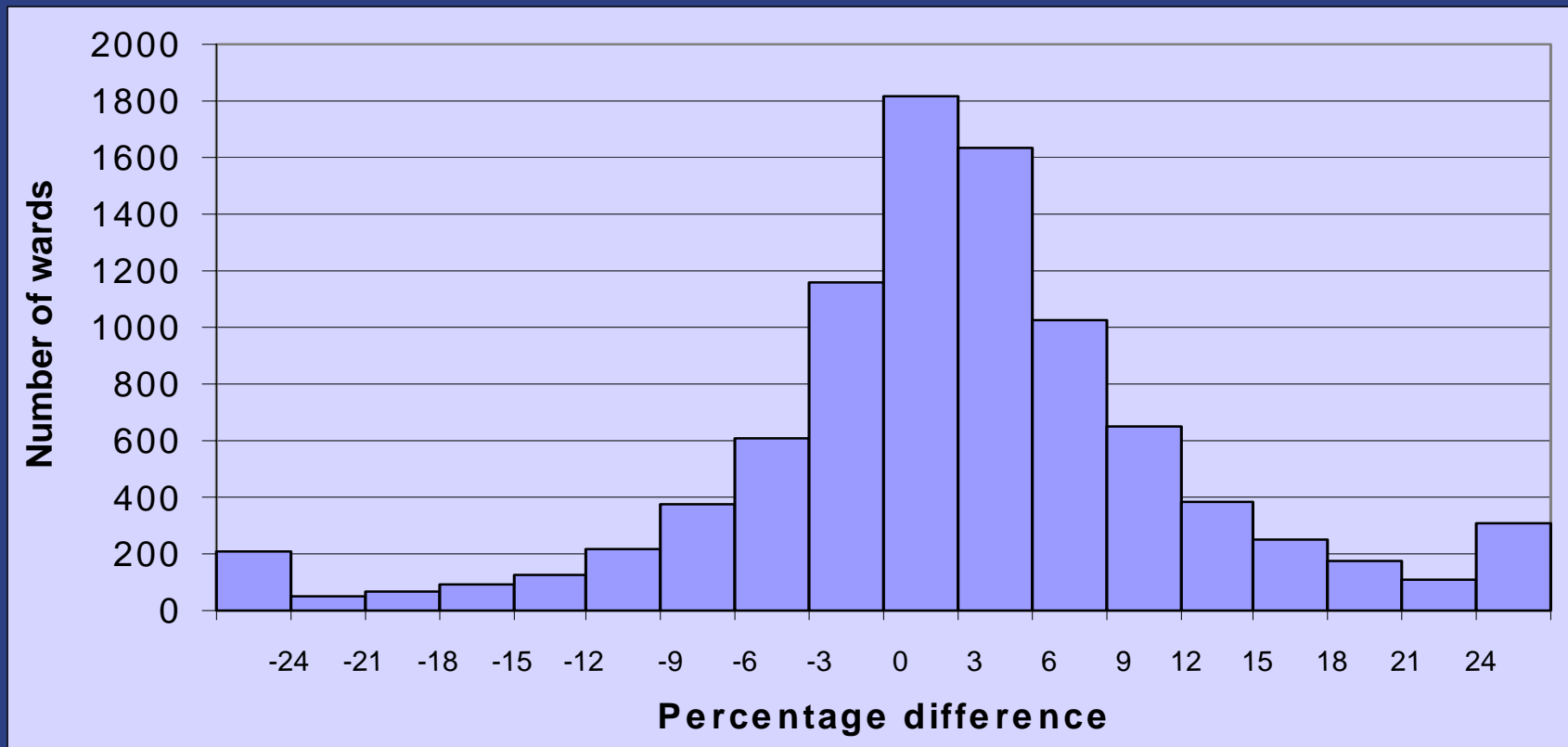
Coverage of Data Sources



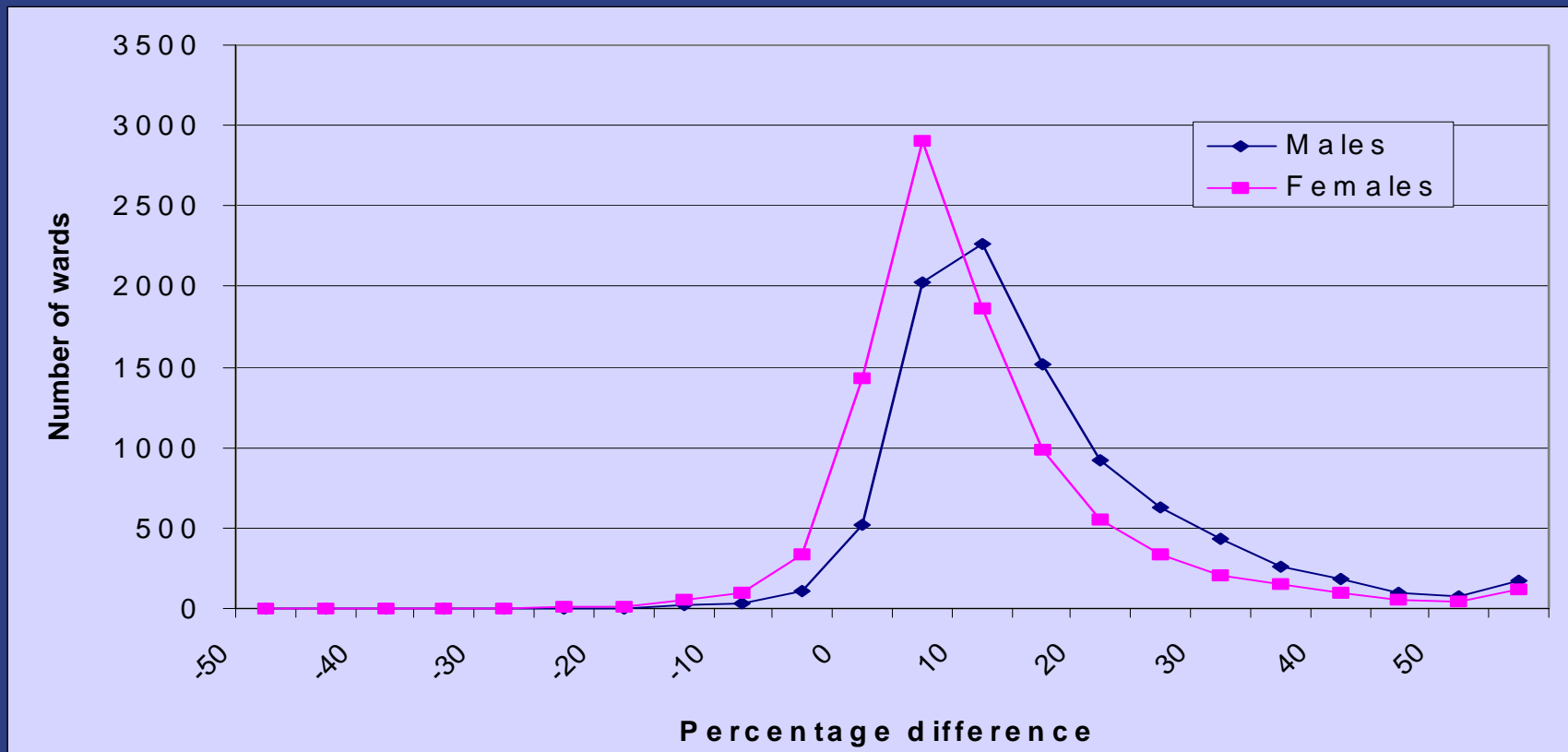
Main Findings

- patient register counts higher than other data sets;
- patient registers and child benefit numbers closest, but a few very large differences need investigating;
- patients v electorate at ward level: many small differences, a few very large differences;
- patients v older persons: greater differences for men than for women, greater for older than younger;
- but not possible to say at this stage which data are closest to the true population.

Percentage difference between patient registers and child benefit data for children aged 0-15, wards in England and Wales



Percentage difference between patient registers and older persons benefits for males and females aged 65 and over, wards in England and Wales



Next steps

- compare data at national and district level against published 2001 census data (in progress);
- compare data at ward and Census Output Area level against 2001 census data (Spring/Summer 2003);
- compare data against each other on a longer time series (Spring/Summer 2003);
- assessment of suitability for use within estimation methods, after consultation with data suppliers and Working Group.