

Using hospital data to study bone and joint health and cardiovascular disease

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Hospital admissions data in the UK

Hospital admissions data in the UK

Hospital episodes

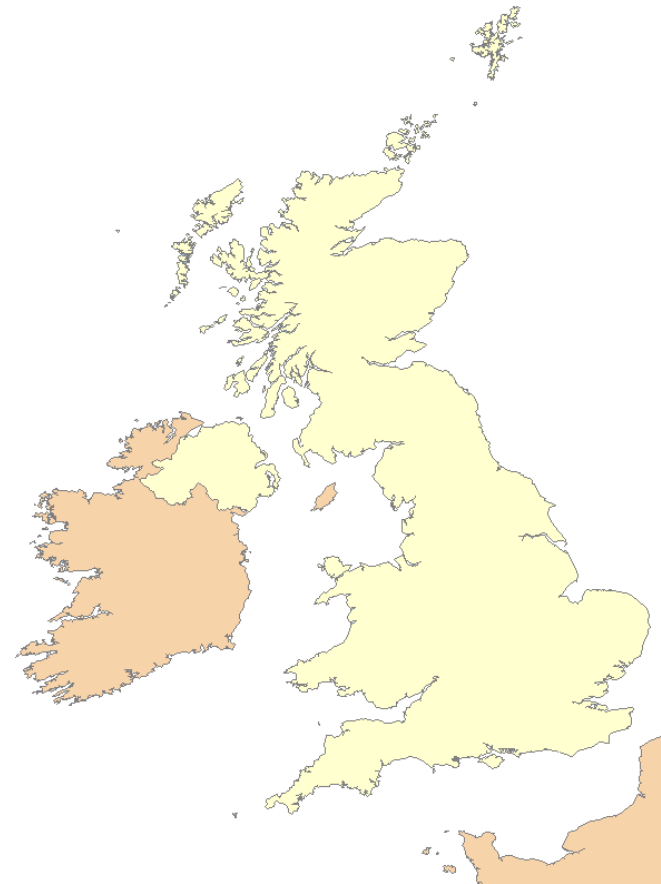
Admissions consist of 1+ 'episodes' – periods under the care of a consultant

Core inpatient data per episode:

- **Dates of admission & discharge, episode start & end**
- **Coded diagnoses & procedures**

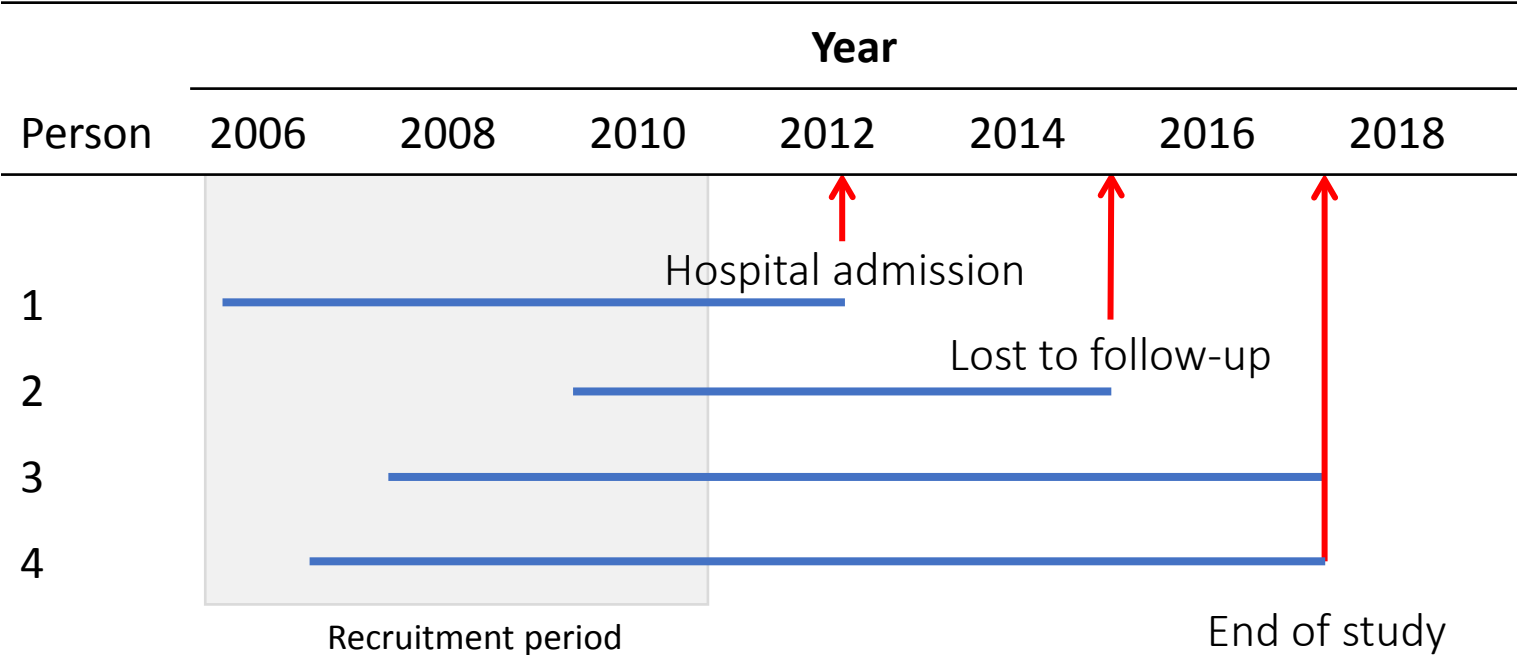
Also: outpatients, A&E, although more limited in detail or coverage

Some differences between devolved nations



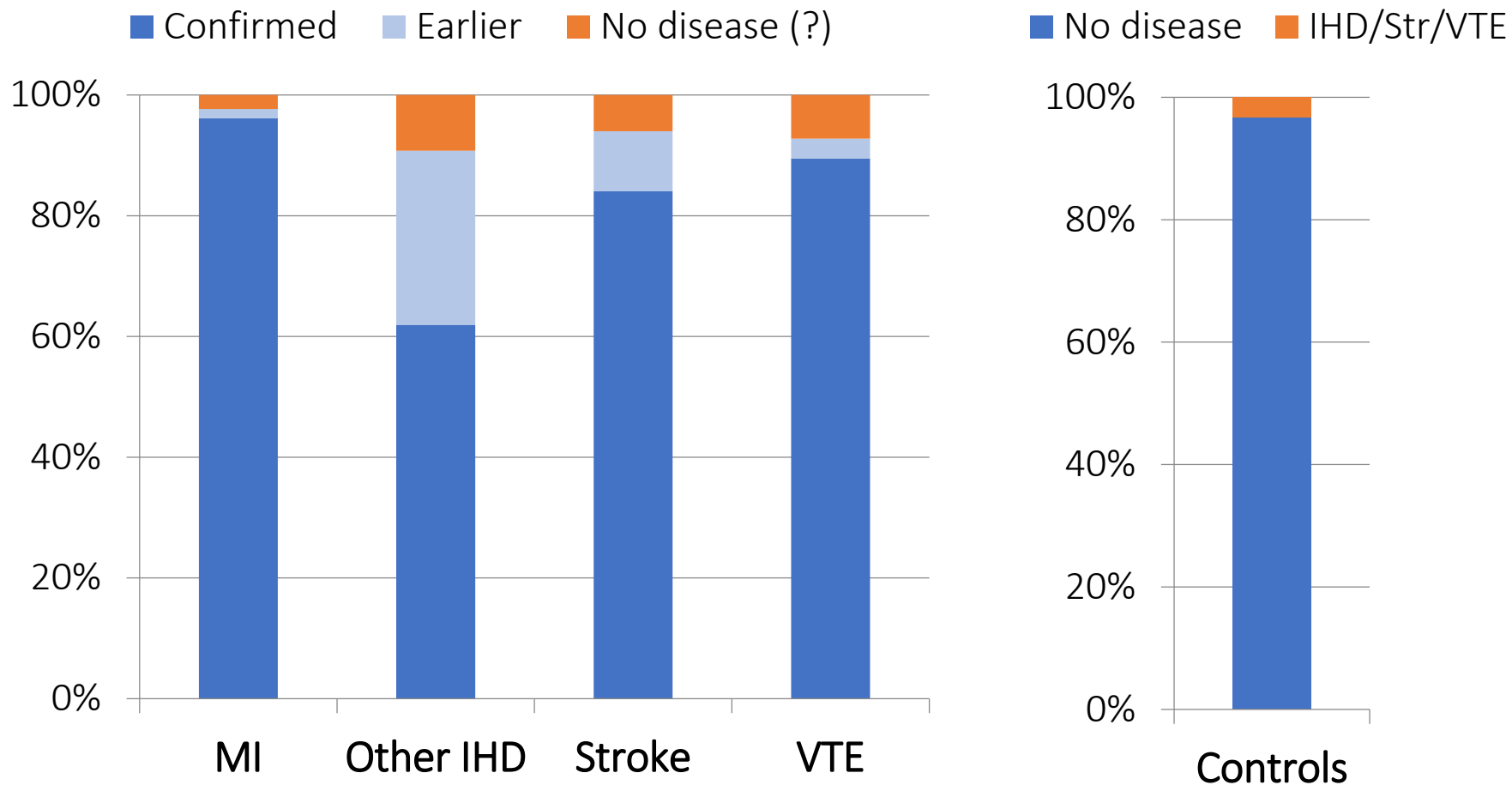
Hospital admissions data in the UK

Admission date and diagnosis or procedure



Hospital admissions data in the UK

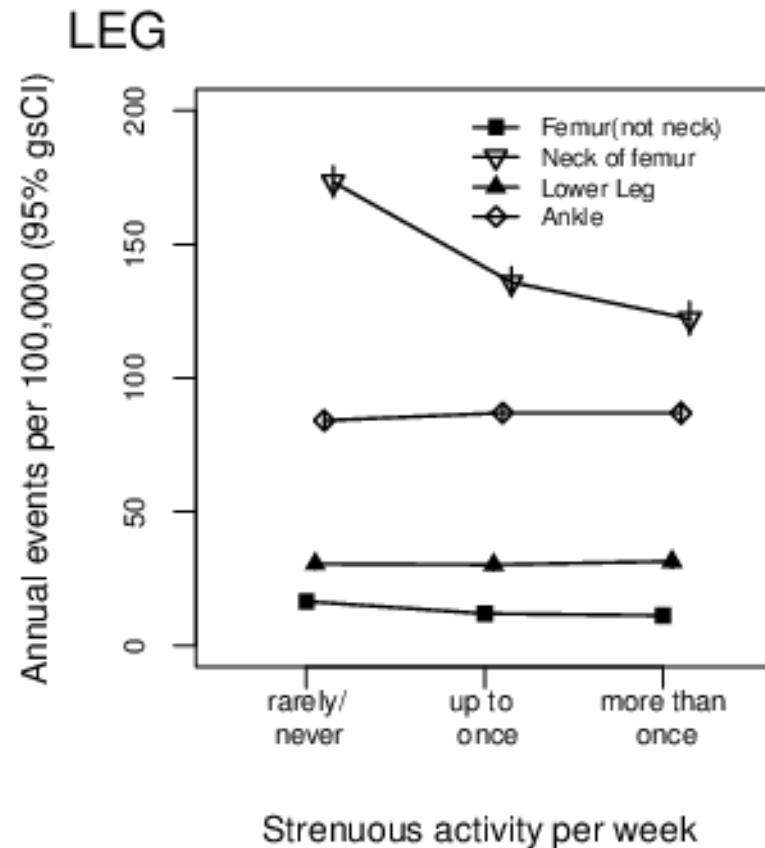
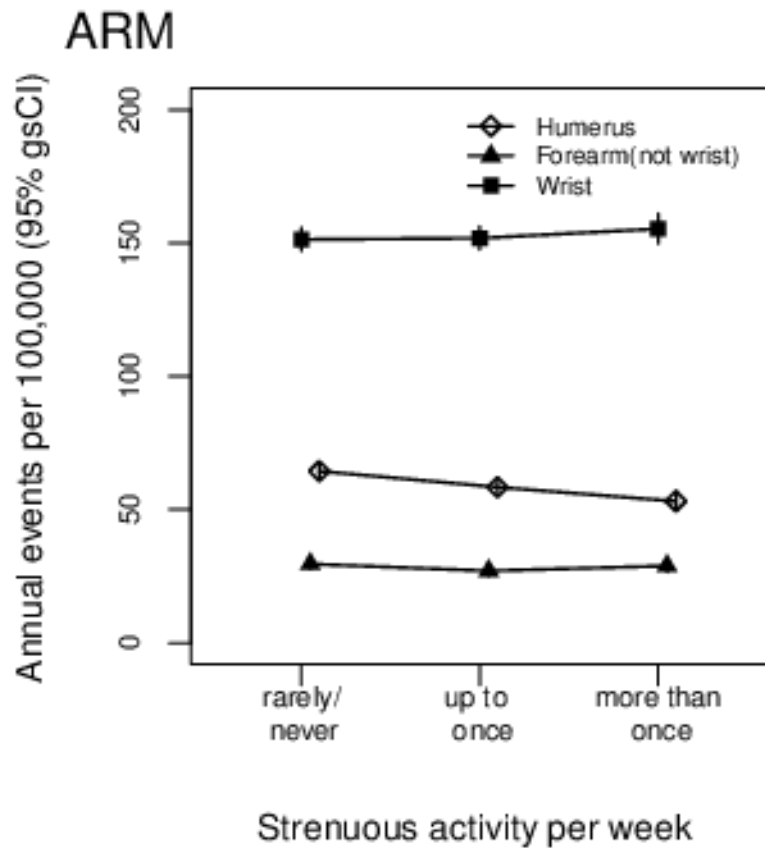
Validation of hospital records diagnostic codes



Applications of hospital records in population health

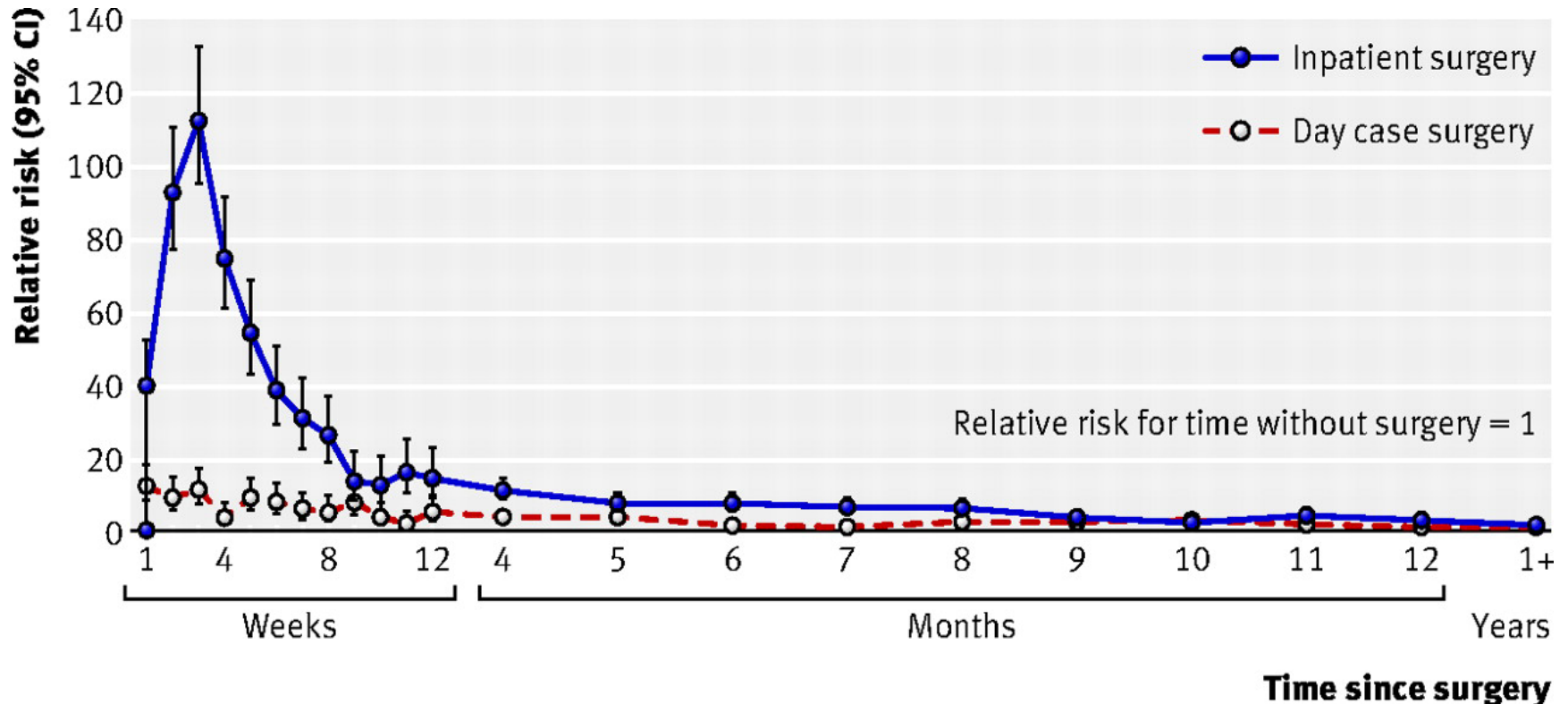
Applications of hospital records

Relationships of physical activity with fracture risk



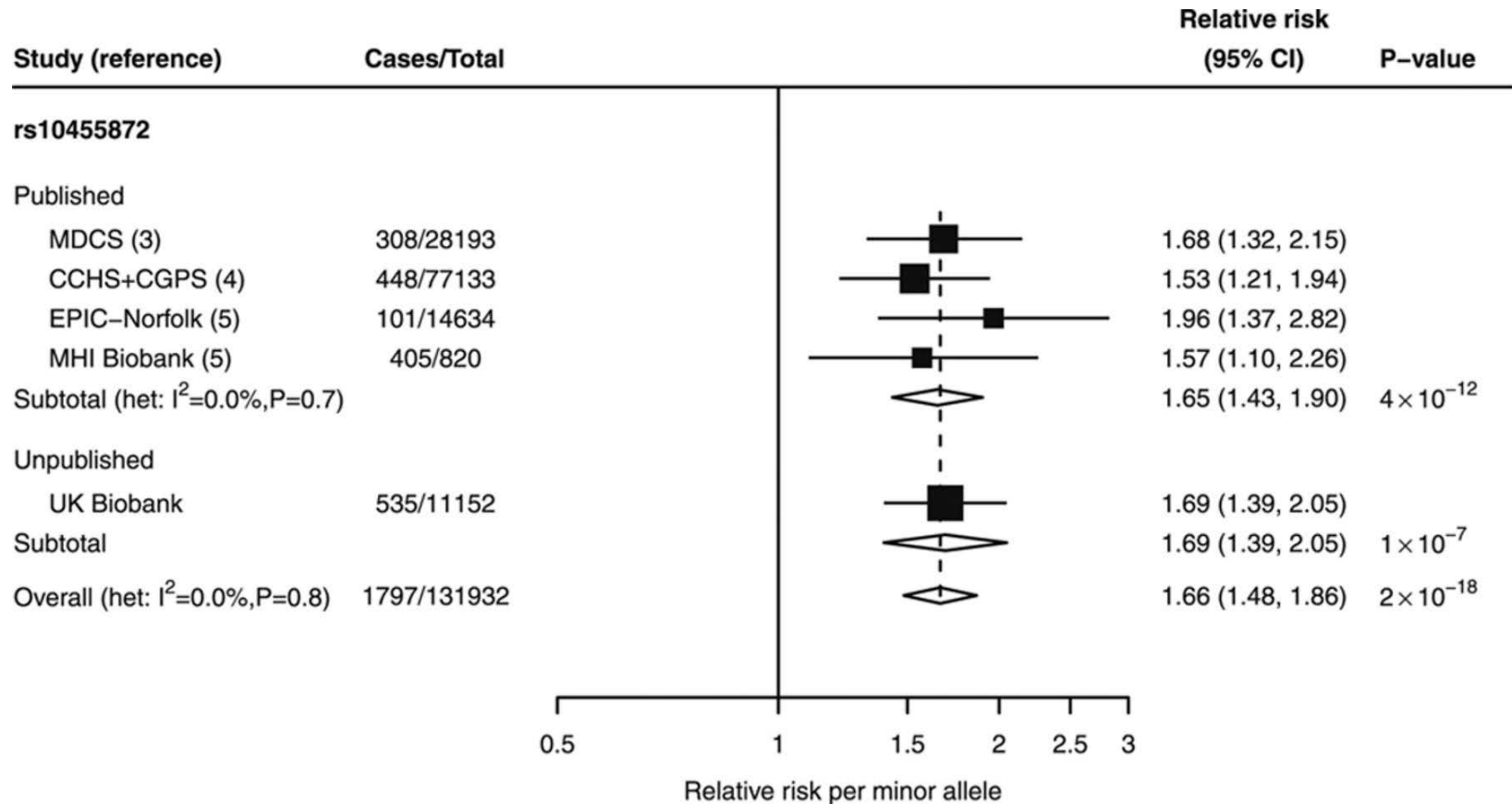
Applications of hospital records

Blood clot risk after surgery



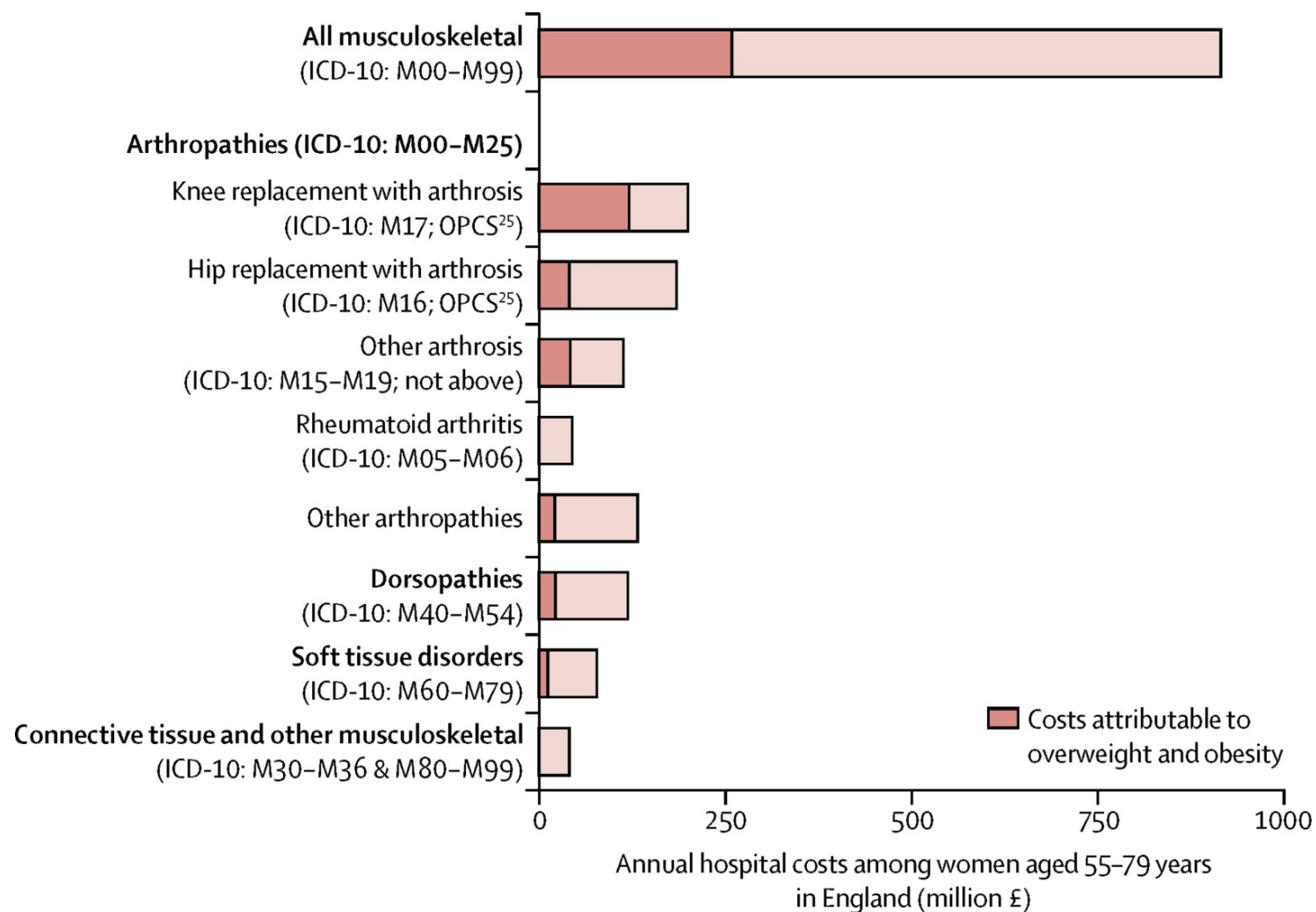
Applications of hospital records

Genetic variants for aortic valve stenosis



Applications of hospital records

Obesity and costs of musculoskeletal conditions



Using hospital records to study health and healthcare in UK Biobank

Hospital records in UK Biobank

Potential of hospital records in health research

Hospital records are administrative records

Hospital records can accurately represent health outcomes

Some opportunities to make more of hospital records:

- Integration of multiple healthcare records – primary care, hospital records, deaths, cancers, and more
- Use of imaging and other measurements to validate and enhance outcomes defined with health records
- Understanding not only individual conditions but the spectrum of disease and healthcare use in the UK

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