



HEALTH INFORMATION SOURCES

MORBIDITY DATA

MORTALITY DATA

Hospital

Strengths

- Individual records for each in-patient admission for NHS care
- ICD-10 with diagnosis & operation / procedure code
- Can analyse daily count of admission (e.g., for asthma)
- Inpatient data stored locally in each hospital and sent to a national Hospital Episode (HES) database
- Allows local health authorities to analyse data on their residents anywhere they're admitted

Weaknesses

- No data on private care
- Coding done locally, so variable quality
- Lab & x-ray data on local computers, so impossible to access & retrieve data
- Outpatient & A+E systems are intermediate - variable coding and reporting
- Number of admissions / attendances; NOT number of patients

Medical

Primary care

Examples

- Dental, pharmacy & opticians - very limited source
- GP research database (aggregate data of some GP systems)
- PACT (prescribing practices of GPs)
- Computerised medical records
- Royal College of General Practitioners (spotter / sentinel practices, e.g., influenza-like illness)

Strengths

- Read codes (from James Read); not ICD-10
- Includes vague symptoms not included in ICD-10 codes
- Captures much morbidity data that does not reach hospitals

Weaknesses

- Data on separate systems
- Not routinely aggregated
- Need to write to each GP practice
- GPs may not wish to share data

Surveys

Examples

- General Household Survey
- Health Survey for England

Strengths

- Repeated surveys can show trends
- Can be cheap
- Flexible - can collect any information you ask about

Weaknesses

- Generalizability
- Questionnaires prone to recall bias
- Validity issues
- Representativeness
- Regional estimates, not local (due to sample size and power)

Registers

Others (e.g., police, schools, fire, social services, etc...)

- Little use in public health
- Definitions not clear / accurate
- Poor data quality
- Variable completeness

Synthetic estimates

Strengths

- Comprehensive (every death registered)
- ICD-10 by ONS
 - Unlike hospital data that is coded locally to a variable standard
 - Uniformly high quality
- Cause of death recorded
- Underlying cause of death also recorded

Weaknesses

- Aggregate data published annually in fine categories
 - 5-year age bands
 - 3-digit ICD-10 codes
- Cause of death is an opinion, not a diagnosis
- Accuracy depends on...
 - Type of cause
 - Leukaemia more accurate
 - Pneumonia less accurate
 - Inversely proportional to age
- Geographic limitation - only as far as local health authority, not an electoral ward
- ICD-10 problematic for very specific causes of death - may not be separately identifiable in a wider code