

## Understanding Data and Setting Targets

# Understanding Administrative Data

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## Why administrative data?

- Low cost - Already collected
- Covers whole population (nearly)
  - Minority groups
  - Small area
- BUT
  - Definitions may not be what you want
    - proxies?
  - System changes
  - Control over what's collected?
  - Tend to measure inputs and outputs

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## What to use?

- Source of data
  - What is the collection process
    - Quality Assurance
  - What is being measured / counted
  - Ideally a bi-product of admin process
- Frequency of collection
- Revisions to data eg
  - Benefit applications
  - Reoffending

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## Quality Assurance

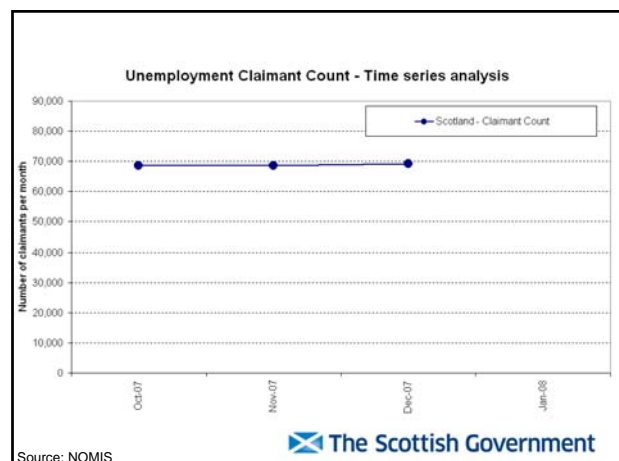
- Administrative data isn't always right.
- Errors at different stages
  - System set up / form design (*get involved*)
  - Data capture
  - Data transfer
- Speak to data collectors / owners / experts
  - How much QA of data? And of what?
- Do your own QA

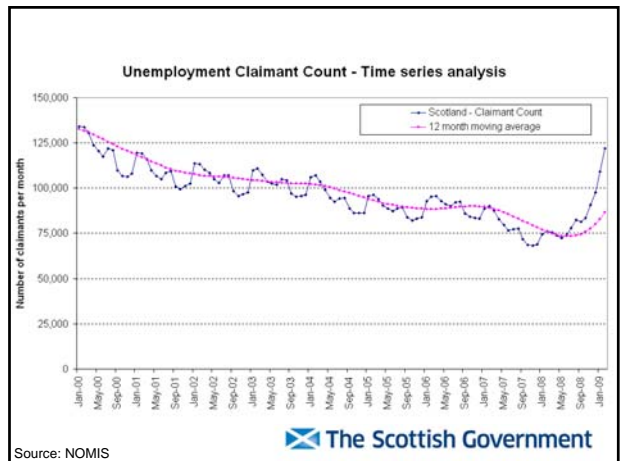
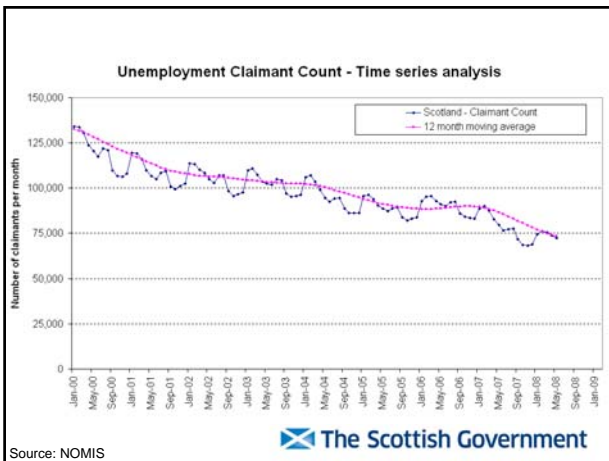
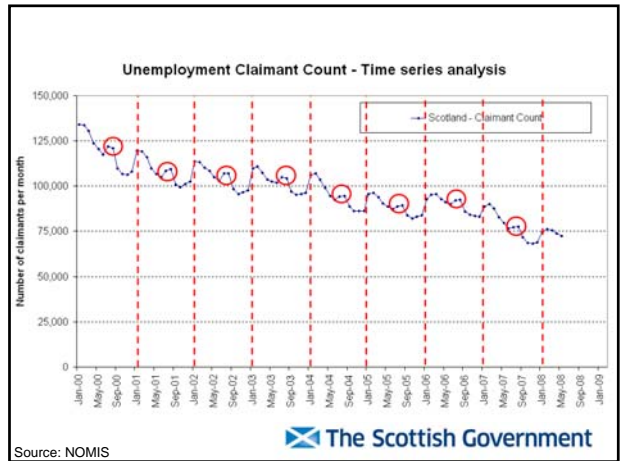
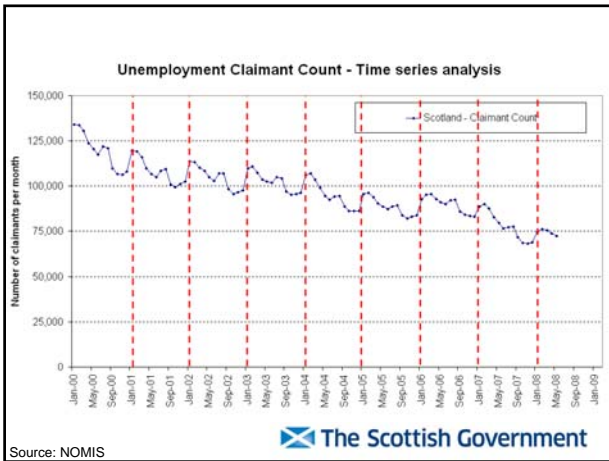
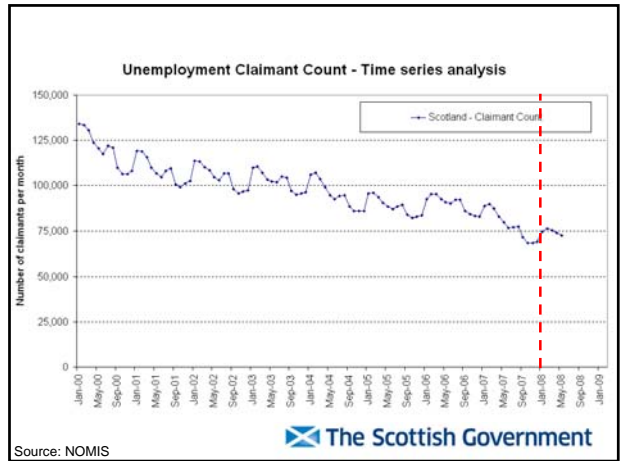
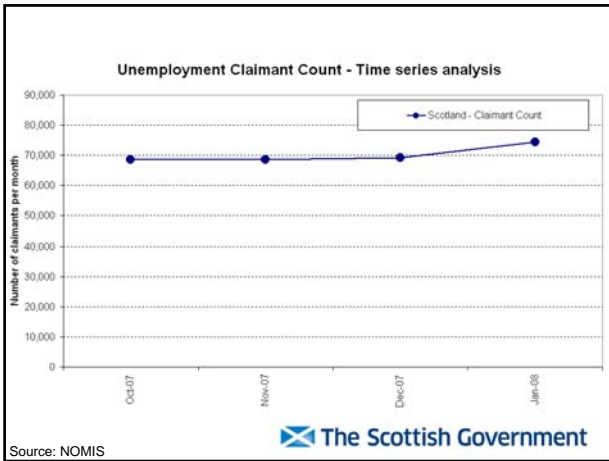
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## Measuring change – When is a change not a change?

- Seasonality
- Externalities
- Randomness
- An example - unemployment

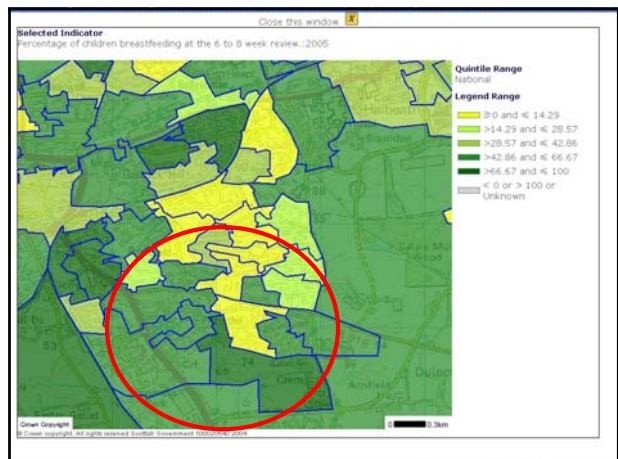
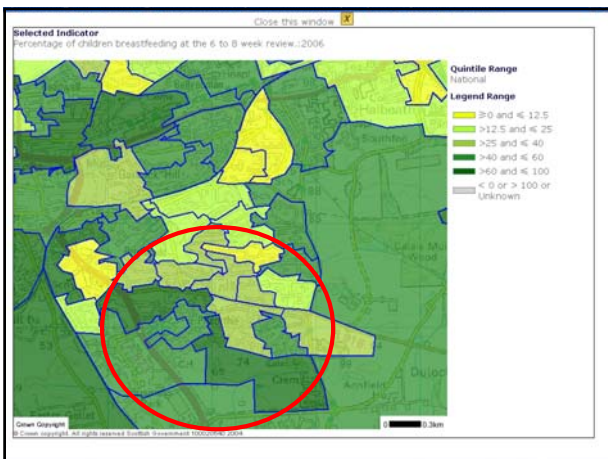
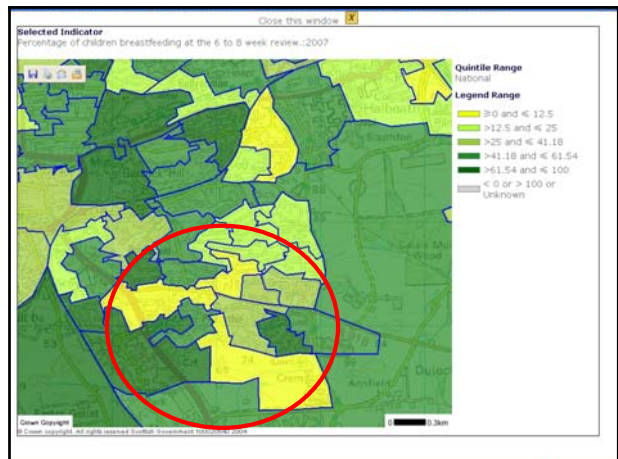
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## Using administrative data - Things to consider (part 1)

- External Factors eg
  - crime rates and drugs
  - Harold Shipman
  - encouragement to report crimes
- Randomness / Small numbers
  - Similar issue to surveys
  - Population size, not sample size
- Time series are important
- A health example..



## Breast feeding - the data



SO1002616	2006	2007	2008
Children examined	5	2	2
No. breast feeding	5	2	0



SO1002629	2006	2007	2008
Children examined	3	8	6
No. breast feeding	2	5	0

Source: Scottish Neighbourhood Statistics

## Using administrative data - Things to consider (part 2)

- Behaviour changes as a result of targets
  - Subjects
  - Inputters
- Relative vs Actual improvement
- An example..

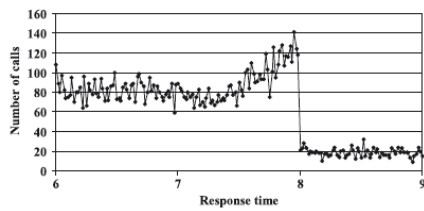


Fig. 6. Bulge in frequency of response times to category A calls around 8 minutes by one service (source: Commission for Health Improvement (2003c))

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## Summary

- Know your source, talk to the experts
- Quality Assurance
- Look at all the data
- Explanatory factors
  - Real
  - Methodological
- Think carefully about sub-sets

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## Further information

- National Sources:
  - Scottish Government ([www.scotland.gov.uk/topics/statistics](http://www.scotland.gov.uk/topics/statistics))
    - Sources and suitability pages
  - Scottish Neighbourhood Statistics ([www.sns.gov.uk](http://www.sns.gov.uk))
  - General Register Office Scotland ([www.gro-scotland.gov.uk](http://www.gro-scotland.gov.uk))
  - ISD Scotland (<http://www.isdscotland.org>)
  - ScotPho (<http://www.scotpho.org.uk>)
  - Scotstat ([www.scotland.gov.uk/topics/statistics/Scotstat](http://www.scotland.gov.uk/topics/statistics/Scotstat))
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