

## What, today, are the barriers in access to micro-data?

The decision making framework for initiatives in research data access to ONS micro-data.

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## John Snow and Cholera, 1854



## John Snow - researcher

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“On proceeding to the spot, I found that nearly all the deaths had taken place within a short distance of the [Broad Street] pump. There were only ten deaths in houses situated decidedly nearer to another street-pump. In five of these cases the families of the deceased persons informed me that they always sent to the pump in Broad Street, as they preferred the water to that of the pumps which were nearer. In three other cases, the deceased were children who went to school near the pump in Broad Street...”

## Framework for decisions

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1. Legal
2. Researcher needs
3. Data Strategy
4. Cultural
5. Technical
6. Partnerships
7. Money
8. Methodology
9. Governance
10. Inertia / familiarity

## Barriers in decision making

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Aspects of each :

- Parts we can control directly
- Parts we can influence
- Parts we get consulted about
- Parts we have no control over at all

But knowing about them allows us to make the most of the leverage we have.

They are all changing – now, more than ever before.

## 1. Legal

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### Framework Status?

- Better than ever, and still improving

- New national laws
- New ESS law
- Enabling, flexible
- Recognise the legitimacy of research access

## 1. Legal

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### Barriers remaining?

- International transfers
- Focus on the wrong risks
- Sector specific

## 2. Researcher needs

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### Framework Status?

- Better than ever, and still improving

- Closer cooperation between researchers, NSIs and Govt.
- More prepared to enter binding contracts
- Better explanation of research purposes

## 2. Researcher needs

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### Barriers remaining?

- Still some reluctance to accept our conditions
- Privilege, not a right
- Demand still high for local copies

## 3. Data strategy

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### Framework Status?

#### - Better than ever, and still improving

- 'Information society', 'power of information'
- Evidence based decision making
- Building analytical capacity
- Data mash-ups
- All the above are terms our Minister has used in his blog.

### 3. Data strategy

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#### Barriers remaining?

- Not enough value given to interdisciplinary, longitudinal, small area information
- We've not even begun to tap the power of the Grid
- Web 2.0

### 4. Cultural

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#### Framework Status?

- Better than ever, and still improving

- Researchers and statisticians in the same family
- Exploiting information safely part of its culture
- Room for more than one narrative

## 4. Cultural

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### Barriers remaining?

- Can anyone really care as much as we do?
- Researchers as a devolved community
- Research for research sake?

## 5. Technical

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### Framework Status?

#### - Better than ever, and still improving

- Never has data storage, processing, identity management, encryption, and analysis been so cheap
- Never have so many people got access to the basic tools of research

## 5. Technical

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### Barriers remaining?

- Capability is running ahead of practice
- 25m child benefit records on 1 CD...

## 6. Partnerships

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### Framework Status?

- Better than ever, and still improving

- Some NSIs are working together to pool solutions
- ESSNet
- NSI / academic partnerships building all the time

## 6. Partnerships

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### Barriers remaining?

- Partners – but do we trust each others' decisions?
- Cooperation – but from our own separate desks?

## 7. Money

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### Framework Status?

#### - Bad, and getting worse

- Budgets seem to be falling in NSIs the world over
- Unless seen as 'core', research access could be cut
- Cost recovery, before we've even calculated its value

## 7. Money

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### Barriers remaining?

- Complex funding frameworks
- Equality of access vs. cost recovery
- Space Station, or NICE, as our funding model?

## 8. Methodology

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### Framework Status?

- Better than ever, and still improving

- Methodologists are now finding solutions, not problems
- (We've set them a better task)
- Useful guidance and methods now readily available

## 8. Methodology

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### Barriers remaining?

- Still a focus on standard outputs from static data
- Work needed on safe visualisations of dynamic data

## 9. Governance

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### Framework Status?

- Better than ever, and still improving

- Accepted now as a base-line cost
- Panels, Committees, case-by-case decisions
- Forensic risk management
- 'Fit and proper person'

## 9. Governance

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### Barriers remaining?

- Little standardisation
- Back to square 1 each time a researcher asks for access
- Output, not outcome, criteria

## 10. We've always done it like that...

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### Framework Status?

#### - Better than ever, and still improving

- Dire predictions, but the world did not end when the first researcher used the first confidential data.
- Trewin et al have changed the default position
- Soon, what we 'always will have done' is given research access to confidential data

## 10. We've always done it like that...

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### Barriers remaining?

- The familiar is still seen as less risky than the innovation
- Innovators have to fight for every penny
- but the old ways just get a 5% cut...

## If John Snow said to you today...

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"Can I have access to

- individual cause of death records
- by day for the last 2 weeks
- for the Soho area of London
- with house number and street for each place of death
- so I can take the records away to where I work
- and experiment with a new visualisation technique
- to see if there is a link between a water source and cholera
- I have no money to give you
- I have no statistical qualifications
- I don't have any special facilities

...please."

## What would you say?

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## Conclusion

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There has never been a better time, nor a greater need, to innovate in research data access

Paul J Jackson

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