DWP Research Data Handling

Doing the right thing
&
doing it the right way

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DWP Department for Work and Pensions

- DWP's data
- Security processes
- Ethics

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Why me?

Statistician, including supporting research -12 years

Data protection & security – 5 years

Research data security improvements – 1 year

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What sensitive data does DWP have?

- All benefit data
  - Sickness & Disability
  - Payment information (amounts & accounts)
- All program data (New Deals etc.)
  - Drug abuse
  - Criminal history
- General customer info
  - Personal details
  - Ethnicity
  - Disability
  - Transgender
  - Family make-up

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What sensitive data does DWP have? (2)

- Quantitative surveys
- Depth interviews
- Focus groups
- Other organisations data
  - HM Revenue & Customs (employment, tax, earnings, tax credits, child benefit, savings etc.)
  - Learning & Skills Councils (FE courses)
  - Child Maintenance Enforcement Commission
  - Etc.
- More in the future
  - From more systems
  - Lesbian, Gay, Bisexual, Transgender
  - Religion

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Security (1) - before data losses

- Data minimisation
  - Data transfer linked to privacy business case in majority of projects
  - Partial anonymisation of data for secondary analysis
  - minimalist sampling specifications (and chunking)
  - sensitive excluded if possible
- Secure transfer
  - SPSS encryption
  - CD/DVD burning controls
    - IT facilities restricted
    - approval level below Senior Civil Service – me!
  - Some assessment of contractor security

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Security (2) – immediately after data losses

- Data minimisation
  - full anonymisation of bulk data (millions of records) for secondary analysis outside DWP unless contractor is security accredited
- Secure transfer
  - 128 Bit approved encryption technology
  - All transfers by removable media approved by Senior Civil Servant
  - Contractors given more advice on security standards
  - “Baseline” Security clarified in contracts
  - Standard list of contractor security measures developed in-house

Security (3) – after Cabinet Office review

- The same data minimisation
- Assess all Information Systems formally
  - Research projects are information systems
  - Standard = Information System Security Standard (ISSS) *The Right Things*
  - Process = Risk Management & Accreditation Document Set (RMADS) *The Right Way*

- More than just the transfer, includes processing at rest

- Being implemented in DWP by……

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Security Assurance for Research & Analysis (SARA)

- Pilots
- Found the risks were much the same
- Generic risk profile
  - Confidentiality, Integrity, Availability
  - All Information Assets
  - All locations
- Generic mitigations
  - Applicable to research
  - Smaller than full ISSS (but still meets requirements)

⇒ SARA - *a* right way to ensure we are doing all the right things to keep research information secure

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SARA (2)

- Screen (Triage)
  - No risk – Triage out - don't do SARA
  - Risk within Profile – Triage in – SARA
  - Risk above profile – Full RMADS
  - Decision by an independent, skilled team

- Above risk profile
  - Large volumes, where individual records may facilitate crime
  - Individual records that risk safety or liberty
  - ⇒ Minimise data or use data lab within DWP

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SARA (3)

- Document all information assets
  - Same principles as Information Asset governance
  - SARA Risk Template
  - Confidentiality, Integrity & Availability (CIA) impact assessment
  - Locations
  - Key project and Information Asset governance staff
- Security mitigation confirmation
  - Generic Security Accreditation Document (GSAD)
- Senior Civil Servant sign-off
  - Based on risks and mitigations of contractor
  - Contractor GSAD may have omissions - decision required
  - Civil Service staff compliance must be considered
  - Accountable for risks

SARA (4)

- Part of research data sharing & data access approvals process
  - includes privacy impact assessment etc.
- Being made part of research planning
  - Project Initiation stage
  - SRO accountability (security is like finance, timescales etc.)
- Training
  - Awareness (part of wider data handling) face to face
  - Process – initially face to face, then Intranet
  - Guidance
  - Leadership from Senior Analysts

Data Labs

- Uses
  - Where contractor mitigations don't meet standard
  - Where data is above Generic Risk Profile

- A work in progress, but some requirements known
  - Contractor on DWP site
  - Limited technical access
  - Limited physical access
  - Closely observed

- Allows for flexibility in the solution, still meets the requirement

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DWP Data Access Ethics Committee

- Established in 2004
- Independent & Government members
  - Independents have key voting rights
  - Independents from varied & senior backgrounds
- Focuses on use of non-DWP data due to sensitivities
  - Higher risk or strategic cases tabled for discussion
  - Can review all uses within scope
  - Can ask for more info
- Minister has attended twice
- ICO head of privacy practice in public sector has attended
- Info and annual reports on DWP website

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DWP Data Access Ethics Committee (2)

- Risks assessed
  - Legality, control, impact, novelty & overall
  - Low risk = best practice
  - High risk = we could (DWP decision), but not best practice ⇒ *should* we do it?
  - Used to summarise for the EC, but they make up their own minds
  - EC opinions feed back into subsequent risk assessments

- Forward looking
  - Broad programmes brought to EC at early stages
  - Advice feeds into planning
  - Can return to EC several times over years

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Conclusion

- High/required standards
- Best practice
- Proactive
- Continuous improvement
- Openness

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?Questions?

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