The Behavioural Challenge of Sharing Data on Vulnerable People

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Thought for the day

The “dirty little secret” behind the promotion of data sharing is that not much sharing may be taking place (Borgman, 2012: loc. 1059).
Problematic

– Why is sharing administrative data on vulnerable people (usually) so difficult?
– Understanding data sharing as behaviour
– How might that help?
– How can you help?

Data is not just on vulnerable people – sharing data can make people more or less vulnerable.
“Sharing”

• Why data *sharing*?
  – Because (market) *exchange* is hard to establish (data makes a problematic commodity)
  – Because *mandatory* bureaucratic procedures are seen as slow and cumbersome
  – Because *Open* Data is “too open” (for vulnerable people)
Data (on vulnerable people)

• Data
  – Data is “entangled” (Carlson and Anderson, 2007) along the value chain and beyond
    • So you can’t (easily) share the data without sharing specific problematics and other frames of reference
  – “Raw data is an oxymoron” (Gittleman, 2013)
    • All data is already “cooked,” reflecting choices and biases

• (particularly) Vulnerable People’s data
  – Acknowledges power imbalances
  – Generates complex rules
Sharing and the Big Data Value Chain

Sharing data means sharing along the whole value chain!

Sharing

Problematic → Data Assembly → Analytics → Presentation → Action

Volume Velocity Variety → Visualisation → Verification

Value

c. 80% of Effort

Adapted from Miller and Mork, 2013
### Three Logics of Data Sharing

<table>
<thead>
<tr>
<th>Basic framing</th>
<th>Design Logic</th>
<th>Governance Logic</th>
<th>Enculturation/practice Logic</th>
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</thead>
<tbody>
<tr>
<td><strong>Centra</strong></td>
<td>Data Sharing is a design problem</td>
<td>Data Sharing is a governance problem</td>
<td>Data Sharing is a cultural, behavioural or people problem</td>
</tr>
<tr>
<td>theme</td>
<td>Enabling, facilitating</td>
<td>Controlling, clarifying</td>
<td>Encouraging, motivating, supporting, leading</td>
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<tr>
<td><strong>Framing of the Problem Space</strong></td>
<td>We lack the tools and procedures to share data securely and effectively</td>
<td>We lack, or fail to understand, the rules that govern data sharing</td>
<td>We don’t have a culture of data sharing</td>
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<tr>
<td><strong>Typical Product(s) (framing of the solution space)</strong></td>
<td>A (software) tool, an information system/environment, process</td>
<td>An information sharing agreement/protocol; guidance; training</td>
<td>Stories, narratives, case studies, best/good/promising practices</td>
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(Adapted from Cornford, 2019)
Many Behavioural Perspectives

• Theory of Planned Behaviour
  – Attitudes, (Subjective) Norms and Control → Intention → Behaviour

• COM-B Behaviour Wheel (Michie et al., 2011)
  – Capability, Opportunity, Motivation → Behaviour

• Theoretical Domains Framework (Atkins et al. 2017)
  – 14 domains; 128 constructs

• “Information Behaviour” – (e.g., Hepworth 2007; Godbolt, 2006)
  – e.g., Scientific Information Sharing (e.g., Borgman, 2012)

• MINDSPACE (Institute of Government, 2012)
  – Messenger, Incentives, Norms, Defaults, Salience, Priming, Affect, Commitment, and Ego.

• Normalisation Process Theory (NPT) (e.g., May and Finch, 2009)
  – Coherence, cognitive participation, collective action, reflexive monitoring
Six Core Traditions in Behavioural Science

- Rules and regulation
- Roles and identities
- Rewards and risks
- Relationships and networks
- Routines and habits
- Rationales and sense-making

+ Resources
Rules (and regulations)

• Underlying model: people mostly follow (legitimate) rules
• But, for sharing vulnerable people’s data
  – Rules are seen as missing or out of date
  – Where there are rules, they are seen as very complex and there is little agreement about what the rules mean in practice
  – Additional “guidance” seems to just add to the confusion
  – There is a “culture of anxiety” (Caldicott) about data sharing rules
Roles (and Identities)

• Underlying model: people mostly act in role
• But, for sharing vulnerable people’s data
  – There is no discrete “data sharing” role (cf. business and the rise of the “data wrangler”)
  – It’s not clear if it is part of any particular individual’s role
  – Several roles intersect (e.g., sign-off versus actually extracting and delivering the data)
  – DS ‘crafted’ into, but also out of job role
  – Data sharing role strain
Rewards (and Risks)

• Underlying model: People mostly respond to rewards and avoid punishment
• But, for sharing vulnerable people’s data
  – The rewards are seen as ambiguous and uncertain
  – Risks are seen as large and well defined
  – “No one ever got sacked for saying no to data sharing”
Relationships

• Underlying model: behaviour is shaped by personal (social) networks of relationships

• But, for sharing vulnerable people’s data
  – Relationships may be missing or tenuous
  – They take time to build up
  – Developing relationships is impeded by constant changes of personnel
Routines and habits

• Underlying model: people are creatures of habit
• But, for sharing vulnerable people’s data
  – Most routines don’t include or are inimical to data sharing
  – It is difficult to establish a routine in the context of constant change in personnel, rules, etc.,
  – ‘It’s hard to get the data sharing habit’
Rationale & Sense-making

• Underlying model: people try to make sense of a baffling reality
• Rationale & Sense-making activity
  – The powerful (plausible, useful) story or narrative helps data sharing to ‘make sense’ to us

Ode to Dr. Karl Weick
The University of Michigan professor in organizational behavior and psychology asserts that what we say determines what we think, not the reverse.

Bea Boccalandro
A final R: Resources

– Data sharing is not costless
– Data sharing = cost sharing?

Another story for another day...
6 Padlocks to Unlock Data

• A checklist
  – Can we clarify the rules and regulations?
  – Are the data-sharing roles defined?
  – Do the potential rewards outweigh the potential risks?
  – Do we have the relationships to support this?
  – Can we make sharing data part of a “routine”
  – Have we got a powerful rationale (story or narrative) for data sharing

• + Have we allocated adequate resources to data sharing
Sharing about Sharing: Over to You....

- Think of Practical Actions to Address Data Sharing behavioural challenge
- Short bullet points on the Big Post Its!
- Write big so we can read from distance!
- Stick up under the appropriate title
- Stand back and contemplate ...
- I will circulate results
References

• Atkins et al. (2017) A guide to using the theoretical Domains Framework of behavior change to investigate implementation problems, Implementation Science, 12: 77.
• Cornford, J. (2019) Competing Institutional Logics of Information Sharing in Public Services: why we often seem to be talking at cross-purposes when we talk about Information Sharing, Public Money and Management, 39(5): 336-345
More references