



Queensland University of Technology
Brisbane Australia

Health Management

School of Public Health and Social Work

The value and use of linked data to inform public policy

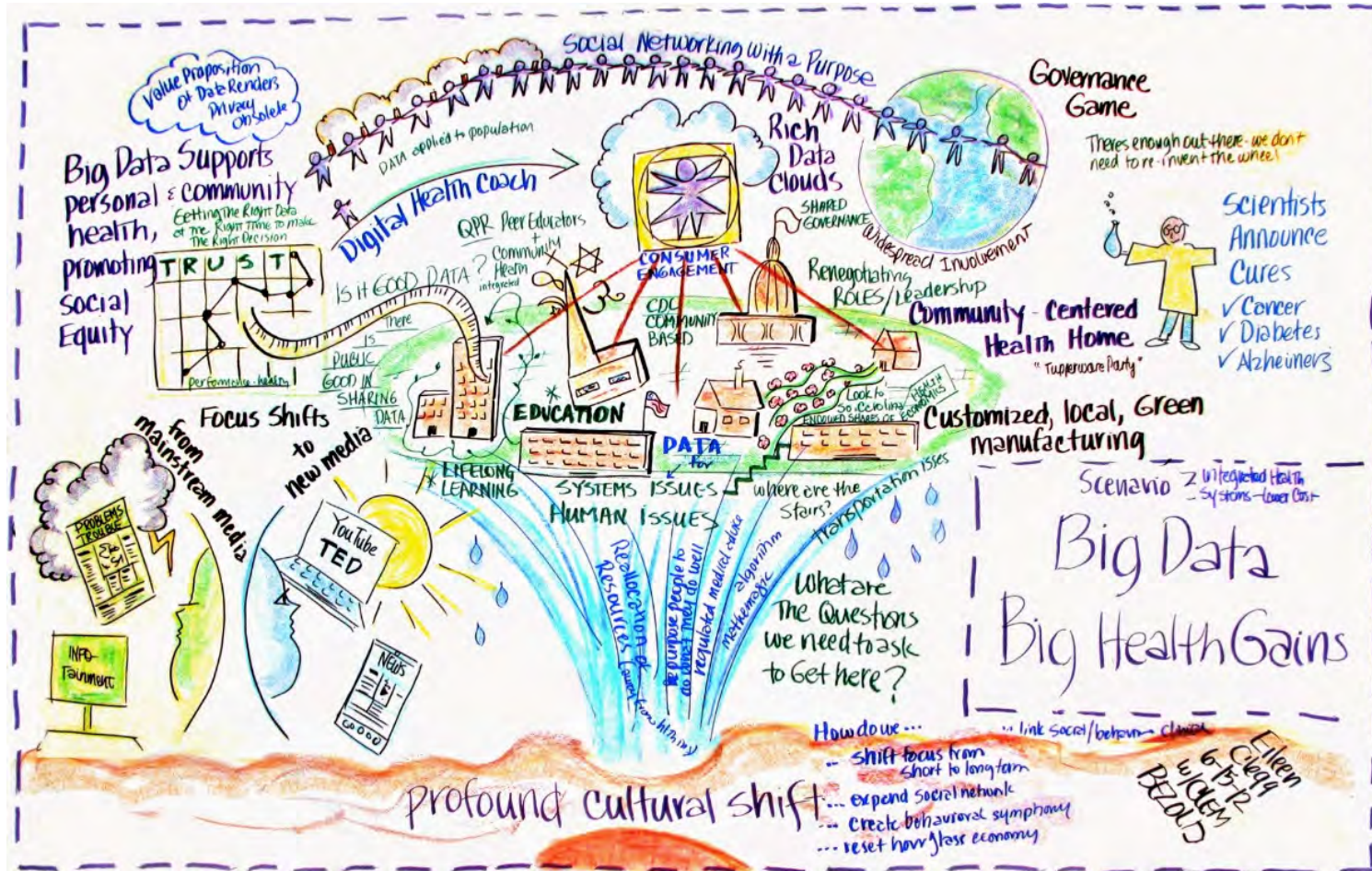
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Linked data.



The challenge of data informed policy!

- The challenge derives from the macro health system challenges
 - Growing demand for healthcare
 - Financial constraint
 - Governance, culture and performance
 - Quality and safety
 - The challenge of technology
 - Workforce flexibility and lifestyle demands

Why use data for policy:

- Ian Oliver writing in the MJA April 2014 identified three broad areas in which linked data could help inform policy in relation to cancer services:
 - Evaluate effectiveness of care
 - Identify the uptake and application of treatments
 - Identify the impact of screening

Consider the patient perspective and the different systems for each of these.

- Demographic data
- Risk factors
- Medicare
- Private insurance data
- GP attendance
- Ambulance
- Hospital; public and private
- Births, deaths and marriages

Why link data?

- Gives a big picture
- More efficient than building single
- Not as vulnerable to central failure and bottlenecks
- Permissions can be dealt with in broad terms allowing more efficient access
- Links social, health and other data sets

Why link data?

- When patient outcomes were immediate or directly linked to service providers then the provider knew the outcome.
- Now our health systems are more complex and there is a disconnection between the provider and outcomes.

The systems of information

- Our agenda to date has been marked by attempts to build system wide mega systems which have largely failed. The new strategy is to build enterprise level system which can be mined for the linkable data.



The challenges

- The drive to improve efficiency and reduce costs will demand data collection as a by-product of service delivery and not an end in itself.



Linkage is possible

- Widespread use of digital records that can be searchable
- Access to mega data systems that allow large database handling



Barriers to linking

- **Ethical:** privacy and confidentiality
- **Political:** risk of adverse findings that may be critical of
- **Financial:** How do we pay for linkage
- **Administrative:** We are all too busy

Policy domains where linked data may help

- Mapping epidemiology
- Informing service planning
- Evaluation of service performance (audit)
- Clinical outcomes and effectiveness
- Workforce planning, monitoring and evaluation

Experiences

- Building registries; cancer, trauma etc
- Used linked data to inform the Trauma Plan
- Linked data to analyse the impact of ramping

INTERNATIONAL
Health Data Linkage
NETWORK



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