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ARCBITE

Brokering Innovation Through Evidence

How do health and care decision-makers use data to help plan more equitable services and reduce healthcare inequalities?

Decision-makers, such as health commissioners, are often required to make decisions about the structure and delivery of health and care services to ensure that they are equitable, so that everyone has equal access to the care they need.

These decisions can have implications for more than one organisation. For example, someone working within a council could make a recommendation on how to design local social care accommodation, but this decision also has implications for other local organisations such as GP surgeries.

Patient information is often stored in anonymised administrative heath or care records. Knowledge generated from the analysis of these records ('analytics') is increasingly being used to inform decision-making.

What was the aim of the project?

This study aimed to explore if and how senior leaders' readiness to use analytics for strategic and equitable decision-making varied across health and care organisations. This study also sought to advance understanding of what facilitates or hinders analytics use in this context.

What did we do?

This research conducted interviews with 20 senior leaders of partner organisations of North Central London 's Integrated Care System (ICS). The ICS serves the boroughs of Islington, Camden, Barnet, Haringey, and Enfield.

The interviews explored barriers and facilitators of analytics use for informing strategic and equitable decision-making across organisational boundaries.

A typology was used – a method that allows researchers to capture and describe the variation in participant responses. The typology was informed by key themes and used to identify and define different types of analytics users across study participants.

What we found and what does this mean?

This research found that half of the decision-makers interviewed factored health inequalities into their decision-making. Analytics were mainly used to help inform investment and disinvestment, plan new, or redesign existing, services and understand the impacts of new services models.

Three themes captured the identified barriers and facilitators of analytics use. These were:

- Factors related to the working environment. These included **system structures** such as organisational fragmentation and priority alignment and **top-down constraints** such as resource pressures and policy priorities.
- Factors related to people. These included **personal relationships** between leaders and between leaders and analysts, and the **skills and knowledge** of leaders and of analysts.
- Factors related to data quality such as **data availability and accuracy** and **data richness and linkage.**

There was considerable variation in participant's readiness to use analytics. Five types of analytics users were identified:

- **"Advanced"** users regularly collaborated with trusted analysts to obtain analytics support and viewed strategic priorities as aligned with other leaders, which facilitated analytics use. They expressed few concerns around data quality.
- **"Hands-On"** users regularly used analytics but lacked collaborative relationships with analysts, and instead requested raw data to conduct their own analysis.
- **"Challenged"** users inconsistently used analytics. Their priorities did not align with other leaders involved in the decision, which hindered collective priority setting and analytics use. They struggled to access necessary data and sometimes perceived data quality to be poor, though they did attempt to overcome these barriers.
- **"Reluctant"** users hesitantly used analytics. They faced the same barriers as "Challenged" users, but instead chose to stop analytics use.
- **"Waiting"** users seldom used analytics but expressed a readiness to do so. They faced barriers due to data being stored on separate systems and a perceived lack of high-quality data and linkage. They worked to set up data systems to facilitate access to linked data.

Recommendations

For more decision-makers to become "Advanced" users of analytics, more is needed to better integrate organisations, align organisational priorities, and build and sustain relationships between leaders and analysts, and across leaders of different organisations.

What next?

This research generated further questions: How do these findings compare to other local areas and ICSs? How can we successfully address the identified wider barriers to analytics use? The researchers are now working with local health and care practice partners to use the findings to inform their practice.

Improved data sharing will be insufficient to realise the UK government's aspiration for data to transform care without strategies to address further key barriers to analytics use.

Who needs to know

National policy makers and local organisations aiming to improve data and analytics use for informing the delivery of more equitable health and care services.

Find out more

Ingram E, Cooper S, Beardon S, Körner K, McDonald H, Hogarth S, Gomes M, Sheringham J. Barriers and facilitators of use of analytics for strategic health and care decision-making: a qualitative study of senior health and care leaders, *BMJ Open* 12, 2 (2022). doi: 10.1136/bmjopen-2021-055504