Balancing speed and rigour for real world application – designing rapid studies and methods used

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Session outline

- 11:45-11:50 Introduction and overview
- 11:50-12:00 Presentation on planning and delivering rapid studies – quantitative methods
- 12:00-12:10 Presentation on planning and delivering rapid studies – qualitative methods
- 12:10-12:25 Group discussion
- 12:25-13:30 Concluding remarks





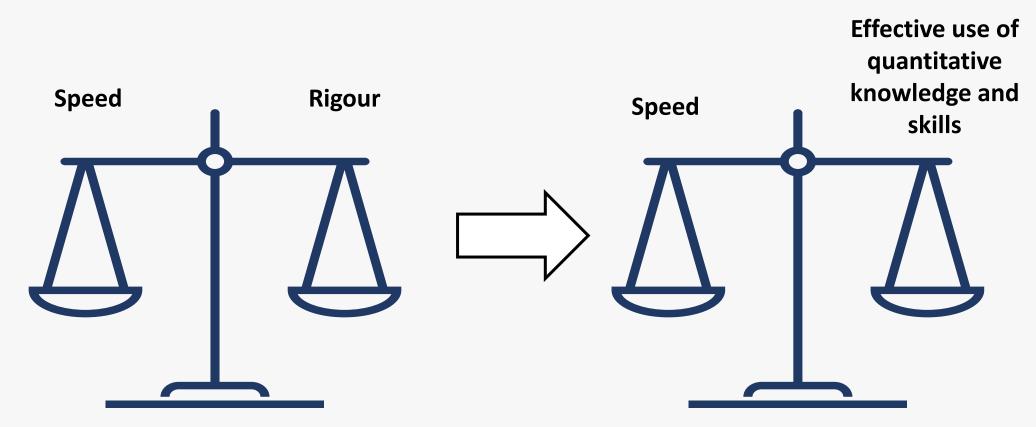
Balancing speed and rigour: quantitative considerations

Chris Sherlaw-Johnson, Nuffield Trust, NIHR RSET





Defining the balance

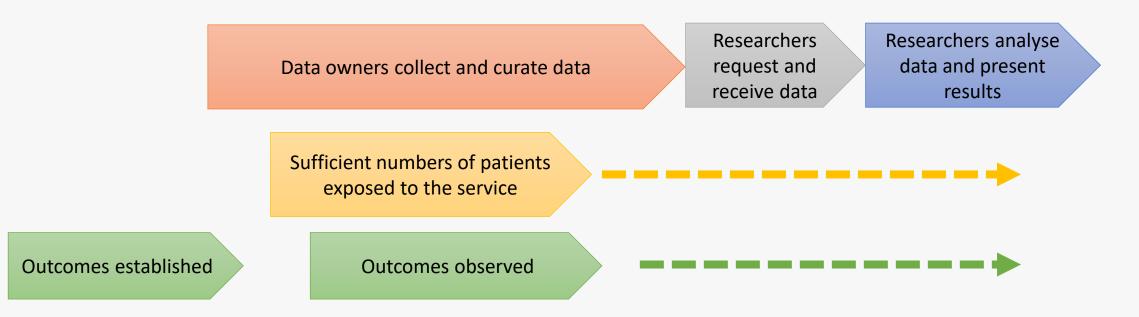






Typical timeline for quantitative evaluation of impact

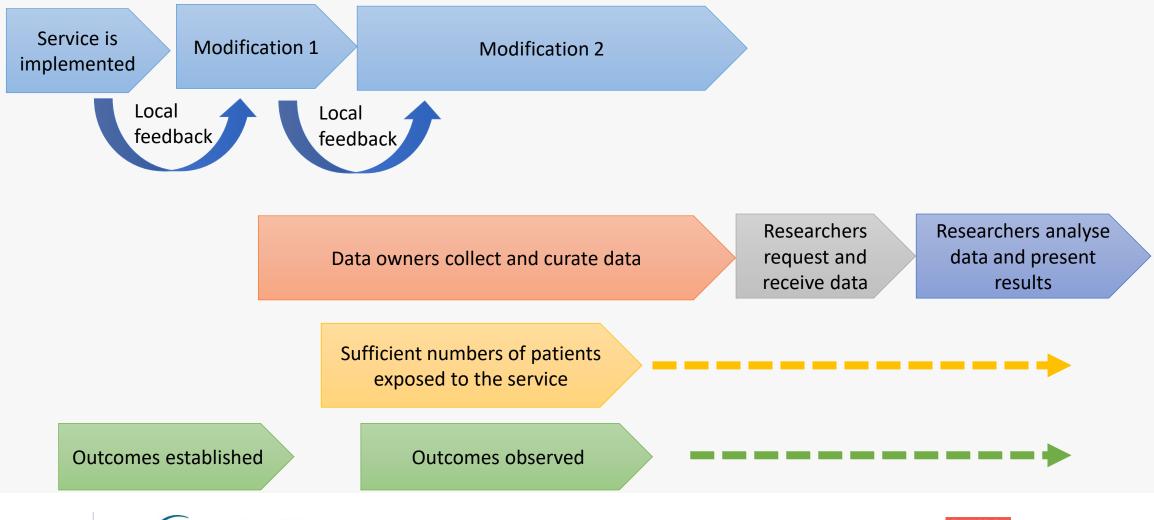
Service is implemented







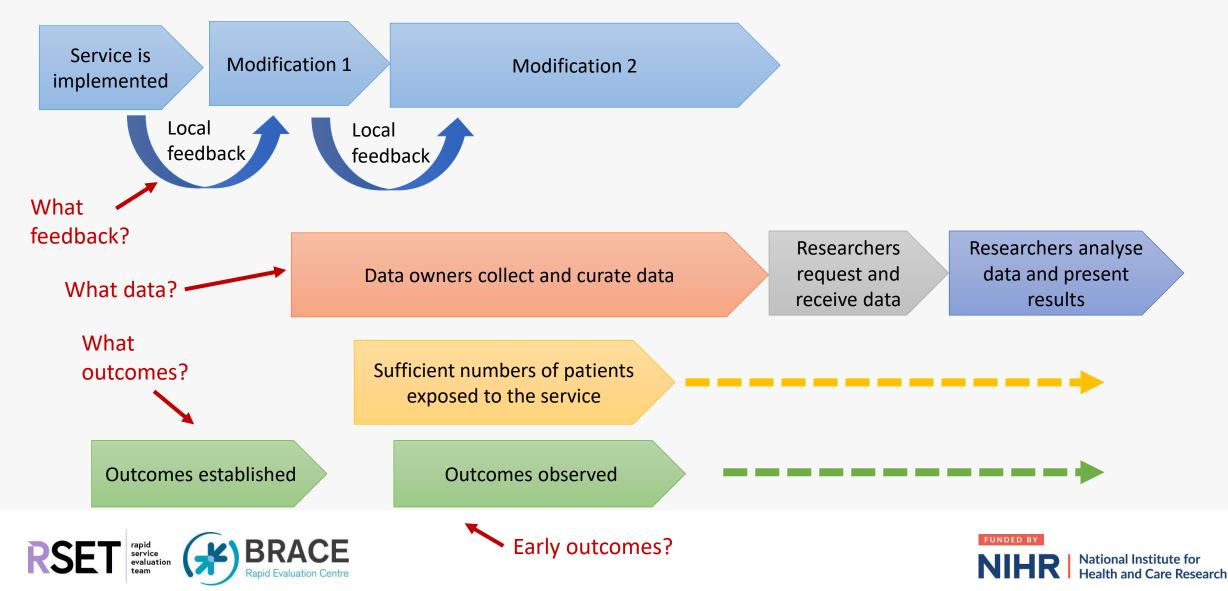
Also, services can change







Asking the right questions



Lots of questions

The intervention

- Is the intervention implemented consistently?
- Is it stable or evolving?

Outcomes

- Can we establish the important outcomes?
- Are they being measured?
- How long will it be before any impact can be observed?
- Are there useful short/medium-term outcomes?

<u>Data</u>

- Is there any data?
- Do we know where the data would be coming from? Can we rely on it?
- What sample sizes are needed to detect any impact?
- Is there a consenting process for sharing service user data?
- Would it be sufficient to use aggregated data?





Matching methods to the appropriate objectives

What are viable objectives?

Is it effective?

Formative feedback

Is it safe? Is it equitable?

Can it be effective? How can it be effective?

Facilitating ongoing or future evaluation



Possible approaches

One-off or staged statistical analyses

Continuous monitoring of new data

Assimilation of existing evidence

Modelling approaches

Service, stakeholder and PPIE engagement



Evaluation of a hospital-based Youth Violence Intervention programme



Young victim of violence, assault, exploitation

Hospital ED with embedded Youth Violence Intervention Programme (YVIP) Bespoke engagement

Community





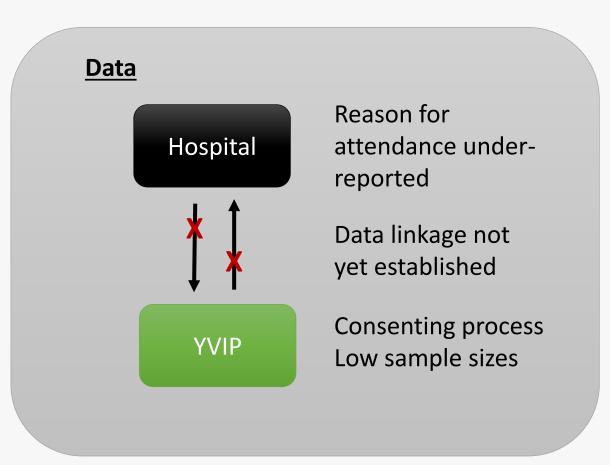
Major issues for the quantitative evaluation

Service

- New service
- Hospital emerging from the pandemic

Outcomes

- ✓ Relative engagement between different population groups
- ✓ Hospital reattendance
- X Educational attainment
- X Employment







Our approach

- Primary qualitative data collection
- Assessing the **measurable** impacts (Access, reaching difficult groups)
- Investigating how a combination of routine secondary care and YVIP data can inform an evaluation of the impact of the service
- Investigating what evaluation approaches and methodological designs appear particularly well suited and feasible for evaluations of such services in the NHS

Recommendations:Data captureLinkageConsenting processOutcome measurementMethodology options with pros and cons of different approaches





Some lessons



What is measurable v. what is useful



Anticipate problems with new data collections



Aggregated v. person-level data



Data assessments built into the protocol



Interview topic guides





National Institute for Health and Care Research

Balancing speed and rigour: qualitative considerations

Manbinder Sidhu, BRACE, University of Birmingham





Short timeframes risk being associated with evaluations that might appear to be rushed, less rigorous and lacking sufficient engagement with theory

(McNall & Foster-Fishman, 2007)





Rapid evaluation of remote home monitoring models during COVID-19 pandemic in England (Phase 1)



Study timeframe: July – September 2020

4-week scoping exercise

Aim: 1) **Develop a typology** of remote home monitoring models (including their key characteristics) operating during first wave of the COVID-19 pandemic;

2) Draw out **lessons learned** for development of models for winter2020-2021

RSET rapid service evaluation team BRACE Rapid Evaluation Centre Workstream 1: Rapid systematic review of the use of remote home monitoring during the COVID-19 pandemic



Workstream 2: Qualitative fieldwork

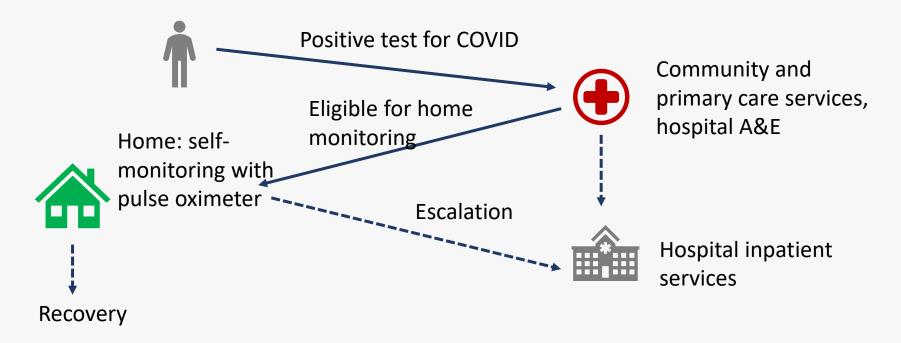
22 telephone/online interviews with staff in eight pilot sites across England (project leads, staff delivering interventions and data analysts)

Analysis using RAP sheets



COVID Oximetry @Home

Pre-admission monitoring

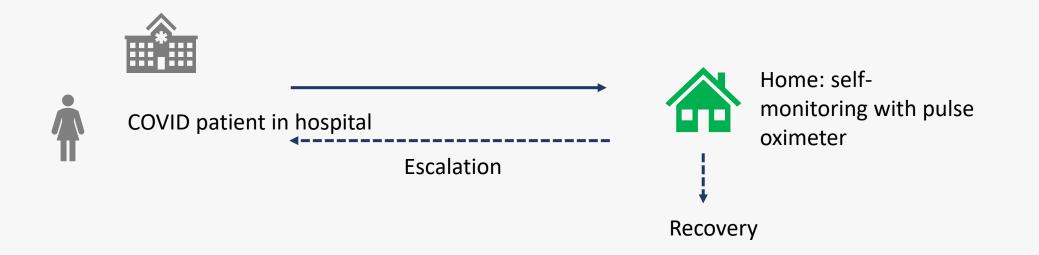






COVID Virtual Wards

Post-discharge monitoring







Learning and reflections

Team resources	A large team of researchers to undertake interviews and/or observations in an intensive short period of time
	Using a common database to store notes and recordings
	Scheduling regular research team workshops to discuss findings and identify gaps and insights
Stakeholder engagement	Importance of building relationships with those working in the health and care system to engage in research and provide real-time feedback
	Use of technology for conducting research interviews, which offers more flexibility of scheduling and location for the discussion, saving on travel times and costs; yet, less able to take stock of wider contextual issues





Learning and reflections

Data collection and analysis	Selective transcription of audio-recordings Analysis based on interview notes using RAP sheets and not all transcripts
	Rapid insights for service leads and commissioners VS in depth analysis using theoretical lens for publication
Set-up and co-	Multiple or single case study site approach? Need to work with site leads/gatekeepers to establish what is possible regarding access to participants
ordination	Patient and Public Involvement (PPI)- the trade off between easy-to-reach or-engage with VS harder-to-reach or seldom heard groups





Learning networks and communities of practice

Specialist topic and methods knowledge with existing networks or communities of practice and shared learning using slide decks and workshops

Evaluation grounded in service need, with clinical innovation driving the research agenda across networks. Notably, the networks show that transferable learning can be obtained from rapid service evaluation and not just formal research.

The engagement between applied health researchers and the networks was vital to the speed of dissemination of the knowledge generated

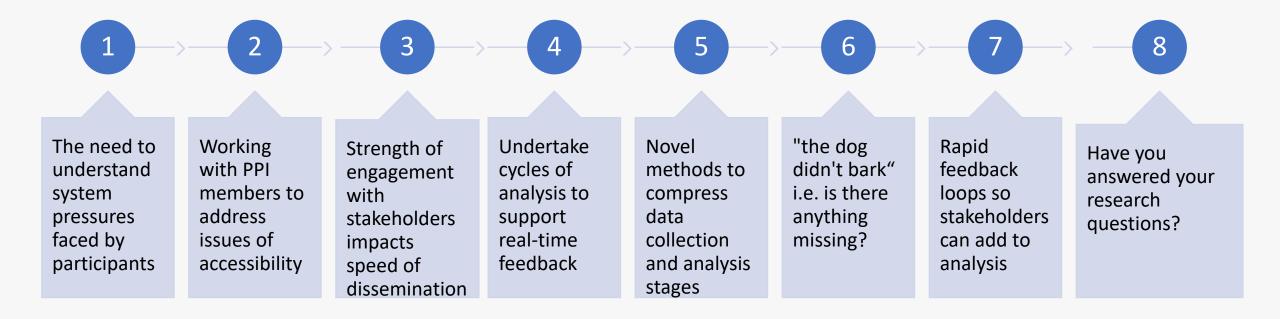
The role of knowledge brokers—that is, people with hybrid professional roles who were members of several networks, facilitating interaction and coordination

Collaboration between clinical learning networks and academics is needed to evaluate new practice rapidly and provide evidence in a format that supports its implementation into practice.





BRACE/RSET lessons for rapid and rigorous evaluations









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For more information, please visit:

NIHR RSET: <u>https://www.nuffieldtrust.org.uk/rset-rapid-evaluations-of-new-ways-of-providing-care</u> NIHR BRACE: <u>https://www.birmingham.ac.uk/research/brace/index.aspx</u>



