

Rapid qualitative evaluation to inform decision making



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Request for a rapid evaluation

- Intervention based on delivering QI training and support to clinicians
- Delivered across six NHS Trusts
- Based on a training programme and support for the development of local QI projects
- Difficulties outlining the scope of the evaluation
- Programme theory not fully articulated
- Emerging findings required in two months to inform future funding decisions and potential scale-up
- Final evaluation findings required in six months

“The timeliness of information is no less critical than its accuracy” (McNall et al. 2004).

Why does some research and evaluation need to be timely?

Timeliness influences the utility of research

Only findings shared at particular moments can inform decision-making

Mismatch between policy and evaluation (Nunns 2009)

Some research topics are time-sensitive



How would you make an evaluation rapid?

- How would you make sure a study is rapid?
- Where would you speed up the research process and why?
- How would you speed it up?

What are rapid methods?

Rapid Research and Evaluation Methods (REAM)

Table 2
Core Elements of Rapid Research and Evaluation Methods

Methods

Mixed methods:

Quantitative approaches typically include:

Quantitative surveys

Review of existing data sets

Qualitative approaches usually include:

Key informant interviews

Focus groups

Naturalistic observations

Record reviews

Mapping of areas affected by problem

Process

Rapid: Evaluation, assessment, or appraisal lasts from a few weeks to a few months

Participatory: Representatives of local populations and institutions are involved in the planning and implementation of the research

Team based: Members of the research team work collaboratively on all aspects of the research process, from planning and data collection to the interpretation of findings and presentation of results.

Iterative: Data are analyzed while they are being collected, and preliminary findings are used to guide decisions about additional data collection. This process continues until theoretical saturation is achieved.

McNall and Foster-Fishman (2007)

How rapid are rapid approaches?

4 to 6 weeks (Beebe 1995, 2014)

6 weeks (Scrimshaw, et al. 1991;
Watts et al. 1989)

3 months (Handwerker 2001)

4 to 8 weeks (ERAP 1988)

7 weeks (Wilson and Kimane 1990)

3 weeks (Pearson, et al. 1989)

2-3 months (Bentley, et al. 1988)

How rapid is rapid research?



Review article

Rapid qualitative research methods during complex health emergencies: A systematic review of the literature



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Table 2
Main characteristics of articles included in the review.

First author name	Year	Location and type of setting	Type of complex health emergency	Study aims	Timeframe for data collection	Research design	Research methods Type of research team	Sample size and population	Use of research findings
Cheung, E. et al.	2003	Afghanistan Setting: Rural community	Outbreak Scurvy	Identification of scurvy outbreaks and monitoring of an intervention	A few days (exact number not specified)	Mixed methods	Focus groups; Case note reviews International and national "monitoring" teams	120 community members in 15 focus groups (groups with men and women, inclusion of village leaders)	Identification of high-risk areas for targeting interventions
Brennan and Rimba	2005	Indonesia Setting: Rural community	Natural disaster Tsunami	Determine the public health impact of a tsunami	4 days	Mixed methods	Observations; Focus groups; Surveys; Secondary data analysis International and national research teams	Survey among 32 households Focus group with women from the community sample size not specified	Informed the International Rescue Committee's response
Güereña-Burgueño, F. et al.	2006	Thailand Setting: Healthcare facilities	Natural disaster Tsunami	Rapid health needs assessment to plan and execute humanitarian assistance	7 days	Mixed methods	Interviews; Observations; Secondary data analysis International and national research teams	Administrative and clinical staff from 12 hospitals	Informed US humanitarian assistance strategies
Broz, D. et al.	2009	USA Setting: Relief center	Natural disaster Hurricane	Effectiveness of response strategy to provide health care to Hurricane Katrina evacuees	11 days	Qualitative	Interviews; Observations National research team	33 staff members (clinicians and non-clinical support staff)	Informed the response directed by the Chicago Department of Public Health Developed a new framework for pandemic planning
Krumkamp, R. et al.	2010	N/A	Outbreak Influenza	Systematic assessment of the national health system capacity to respond to pandemic influenza	Not specified	Qualitative	Interviews; Documentary analysis	Not specified	Developed a new framework for pandemic planning
Bile, K. M. et al.	2010	Pakistan Setting: Government offices and healthcare facilities	Natural disaster Earthquake, cyclone and floods	Effective coordination, joint planning, distribution of roles and responsibilities, and resource mobilization between partners	A few days (exact number not specified)	Mixed methods	Survey; Informal interviews (described as 'consultations') International and national research teams	Government, humanitarian agencies, and other partners Sample sizes not specified	Informed the response to enhance primary care and hospital capacities
Brahmbhatt, D. et al.	2010	USA Setting: Shelter	Natural disaster Hurricane	Evaluate the composition, pre-deployment training and recognition of scenarios with	8 days	Mixed methods	Interviews; Surveys National research team	43 shelter staff members (including volunteers, nurses, medical technicians, and assistants)	Informed the response by providing a disease burden assessment and establishing

How rapid is rapid research?

SYSTEMATIC REVIEW

Quick and dirty? A systematic review of the use of rapid ethnographies in healthcare organisation and delivery

Cecilia Vindrola-Padros,¹ Bruno Vindrola-Padros²

Research designs

Study time frames

The study durations ranged from 5 days to 6 months, and some studies did not specify the length of the study or only included the number of hours of observation. Three studies used a series of intensive periods in each of the study sites. Ash *et al*²⁵ and Chesluk and Holmboe²⁶ spent 5–6 days at each site and Wright *et al*²⁷ used intensive 1 to 2-week periods at each site.

Different rapid research approaches

Research	Evaluations
Participatory rural appraisal (PRA)	Real-time evaluations (RTEs)
Rapid ethnographic assessment (REA)	Rapid feedback evaluations (RFEs)
Rapid appraisal	Rapid evaluation methods (REM)
Rapid assessment procedures (RAP)	Rapid cycle evaluations (RCEs)
RARE model	
Rapid rural appraisal (RRA)	
Short-term ethnographies	
Quick ethnographies	
Focused ethnographies	

Rapid appraisals

More recent model proposed by Beebe (2014) for RQI

Draws from ethnographic and case study research

In between early RAs and PRA in terms of participation

Underlying concepts:

- The focus is on getting the insider's perspective
- Intensive teamwork is critical for data collection
- Intensive teamwork is critical for data analysis and additional data collection

Not defined by specific research methods, but by the search for insight into the perspectives of participants

Rapid appraisal features (see also RQI) ¹

Data collection and analysis using triangulation

Iterative process (several cycles of collection and analysis)

Use of a team of researchers

At least 4 to 5 days long

Participatory rural appraisal (PRA)

Associated with the work of Robert Chambers

Defined as *“a family of approaches and methods to enable rural people to share, enhance and analyse their knowledge of life and conditions, to plan and to act (Chambers 1994: 953).*

Focuses on the empowerment of local participants

Involves data collection from a variety of sources:

- Secondary sources
- Key informants
- Local residents
- Observations

Chambers (1994) lists over 29 methods of data collection

PRA Characteristics ¹

Community involvement in the gathering and analysis of data

A holistic and systematic approach

Multidisciplinary and interactive methods

Flexible responses

Emphasis on communication and listening skills

Visual display of information

Rapid assessment procedures (RAP)

- Scrimshaw and Hurtado (1987)-make RAP accessible to non-anthropologists
- Beebe (2004)-introduce methodological rigour missing in other rapid approaches
- Involvement of decision makers at different levels: produce change and ensure credibility
- More than one researcher is involved in data collection
- More than one researcher is involved in data analysis
- Relies on the use of proformas and standardised methods for collection and analysis across team members (i.e. RAP sheet)
- Results can be produced in 1 to 6 weeks

RAP Features ¹	
Rapid	Shortened time dimension
Assessment	Limited or focused scope of information to assist in problem solving
Procedures	Formalised means of data collection

1. Utarini et al. (2001)

Rapid evaluations

- Real-time evaluation (RTE)
- Rapid evaluation method (REM)
- Rapid feedback evaluation (RFE)
- Rapid cycle evaluation (RCE)

Rapid, Responsive, and Relevant? A Systematic Review of Rapid Evaluations in Health Care

**Cecilia Vindrola-Padros^{1,2}, Eugenia Brage³,
and Ginger A. Johnson^{4,2} **

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Rapid evaluations

“Rapid feedback evaluation is an evaluation model that is focused on a particular issue, problem or information need, where evaluative information is needed in a short timeframe” (McNall et al. 2004).

Table 1
Comparison of comprehensive and rapid-feedback evaluation models

Feature	Comprehensive evaluation	Rapid-feedback evaluation
Focus	Multiple foci	A focused evaluation of a particular program process
Purpose	Various purposes—depends on what stakeholders' questions are	Providing program managers with evaluative conclusions about the performance of a particular program process
Use	Various uses, including improved program implementation, program extension, or program termination	Use of evaluation conclusions by program managers to optimize the performance of a particular program process
Time frame	Months to years	Days to weeks
Key audiences	Various stakeholders	Program managers

Rapid evaluations

Characteristics of REM

- REM is planned and executed with the active participation of health programme and service managers, staff trainers and supervisors, and the staff themselves.
- Information produced by REM examines the quantity, quality and client satisfaction of health services and, to a lesser extent, health status.
- The results of the REM are very rapidly available to the decision-makers—within days or weeks after the end of the REM field survey.
- The REM exercise is tailored for and necessarily followed by managerial decisions and actions ranging from improvements in training and supervision to new service strengthening projects, and overall health development plans.

Anker et al. (1993)

The Center For Medicare And Medicaid Innovation's Blueprint For Rapid-Cycle Evaluation Of New Care And Payment Models

Shrank (2013)

- Provides timely feedback to funding organizations and program staff and care providers
- Offers support for continuous quality improvement and allows observations of changes over time

How is rapid research used?

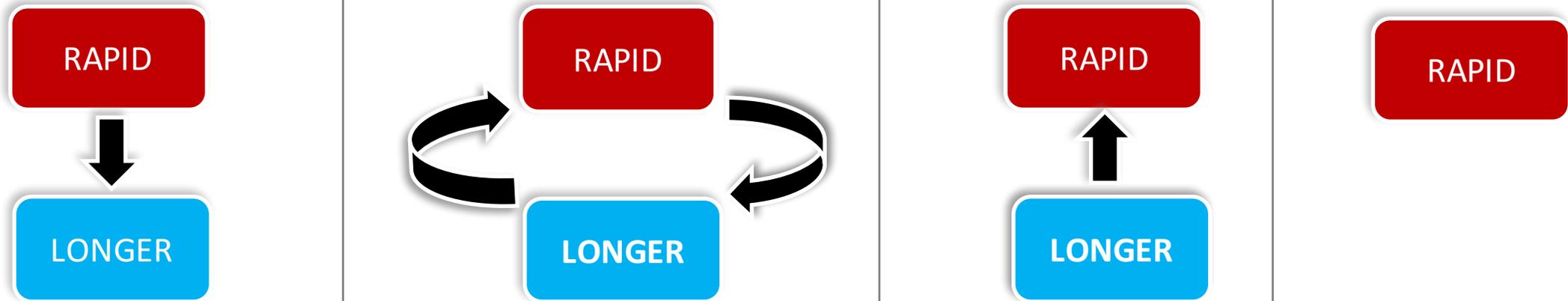
Quick overview of a situation (exploratory, not in-depth, diagnostic purposes)

Inform longer research project (preliminary study)

Run in parallel with a longer study (strand of mixed-methods study)

Explore the findings of a longer study more in-depth

Study on its own



Challenges of rapid research

Table 1 Thematic framework on potential challenges in rapid ethnographies used to inform the research questions

Key literature	Potential challenges/issues that require more research	Description of the challenges	Research questions guiding this review
3 4 10 12	'Breadth' versus 'depth' in data collection	Inability to capture changes over time, understand all relevant social and cultural factors at stake, or conflict and contradictions	What were the main research designs?
3 4 10 12 14	Representativeness and sample size and selection	Dependency on most accessible informants and loss of multiplicity of voices	What were the sample sizes used in the study and selection of groups/ participants? How were these justified?
3 4 10 14	Use and training of local research assistants (research assistants from the observed field)	Local research assistants are not always available, have the required skills or willingness to take part. Training takes time. Research undertaken by researchers without an anthropological background might limit the quality of the study.	Who were the data collectors? Why were they recruited? Was training provided? Were interpreters used? Were data collectors fluent in the local language?
3 10	Lone researcher versus multimembered team	Multimembered teams can maximise resources and cover a wider range of expertise. Recruitment might be an issue and clear roles in the field need to be outlined.	Who are the article authors and what are their affiliations? How were research teams defined? How many field researchers were used and what was the justification?
3 4 12 14	'In and out' researcher versus long-term engagement	New researchers might get more attention, but lack familiarity with the study area. Prolonged engagement often increases credibility and internal validity. Prolonged engagement might also lead to stronger relationships between research participants and the field researchers.	Did the research team have prior research experience in the study area? Does the research team report the establishment of relationships with potential research participants prior to the study?
13 14	Time for reflexivity	The rapid study time frames might not allow researchers to critically analyse the position they play in the field site and their role in the collection and analysis of data.	Does the article include reflections on the authors' positionality or factors that might have influenced data collection and analysis?
12 14	Research governance, and ethical principles	Time pressures should not deter researchers from undergoing the required governance and informed consent processes.	What were the research governance processes? Was the study approved by an ethics committee? Did the researchers follow an informed consent process?

Study design

Choosing the approach

- Aim (evaluation, exploratory, diagnostic purposes)
- Research questions
- How participatory?
- How structured?
- Resources?
- Team or lone researcher?
- Who will use the findings?
- When are findings needed? (one time-point or regular feedback?)
- Who might be impacted/benefit from the findings?

Appraisals and ethnographies	Evaluations
Participatory rural appraisal (PRA)	Real-time evaluations (RTEs)
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Quick ethnographies	
Focused ethnographies	

Data collection

Table 3 Types of interviews, observations, focus groups and mapping processes

Interviews		Observations		Focus groups		Mapping and surveys	
Type	Articles	Type	Articles	Type	Articles	Type	Articles
Semistructured	11 27 29 30 32 33 35 41 43 50 60 62	Ethnographic observations	11 43 60	Focus groups	28–30 30–34 36 37 40 41 43 60	Health walks	35
Structured	28	Video observations	44	Natural groups	30	Field surveys	9 27 38
Unstructured	28	Participant observation	24 30 37 41 62	Informal focus groups	9	Photographic documentation of spaces	8
Opportunistic or rapid 'street intercept'	11 36	Direct observation	28 36 42			Mapping and geocoding	36
In-depth	9 24 28 31 33 37 39 40 61	Shadowing	8 11				
Key informant/ expert	36 25	Observations (specific type not specified)	26 29 31				
Informal discussions	32	Tour observations	9				
Conversational interviews	26	Clinical observations	27				
Video-cued interviews	44						

Feedback loops

Design the dissemination strategy before the study begins

- Decide where the feedback loops will take place based on when findings are needed
- Engage with relevant stakeholders

When establishing the study timeline, build in time for checking with study participants

Ethical approval-potential delays

- **Study must follow the same ethical guidelines as any other study**
- Service evaluation
- Linked to a wider project
- Low risk/streamlined review



Feedback loops

	Rapid Feedback Evaluation (RFE)		Rapid Cycle Evaluation (RCE)	
	Zakocs et al. (2015)	McNall et al. (2004)	Schneeweiss et al. (2015)	Skillman et al. (2019)
	1. Clarify intent: Purpose, questions, study protocol	1. Collect existing data on program performance	1. Review research findings	1. Develop an analytic framework
	2. Collect “good enough” data: Collect and analyze data quickly	2. Collect new data on program performance	2. Translate findings into actions	2. Collect data (first round)
	3. Produce brief memo: Draft concise memo with main findings	3. Evaluate preliminary data	3. Make judgements based on findings	3. Analyze data and develop codebook
	4. Engage in reflective debrief: Discuss findings with project team	4. Share findings/recommendations with project team	4. Initiate implementation	4. Report findings
	5. Decide if more information is needed, take action or take no action	5. Develop and analyze alternative designs for full-scale evaluation	5. Make changes in implementation (if needed)	5. Collect data (second round) adding quantitative data
	6. Repeat feedback loops (steps 2-5)	6. Assist in developing policy and management decisions		Repeat cycle (steps 3-5)

Vindrola-Padros et al. (2020)

Data analysis

Data analysis

- Use of tables, mind mapping, drawings, etc.
- Adapting methods to reduce time for transcription and coding (i.e. RITA)
- Analysis as a team

Tools to reduce time required for data analysis

Analysis from interview recordings

Interview notes

Voice recognition software

Selected transcription

Mind mapping

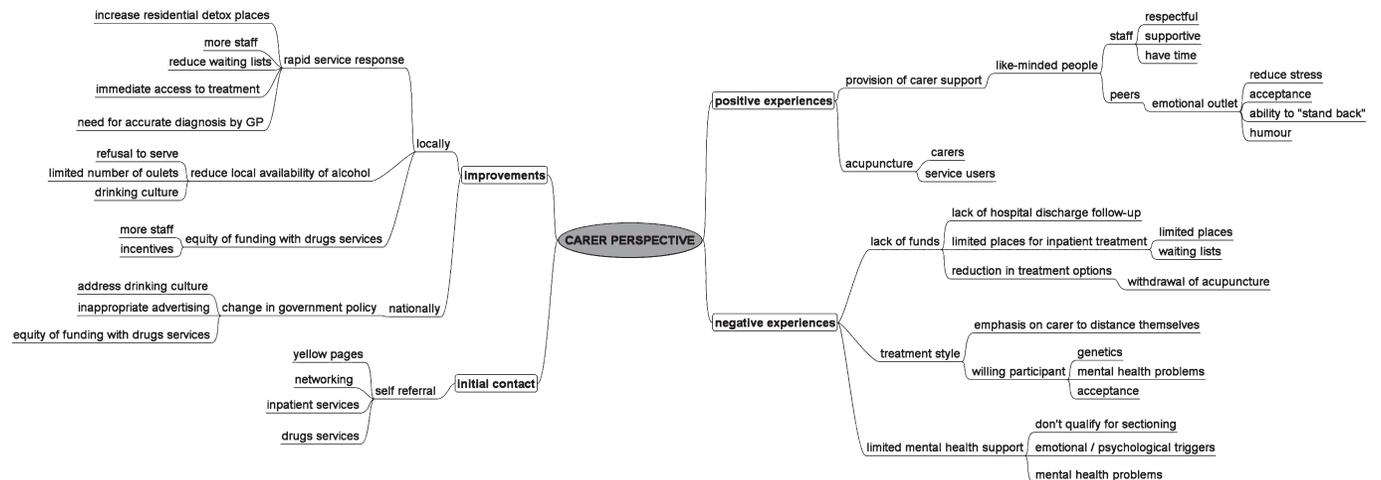


Figure 2 Sample mind map.

Data analysis

- Will you use other researchers to cross-check data or analyse data as a team?
- Can you streamline data analysis in any way? (data collection and analysis in parallel, targeted transcription)
- Can you include participants in the data analysis process?
- Can you 'digest' data throughout data collection?

Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis

Beck Taylor, Catherine Henshall, Sara Kenyon, Ian Litchfield, Sheila Greenfield

Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration

Randall C. Gale^{1*}, Justina Wu¹, Taryn Erhardt¹, Mark Bounthavong², Caitlin M. Reardon³, Laura J. Damschroder³ and Amanda M. Midboe^{1*} 

Rapid evaluation: QI training and support

Mixed-methods design

- Qualitative
- Health economics

Data collection

- Interviews
- Observations
- Documentary analysis

Data analysis

- Framework analysis

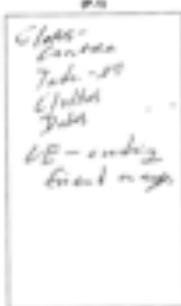
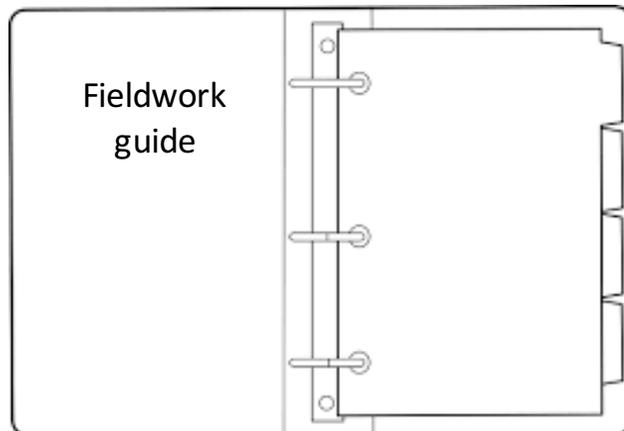


Table 2 Sampling brief to show intended number of interviews with staff members

Research stage	No of interviews				Total
	Acute pain nurses	CPT	Ward nurses	Doctors	
Preintervention	2	1	6	6	15
Postintervention	2	1	6	6	15
Total	4	2	12	12	30

CPT, complex pain team.

Study stage	Time into study	Type of dissemination	Purpose	Format	Type of stakeholder
Scoping/familiarisation	Week 1	Sharing RQs and study outline	Agree purpose of the study	Face to face meeting	Intervention designers, implementers and users
Scoping/familiarisation	Week 2 or 3	Sharing final study scope	Final agreement on study design and dissemination plan	Email or face to face meeting	Intervention designers, implementers and users
Fieldwork and analysis	Month 2	Short memos (monthly or weekly)	Highlight emerging findings	Email	Implementers
Fieldwork and analysis	Month 3-4	Short memos (monthly or weekly)	Highlight emerging findings	Face to face	Intervention designers, implementers and users
Final analysis	Month 5	Report draft	Cross-check early interpretations	Email or face to face	Implementers
Writing	Month 6	Final report and presentation	Final sharing of findings and development of recommendations	Face to face	Intervention designers, implementers and users

Strategies used to deliver timely findings

1) Strategies to reduce evaluation duration

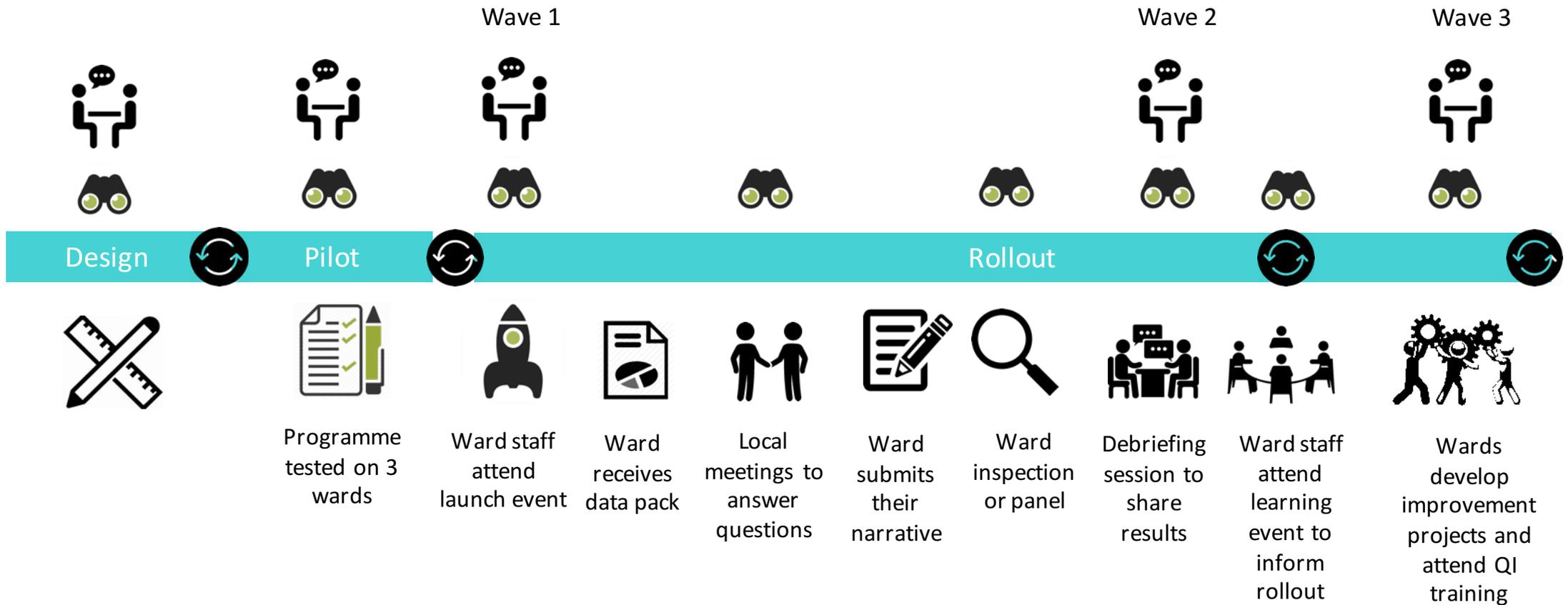
2) Strategies to increase engagement

3) Strategies for quality control

- Data analysis and collection in parallel
- Multiple stages of coding
- Synthesizing data in manageable formats
- Eliminate transcription
- Use large teams of researchers
- Establish a 'core' group of stakeholders to share findings/seek feedback
- Cross-checking of data during data collection and analysis

Vindrola-Padros et al. (2020)

Reflections on the Exemplar Ward Programme Evaluation



?

Upcoming training

March 2020

Dates	Courses
2 March 2020	Introduction to rapid qualitative research
3 March 2020	Introduction to rapid evaluations
4 March 2020	Introduction to ethnography in healthcare

July 2020

Dates	Courses
1 July 2020	Process evaluations in healthcare
2 July 2020	Participatory research methods
3 July 2020	Introduction to rapid ethnography

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