

Multiple perspectives in mixed method research: a strategy for cutting through the swamp?

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Mixed method research

- Interest in mixed method research has spawned varied typologies of mixed method design;
- Distinguishing features of such typologies are:
 - Focus on methods of data collection and analysis;
 - Relative contribution of quantitative and qualitative methods (QUAL/quant; QUAN/qual);
 - Sequencing of different methods within an overall research design e.g. quantitative then qualitative

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2

An alternative approach to mixed method design

- Theory driven approach that focuses on the dialectic between the conceptual framework (research puzzle), research questions, data collection methods and analytic strategies;
- Illustrative example: mixed method evaluation of Intermediate Care

Nature of intermediate care and policy interest in evaluation

- Form of transitional care: both sites of the acute hospital – primarily for older people;
- Aimed at promoting twin (though not necessarily compatible) policy objectives: better resource management of acute beds and enhancing independence through active rehabilitation;
- Major focus of government investment (over a £billion);
- Policy research programme: Does intermediate care work and is 'it' cost effective?

Conceptual and methodological challenges for evaluation

- Concept of intermediate care contested and ambiguous at national and local level:
 - Defined in terms of a diverse range of services that could comprise it that could be provided in parallel or sequentially;
 - Time limited: up to six weeks – but flexible (but related to service or care episode?);
 - More than a set of services: reflected in the emphasis placed on 'co-ordination' and 'whole system working' although the terms variously referred to the organisation and management of the care of the individual and a system of care to meet a range of need.

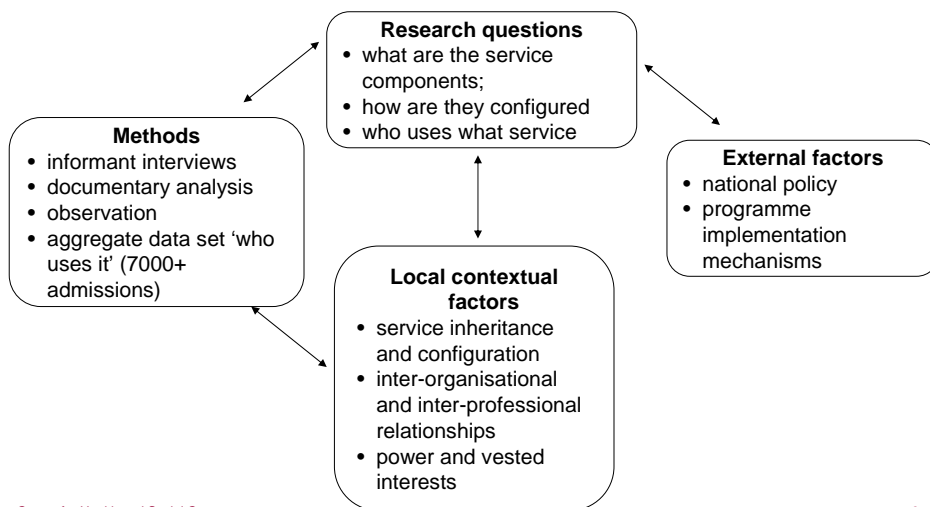
Puzzles driving the research design

- Intermediate care as more than the sum of its parts – service components and inter-relationships **and** co-ordination of individual's care;
- What might then be the features that would characterise intermediate care as a systemic phenomenon (drawing on organisation theories and network theory);
- What kind of data might we draw on to infer its system-like characteristics; and draw conclusions about outcome patterns for the diversity of older people that get into it?

Some facets of the evaluation design

- Presentation will consider three facets of the multi model research design that explored intermediate care as a system.
- Overall aim: to move beyond diversity and complexity to build up understanding of:
 - Commonalities in the pattern of services and configurations (exploring pattern in diversity);
 - Structures and inner workings (structure, linking mechanisms and service delivery processes)
 - User experiences and recovery trajectories (how it is experienced for whom and in what circumstances)

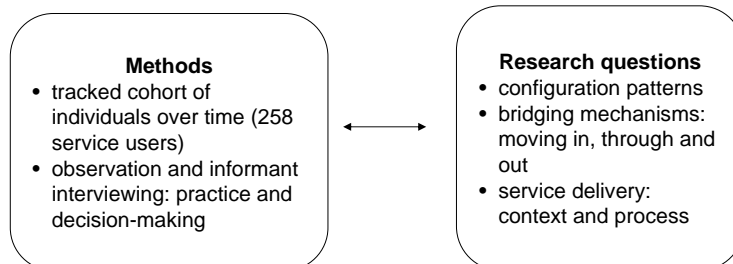
Exploring patterns in diversity



Analytic strategy

- Rich descriptive accounts of the nature and content of services and configurations based on prolonged contact in each site;
- Comparing and contrasting across sites and services to elucidate commonalities and differences and the contextual factors that shaped them;
- Variable analysis: who uses what, where and pattern of use

Structure, linking mechanisms and service delivery processes

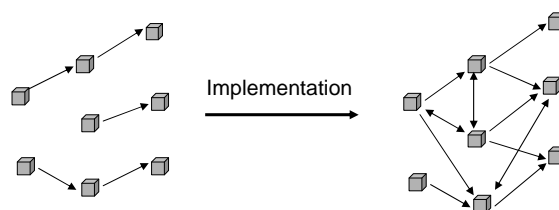


Analytic strategy

- Early understanding of significance of tracking cohort to explore pattern of use of intermediate care services over time within a single episode – but what analytic tools to use?
 - Network analysis with cohort data (measures of network characteristics applied to data);
 - User outcomes explored by calculating odd ratios and then with logistic regression

What we might expect?

Figure 1: Transition from pathways to integrated networks

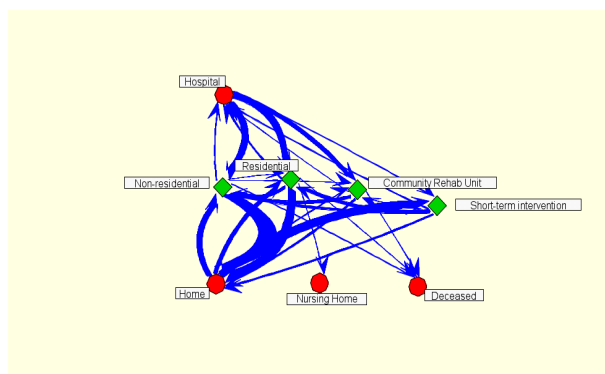


The shaded boxes represent services and the lines are the pathways individuals take. Joined up ideal is represented on the right where people can access any of several services from any decision point – depending on need

Actual pattern of movement through services

- Use of methods developed in social network analysis;
- Hypothesis: patterns of movement should not be of the 'tram-line' type;
- Graphical presentation application (statistical computing package 'R') to aid visualisation of the data;
- Figure 2 : movement of users through services in all five sites (diamonds represent intermediate care services, octagons the originating and destination locations and the lines the movement of users through services, with the thickness proportional to the numbers of people).

Figure 2: Movement of individuals through services



Depiction of movement

- Movements cover individuals entire continuous intermediate care episode – from location prior through one or more services to destination on discharge;
- Principal flows: to and from people's homes or hospital (few entered long term residential care);
- Significant overlap in patterns of use of intermediate care i.e. network rather than 'tram-line' pattern – suggestive of reflecting need

User experiences and outcomes

- Research question:
 - From the perspective of service users and carers, what are their experiences and outcomes of intermediate care; what role does it play in the transition between illness and recovery; how far is it user centred?
- Method:
 - In-depth qualitative interviews with a purposive sample of older people and their caregivers
 - Longitudinal component: three time points
- Analytic strategy:
 - Thematic and narrative analysis

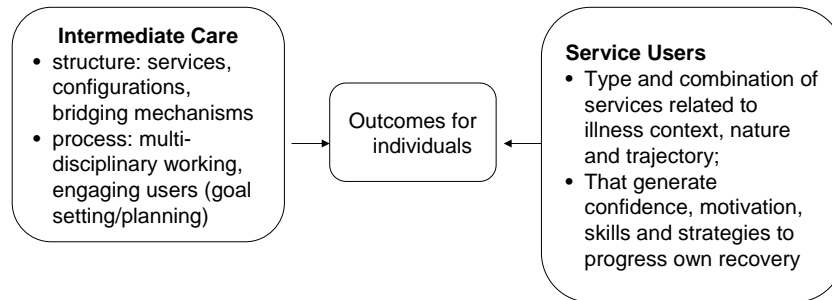
User experiences and outcomes: building blocks

- Managing the transition from illness to recovery
 - Interactive factors impacting on need for services and progress to 'recovery':
 - Prior circumstances and illness 'event'
 - Illness trajectory
 - Resources (internal and relational)
 - Age related factors
 - 'Recovery' trajectories:
 - Cure and restoration
 - Managing discontinuity and establishing markers of continuity
 - Getting back and keeping going
 - Dealing with uncertainty

User experiences: fit with service provision

- Considerable diversity of user characteristics and needs (not reflected in simple case-mix models)
- Evidence of positive (although incomplete) fit between needs and service patterns
- Areas of 'poor' fit:
 - Nature of routing mechanisms: individuals not referred to the most appropriate service for their needs;
 - Nature of configuration: not sufficiently comprehensive (e.g. rehabilitation only provided in residential units; insufficient capacity)

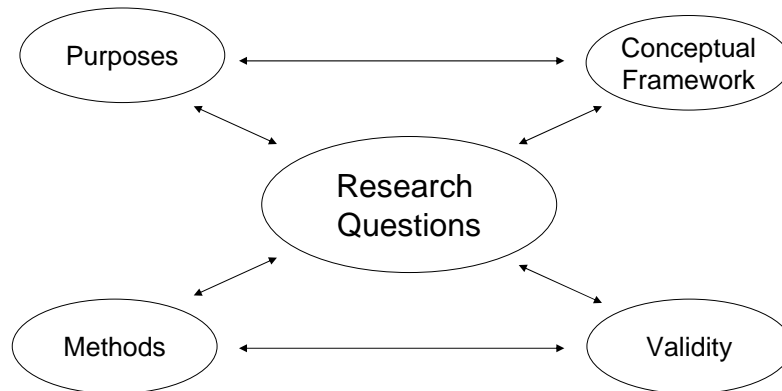
Combining perspectives



Some reflections on 'integration'

- Each component contributed something to the overall understanding of Intermediate care but it is impossible to confer privilege on any one of them;
- The notion of 'convergence' does not adequately describe the process of generating understanding;
- Whilst the key engine driving the process is the conceptual framework, there is an iterative or dialectical relationship between the conceptual framework, data generation and analytic strategies.
- The execution of multi-method design strategies requires the skills of the generalist with some understanding of different paradigms alongside the expertise of the specialist.

Dialectical/Interactive Model of Research Design (Maxwell and Loomis, 2003)



And finally – impact on policy

- Mixed picture:
 - Helped to clarify direction of travel
 - Selective interest in findings
 - Messages too nuanced
 - No definitive answer to cost/benefits equation
 - The policy agenda has moved on...