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Intermediate care: a realist review and conceptual framework

Executive Summary

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Executive Summary

Background

For decades, there have been evolving service delivery models intended to allow patients to leave hospital earlier or avoid hospital admission in the first place through providing enhanced health and social care service arrangements in the community. These service developments, to avoid 'bed-blocking', to better facilitate rehabilitation or more holistically to move 'care closer to home', have variously been called hospital at home, early discharge, step-down or rapid-response admission avoidance services. They are all forms of intermediate care. The lack of a conceptual framework and the modest scale of many IC services hinders the design, long term feasibility and implementation of these services.

Aims

To produce a conceptual framework and summary of the evidence of initiatives that have been designed to provide care closer to home in order to reduce reliance on acute care hospital beds.

1. To synthesise relevant documentary evidence, using realist and conventional systematic review methods, in order to develop a conceptual framework for describing and explaining community-based alternatives to acute inpatient care.
2. To draw some provisional conclusions about the likely circumstances in which different types of scheme are likely to be effective, cost-effective, and feasible in the NHS.

Methods

We conducted a realist systematic review in order to develop an up-to-date and practical conceptual framework for understanding intermediate care, and try to identify "what works, for whom, in what circumstances, and why?".

Comprehensive literature searches yielded 10,314 citations of which 1,828 related to our working definition of intermediate care. To develop the conceptual framework and identify potential programme theories these were classified according to their conceptual 'richness' and descriptive 'thickness', leading to 116 sources being read closely. These related to intermediate care in six user/patient groups (older people, stroke, coronary heart disease, COPD, cognitive

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impairment and 'generic'). The conceptual framework emerged from multiple stages of identifying and refining candidate programme theories, through summarising and discussing them amongst the review team and with the Project Reference Group. Twenty-two 'if-then' propositions became nine candidate programme theories from which three were chosen as likely to have the most explanatory power in explaining variations in the effectiveness of different intermediate care service arrangements. These three formed the core of the conceptual framework of intermediate care, and were also tested and refined using comparative effectiveness studies.

Economic studies were also identified from the original searches, and 17 UK studies formed the basis of our provisional conclusions about the cost and cost-effectiveness of intermediate care. The review of economic studies ultimately used more conventional methods of systematic review; it was not as theory-driven as we originally hoped it might be.

Results

A conceptual framework for Intermediate Care

A modern and evidence-informed definition of intermediate care involves short-term service arrangements which respond to a person's 'health crisis' or acute hospital admission with:

(1) the objectives of care and place of care being negotiated between the service-user, carer(s) and health and social care professionals;

(2) carers and health and social care professionals fostering the self-care skills of service users and shaping the social and physical environment to 're-enable' service users; and

(3) service-users, carers, health and social care professionals and voluntary services contributing actively to decision-making and the delivery care that is integrated.

Such services should also be based on a broad definition of health that encompasses functioning, health and wellbeing, and defined by the service user in collaboration with their significant others and health and social care professionals. Accordingly, the intended outcomes of intermediate care can also range from the improvement, maintenance to the managed decline of functioning, health and wellbeing. Maintenance of functioning, health and wellbeing might either be at the same level as before the intermediate care episode or at a lower level than before.

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Circumstances in which Intermediate Care is likely to be feasible and effective

For the main programme theories the evidence synthesis suggested a range of conditions for improved service user outcomes. Intermediate care can improve outcomes through collaborative decision-making with service users about objectives and place of care, when:

Health and social care *organisations* -

- facilitate professionals to implement collaborative decision-making with service users.
- are able to co-ordinate the delivery of agreed care in a timely fashion.

Health and social care *professionals* –

- have detailed knowledge of the characteristics of local intermediate care provision and are able to combine this knowledge with the needs and preferences of service users.
- establish the *meaning* which different care environments have for service users and explore the implications these may have for decisions about the place of care that best allows functional, psychological, and social continuity to be attained.
- engage with service users in planning longer-term goals that extend beyond the timeframe of intermediate care.
- acknowledge and engage with service users' primary social and care networks.
- develop a trusting relationship with service users in order to support continuity in their lives.

Service users –

- have confidence in the standard of intermediate care services they will receive.
- believe that their input will be listened to and acted upon.
- are recovering from a discrete acute medical event such as stroke, rather than the complex acute-on-chronic co-morbidities of old age. Whilst collaborative decision-making with older people may be important for attaining positive psychological and social outcomes, it does not appear to be so important for attaining positive functional outcomes.

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Collaborative decision-making may be made considerably more complex when the vulnerable state of service users means that *health and social care professionals*

- are required to balance advocacy and a duty of care with engagement in a collaborative decision-making process with service users.

Circumstances in which Intermediate care is likely to be cost-effective

In terms of service-level factors, there is evidence to suggest that the total health and social care costs of care will be increased when IC services:

- have more referrals from hospital (ESD service users) than from homes or residential homes (AA);
- are residential (i.e. in units with beds) or have a high proportion of users who are not cared for their own homes;
- are operating considerably under full capacity (thus are probably 'over-staffed' and with a higher proportion of fixed/overhead to variable costs).

In terms of the characteristics of individual patients, there is evidence to suggest that the total health and social care costs of intermediate care will be increased when:

- their level of assessed need for treatment or care was high (reflected variously in the included economic studies as initial functional ability (ADL), or whether hospital care would have otherwise been required);
- referred service users ordinarily live alone.

Although higher levels of assessed need were associated with higher overall costs of care with intermediate care, some studies also identified that these users had the greatest capacity to benefit from intermediate care, and therefore often also greater cost-effectiveness.

Conclusions

While intermediate care includes a diverse range of services, addressing different health and social care needs, it is possible to identify some core features which partly explain how and why it produces better outcomes for service users. These features, rooted in a collaborative decision-making process with service users and their carers, can be enabled or constrained by actions at both organisational and individual practitioner level. Certain patient groups, such as those recovering from stroke, may be better able to benefit from intermediate care services than people recovering from other complex conditions, especially in old age. The

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degree of trust that patients have in the promised delivery of intermediate care services impacts on their engagement with a collaborative decision-making process. While costs were higher in providing intermediate care for patients with greater assessed need, this group may benefit the most from such services. The impact on health service costs of intermediate care's role in maintaining health and therefore avoiding future hospital admissions, particularly in frail older people, is not known. Future research on intermediate care should 1) better conceptualise the meaning that home holds for service users at different stages of their lives; and 2) test the effectiveness of services that incorporate both admission avoidance and supported discharge.

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