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ESSENCE SUMMARY 11

Transition into and from hospital for people with social care needs: economic evidence

Annette Bauer, Michela Tinelli, Danielle Guy

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KEY POINTS

- Interventions that seek to improve the transition between hospital and other settings include: comprehensive geriatric assessments; specialist dementia/ delirium unit; short-term early discharge home care and rehabilitation packages; early supported discharge with multidisciplinary community care; multi-professional palliative care.
- Each has been linked to some positive outcomes – although for specialist delirium/dementia unit and for multi-professional palliative care outcomes referred to small changes in mood, satisfaction or symptom control rather than to changes in health-related quality of life.
- Early supported discharge programmes that include a rehabilitation-focused community care package are likely to be cost-effective from a combined health and social care perspective. The evidence refers to older people and people with stroke.
- Comprehensive geriatric assessment and short-term rehabilitation provided to older people in hospital units may be cost-effective from a hospital perspective, but the wider impacts are unclear.
- Multi-professional palliative care might be cost-effective; evidence refers to people with multiple sclerosis and people with breathlessness; there might cost savings for people with multiple sclerosis due to reductions in hospital and primary care.
- A specialist delirium/dementia unit was not cost-effective based on health-related quality of life but might importantly improve experiences of people using it and their carers.
- Various national initiatives have been recently implemented to support development of innovative services to integrate care between hospitals and other settings.

AUTHORS

Annette Bauer, Michela Tinelli, Danielle Guy
Care Policy and Evaluation Centre, London School of Economics and Political Science

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BACKGROUND

A range of health, social care and other services are involved when adults with care and support needs move into or out of hospital from community or care home settings. Problems occur when health and social care services are not integrated. The consequence can be a 'poor transition'. Examples of a poor transition are uncoordinated hospital admissions and avoidable admissions to residential or nursing care from hospital. Costs to the government linked to poor transitions have been estimated at £172 million per year although recent figures suggest a much larger amount in the region of £820 million.

A number of service models and interventions exist that support a coordinated approach between different health and social care practitioners with the aim to improve hospital admission and discharge processes. As part of a guideline the National Institute for Health and Care Excellence (NICE) reviewed evidence and developed a guideline for this topic, which was published in 2015. This summary examines the economic evidence that was reviewed for the guideline.

CONTEXT

Organising the transition between hospital and care homes or community settings can be challenging for people with care and support needs. It requires integrated and personalised care provided by a range of professionals across different settings and organisations. Poorly integrated care can lead to delayed transfers of care, emergency (re-)admissions and stays.

The problem is costly. For example, in 2016/17, according to national statistical data, the costs of delayed discharges to the National Health Service were £173 million (1). However, figures based on recorded data are likely to underestimate the problem substantially and the National Audit Office estimated some years ago that gross costs (based on survey data) could be in the region of £820 million (2).

However, delayed discharges are more than just financial problems: they also cause substantial distress to those experiencing them (3–5). Reasons for delayed discharges are manifold. For example, delays might occur in the absence of appropriate care arrangements in the community or in a care home, which make it unsafe for people to be discharged.

This case summary examines economic evidence available for various types of interventions, which was reviewed for the 2016 National Institute for Health and Care Excellence (NICE) guideline on this topic (6). It is important to note that while the guideline was purposefully much broader in scope in that it included transitions between hospital and home or care home (reflecting a bidirectional process), most evidence refers to the admission into or discharge from hospital (reflecting a one-directional process).

In this summary, we thus summarise evidence of interventions that support a coordinated approach between different health and social care practitioners with the aim to support an effective and timely admission into and discharge from hospitals. They are usually provided by multi-disciplinary teams of health and social care professionals. Typically, these are multi-component interventions that help people regain independence and manage conditions, in addition to supporting carers.

COMPREHENSIVE GERIATRIC ASSESSMENT

WHAT IS THE INTERVENTION?

A specialist assessment of needs is carried out of older people who are admitted to hospital and who are particularly frail, or have complex needs. Comprehensive support is provided by a multi-disciplinary team in specialist hospital units or by mobile teams.

IS THE INTERVENTION EFFECTIVE?

Comprehensive geriatric assessments were linked to positive outcomes. Specifically, the intervention was associated with significant reductions in death, deterioration and admission to care homes. Additionally, the intervention was correlated with significant improvements in cognition and living at home at 12 months when compared with non-specialist care on general wards (7). However, it is important to note that positive outcomes were only found when care was provided in specialist wards but not when care was provided by mobile teams.

IS THE INTERVENTION COST-EFFECTIVE?

According to a review including various studies on comprehensive geriatric assessments, the intervention is likely to be cost-effective from a hospital perspective (7). However, the magnitude of cost-effectiveness varied depending on setting and costs examined. The review also concluded that the intervention may lead to savings in hospital costs and care homes costs, although fewer studies measured care home costs (7). Despite the results of the study, it is difficult to derive final conclusions about cost-effectiveness from a health and social care perspective since information on community costs were lacking.

SPECIALIST DEMENTIA/DELIRIUM UNIT

WHAT IS THE INTERVENTION?

Specialist geriatric medical ward for people presenting with suspected delirium or dementia provides recognition and management of delirium and dementia and person-centred care; this includes organised therapeutic and purposeful activities in a dementia and carer friendly environment; care is provided by a multi-disciplinary team trained in delirium, dementia, person-centred dementia care and organised purposeful activity.

IS THE INTERVENTION EFFECTIVE?

When provided to older people with confusion, a specialised geriatric intervention did not lead to any improvements in health status outcomes for people living with dementia (such as those measured with DEMQOL, EuroQol (EQ-5D), Barthel Index, Mini-mental State Examination) or their carers (such as those measured with Carer Strain Index; General Health Questionnaire) when compared with geriatric or general hospital wards (8). However, people living with dementia reported improved experiences and spent more time in positive mood or engagement; carers reported higher levels of satisfaction (8).

IS THE INTERVENTION COST-EFFECTIVE?

The study measured a range of service outcome over a follow up period of 3 months including: days spent at home, new admission into a care home, days spent in hospital and hospital readmission. There were no significant improvements in any of those outcomes. Considering the specialist unit did not improve health outcomes and the specialist unit was not specifically linked to reductions in service, it is unlikely to be cost-effective. However, outcomes for this population are difficult to measure with standardised instruments, and people living with dementia and their carers reported increased mood and satisfaction.

SHORT-TERM EARLY DISCHARGE, HOME CARE AND REHABILITATION PACKAGE

WHAT IS THE INTERVENTION?

A package of short-term early discharge, home care and rehabilitation is provided by a multi-disciplinary team to older people in their own home or people in need of rehabilitation without requiring 24-hours care.

IS THE INTERVENTION EFFECTIVE?

When provided to older people, the package was associated with improvements in functioning and psychological wellbeing compared to the usual care group (9). Standard care referred to standard hospital aftercare, including social services, home care and hospital outpatient care.

IS THE INTERVENTION COST-EFFECTIVE?

The package is also likely to be cost-effective when provided to older people (9). In addition, the intervention also led to reductions in total health and social care costs (£1,730 to £2,020 per person).

EARLY SUPPORTED DISCHARGE WITH MULTI-DISCIPLINARY COMMUNITY CARE

WHAT IS THE INTERVENTION?

Early supported discharge with multi-disciplinary community care refers to a wide range of interventions, such as elements of team coordination and post-discharge support. It begins in the hospital and is continued post-discharge and is provided to people who experienced a stroke starting in hospital and continued post discharge.

IS THE INTERVENTION EFFECTIVE?

Evidence from a systematic review (10) demonstrated that early supported discharge with multi-disciplinary community care provided to people with stroke led to improvements in physical dependency, functioning (activities of daily living) and mortality; standard care referred to conventional hospital and hospital discharge care, which was usually not multi-disciplinary.

IS THE INTERVENTION COST-EFFECTIVE?

Economic evidence from the systematic review mentioned before suggested that early supported discharge with multi-disciplinary community care provided to people with stroke was cost-effective (10). The intervention led to decrease in costs due to reductions in length of hospital stay (by on average 7 days) and in care home admission. Total costs were reduced by up to £630 per person.

SHORT-TERM REHABILITATION IN OUTPATIENT UNIT

WHAT IS THE INTERVENTION?

These units represent a form of outpatient intermediate care, where individuals discharged from hospital stay for approximately 6 weeks and receive a range of rehabilitative services. The intervention is provided to older people that the hospital identifies with the potential to improve and willingness to participate. The intervention is provided by a multi-disciplinary team including therapists, care or rehabilitation assistants.

IS THE INTERVENTION EFFECTIVE?

In one study on short-term rehabilitation provided in an outpatient unit, the intervention did not lead to improvements in outcomes (11). The outcomes included survival at home, meaning the time people spent at home until they were admitted to residential care or died. However, people in the intervention group were older than those in the control group which utilised a range of health and social care. Because of this, it is possible that the intervention actually has positive effects.

IS THE INTERVENTION COST-EFFECTIVE?

Short-term rehabilitation provided in outpatient unit is likely to be cost-effective from a health care perspective (cost savings of about £1,500 per person in 1999/2000 prices) but not from a combined health and social care perspective (11). Thus, intervention and usual care groups were very similar in terms of their total costs. However, the cost of the intervention fell more heavily on social care, while the cost of usual care fell more strongly on the NHS.

MULTI-PROFESSIONAL PALLIATIVE CARE

WHAT IS THE INTERVENTION?

Multi-professional palliative care involves a variety of personalised information and access to various types of support to people at end of life and their carers, as well as flexible visits by the multi-disciplinary team.

IS THE INTERVENTION EFFECTIVE?

Studies found that multi-professional palliative care provided to people with breathlessness in advanced disease or to people with multiple sclerosis led to reduced burden for carer. Additionally, some end of life care outcomes such as symptom management, were also reduced (12, 13). The intervention was compared to standard care, which involved a range of specialist staff and social services.

IS THE INTERVENTION COST-EFFECTIVE?

Findings from one economic evaluation suggested that multi-professional palliative care teams for people with multiple sclerosis had a 50% chance of being cost-effective (12). Cost savings due to reductions in acute hospital and primary care costs were £1,800 per person (12); however, those varied strongly between individuals thus reducing the overall likelihood that the intervention was cost-effective (12). Limited evidence was presented for people with breathlessness in advanced disease, but they suggest that there was no difference in costs, and that the intervention could be potentially cost-effective (13).

WHAT DO PEOPLE SAY ABOUT INTERVENTIONS THAT SUPPORT THE TRANSITION?

There is evidence that a poorly organised discharge from hospital can be extremely stressful for people experiencing it and their carers. In order to improve their experiences, there must be better communication among service providers and among service providers, service users and families (6). In terms of specific interventions, evidence demonstrates that the following interventions improved service user or carer experiences and satisfaction:

- Comprehensive geriatric assessment improved experiences for service users (14)
- Specialist geriatric unit improved service user experiences and carer satisfaction (8)

- Early supported discharge with multi-disciplinary community care improved service user satisfaction (10).

There were no data available for the other interventions, but it is likely that they could achieve similar improvements in experiences for service users and carers due to improved communication between professional groups and access to additional support.

WHAT IS THE QUALITY OF EVIDENCE FOR INTERVENTIONS THAT SUPPORT THE TRANSITION?

The quality of studies on transition support is high. All studies are randomised controlled trials. Many of the studies included additional statistical analyses and sensitivity analyses to explore the robustness of their findings. However, the intervention or standard care in some older studies might have changed substantially.

The definitions and economic evidence used were taken from the NICE guideline. Economic evidence included also partial economic evaluations, which measured service use (in addition to health and wellbeing outcomes) but not costs

HOW ARE INTERVENTIONS THAT SUPPORT TRANSITIONS IMPLEMENTED?

A number of national initiatives have supported the development of innovative schemes to support transitions between hospital and care homes or community settings. This includes some of the 50 Vanguard sites under the New Models of Care programme (15) as well as some of the altogether 25 Integrated Care PioneersPioneers (16), which seek to join up health and social care.

Considering those new developments it is difficult to interpret some of the evidence, which includes models that were developed under different circumstances (e.g. more resources in standard care). Some of the interventions mentioned above might now be rolled out as part of standard care. However, in areas where this is not the case yet, evidence can be used to inform practice changes in the absence of evidence on more recent, innovative schemes.

OTHER INFORMATION

NHS England has more information on their Integrated Care and Support Pioneer Programme in their annual report from 2014 (16). Additionally, the Department of Health and Social Care launched a home resource pack on transitioning from the hospital to home care (17).

REFERENCES

1. Bate A (2017), Delayed transfers of care in the NHS, London: House of Commons Library.
2. National Audit Office (2003), Discharging older patients from hospital, Department of Health, London: National Audit Office.
3. Kydd A (2008) The patient experience of being a delayed discharge. Journal of Nursing Management 16: 121–126.
4. Ellins J, Glasby J, Tanner D, et al . (2012) Understanding and improving transitions of older people: a user and carer centred approach. London: National Institute for Health Services Research.
5. Audit Commission (2011) Joining up health and social care: improving value for money across the interface. London: Audit Commission.
6. National Institute for Health and Care Excellence (2016). Transition between inpatient hospital settings and community or care home settings for adults with social care needs. Quality standard [QS136].
7. Ellis G, Whitehead MA, Robinson D, et al (2011) Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials. British Medical Journal 343: d6553.
8. Goldberg SE, Bradshaw LE, Kearney FC, et al (2013) Care in specialist medical and mental health unit compared with standard care for older people with cognitive impairment admitted to general hospital: randomised controlled trial (NIHR TEAM trial). British Medical Journal. 347: f4132.
9. Miller P, Gladman JR, Cunliffe AL, et al (2005) Economic analysis of an early discharge rehabilitation service for older people. Age and Ageing 34: 274–280.
10. Fearon P and Langhorne P (2012) Services for reducing duration of hospital care for acute stroke patients. Cochrane Database of Systematic Reviews.
11. Ellis A, Trappes Lomax T, Fox M, et al (2006) Buying time II: an economic evaluation of a joint NHS/Social Services residential rehabilitation unit for older people on discharge from hospital. Health and Social Care in the Community 14: 95–106.
12. Higginson IJ, McCrone P, Hart SR, et al (2009) Is short-term palliative care cost-effective in multiple sclerosis? A randomized phase II trial. Journal of Pain and Symptom Management 38: 816–826.
13. Higginson IJ, Bausewein C, Reilly CC, et al (2014) An integrated palliative and respiratory care service for patients with advanced disease and refractory breathlessness: a randomised controlled trial. Lancet Respiratory Medicine 2: 979–987.
14. Eklund K, Wilhelmson K, Gustafsson H et al (2013) One-year outcome of 8 frailty indicators and activities of daily living following the randomised 9 controlled trial; "Continuum of care for frail older people". BMC Geriatrics 13:101–110
15. NHS England (2015). New Models of Care Programme.
16. NHS England (2014). Integrated Care and Support Pioneer Programme.
17. Department of Health and Social Care (2012). Hospital to Home Resource Pack.

CONTACTS

TRANSITION INTO AND FROM HOSPITAL FOR PEOPLE WITH SOCIAL CARE NEEDS: ECONOMIC EVIDENCE

Annette Bauer
a.bauer@lse.ac.uk

THE ESSENCE PROJECT

Michela Tinelli
m.tinelli@lse.ac.uk

https://essenceproject.uk

Care Policy and Evaluation Centre
London School of Economics and Political Science
Houghton Street
London
WC2A 2AE