

Community hospitals and their services in the NHS: identifying transferable learning from international developments

Scoping review, systematic review, country reports and case studies

Emma Pitchforth¹, Ellen Nolte², Jennie Corbett¹, Céline Miani¹, Eleanor Winpenny³, Edwin van Teijlingen⁴, Natasha Elmore⁵, Sarah King⁶, Sarah Ball¹, Joanna Miler⁷ and Tom Ling¹.

1. CCHSR, RAND Europe, Cambridge, United Kingdom
2. European Observatory on Health Systems and Policies, London School of Economics and Political Science and London School of Hygiene & Tropical Medicine, London, United Kingdom
3. MRC Epidemiology Unit and Centre for Diet and Activity Research, University of Cambridge, Cambridge, United Kingdom (work conducted while at RAND Europe)
4. Department of Human Sciences and Public Health, University of Bournemouth, Bournemouth, United Kingdom
5. CCHSR, Institute of Public Health, University of Cambridge, Cambridge, United Kingdom
6. Institute of Public Health, University of Cambridge, Cambridge, United Kingdom
7. Institute of Health and Wellbeing, University of Glasgow, United Kingdom (work conducted while at RAND Europe)

Important

A 'first look' scientific summary is created from the original author-supplied summary once the normal NIHR Journals Library peer and editorial review processes are complete. The summary has undergone full peer and editorial review as documented at NIHR Journals Library website and may undergo rewrite during the publication process. The order of authors was correct at editorial sign-off stage.

A final version (which has undergone a rigorous copy-edit and proofreading) will publish as part of a fuller account of the research in a forthcoming issue of the Health Services and Delivery Research journal.

Any queries about this 'first look' version of the scientific summary should be addressed to the NIHR Journals Library Editorial Office – journals.library@nihr.ac.uk

The research reported in this 'first look' scientific summary was funded by the HS&DR programme or one of its predecessor programmes (NIHR Service Delivery and Organisation programme, or Health Services Research programme) as project number 12/177/14. For more information visit <https://www.journalslibrary.nihr.ac.uk/programmes/hsdr/1217714/#>

The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors have tried to ensure the accuracy of the authors' work and would like to thank the reviewers for their constructive comments however; they do not accept liability for damages or losses arising from material published in this scientific summary.

This 'first look' scientific summary presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health.

© Queen's Printer and Controller of HMSO 2017. This work was produced by Pitchforth *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This 'first look' scientific summary may be freely reproduced for the purposes of private research and study and extracts may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Scientific Summary

Background

Traditionally, community hospitals have been defined as local hospitals that are typically mainly staffed by general practitioners and nurses to provide care in a hospital setting, often for predominantly rural populations. However, the notion of a community hospital has evolved over time, with a diversity of service delivery models developing in response to the needs of local populations served, and in the context of a broader change in the nature of the delivery of healthcare services itself. In England, a growing policy focus on care integration and on shifting services closer to people's homes has led to renewed interest in community hospitals and the potential role they can play in delivering more integrated care locally. There is therefore a need to understand better the role of different models of community hospital provision within the wider health economy and an opportunity to learn from the experiences of other countries in order to inform the future development of community hospitals in England.

Objectives

In order to understand better the role of different models of community hospital provision within the wider health economy and their capacity and capability to integrate services locally, we sought to answer five principal research questions:

1. What is the nature and scope of service provision models that can be considered under the umbrella term 'community hospital' in England and other high-income countries?
2. What is the evidence of their effectiveness and efficiency?
3. What is the wider role and impact of community engagement in community hospital service development and provision?
4. How do models that are comparable to community hospitals in England operate and what is their role within the wider system of service provision?
5. What is the potential for models that are comparable to community hospitals in England to perform an integrative role on the delivery of health and social care?

Methods

We designed a multi-method study that included: (1) a scoping review of the academic and grey literature on current provision of community hospital services in England and other high-income countries; (2) a linked systematic review of the effectiveness and cost-effectiveness of community hospitals in England and other high-income countries; (3) a review of the nature, scope and distribution of service delivery models that can be considered to be community hospitals in five high-income countries (Australia, Finland, Italy, Norway, Scotland), using a review of the published and grey literature following a structured data collection template and key informant interviews; and (4) four in-depth case studies of the specific financial,

organisational and governance features of community hospital models in Finland, Italy and Scotland.

Findings

Seventy-five papers were included in the scoping review, the majority of which were descriptive or used a qualitative design. Eleven reported on a randomised controlled trial. Drawing on the same search strategy, seventeen papers were included in the systematic review of effectiveness and cost-effectiveness of community hospitals. These covered eight studies from two countries and included: randomised controlled trials (7), qualitative research embedded within a randomised controlled trial (2), standalone qualitative research (4), an observational (cohort) study (1) and cost-effectiveness analyses (3).

Twenty-eight key informants participated in interviews as part of the country reviews, representing primarily national, regional or local government, provider or provider associations and academia. The four case studies involved site visits of between four and 10 days and a total of 45 interviews with managers, clinicians and frontline staff, broader system actors and representatives of the community. Interviews were supplemented with non-participant observation and document review.

The roles and features of community hospitals and evidence of effectiveness and efficiency

Evidence from the scoping review found that community hospitals provide a wide range of services, covering the entire spectrum of care provision, from preventative and primary care, through to inpatient and outpatient medical and surgical care. There was wide diversity of provision, which appeared to reflect local need. Community hospitals are staffed by a mixture of general practitioners (GPs), generalist and specialist nurses, allied health professionals and healthcare assistants, and most community hospitals identified in the review were public hospitals under the responsibility of government health authorities.

There were many examples of collaborative working arrangements between community hospitals and other provider organisations, resulting from co-location of different services at a single physical location and through shared workforce with primary care and close collaboration with acute care specialists. Several studies reported the use of telemedicine to facilitate collaboration between community hospital staff and specialists. The evidence synthesis highlighted that collaborative working at community hospitals may be particularly important in informing the design of future models of care, where emphasis is placed on continuity of care and collaboration between different care sectors. We propose a way to conceptualise and represent community hospitals, which recognises the diversity of services offered.

Evidence of the effectiveness and efficiency of community hospitals was only available from England and Norway. Studies reported improved or equivalent patient

© Queen's Printer and Controller of HMSO 2017. This work was produced by Pitchforth *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This 'first look' scientific summary may be freely reproduced for the purposes of private research and study and extracts may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

health outcomes at community hospitals when compared with acute hospitals for post-acute care of older patients. This included increased independence, reduced hospital readmissions, and equivalent patient health outcomes after chemotherapy. Patient and carer experiences were better at community hospitals than acute hospitals for palliative care, post-acute care and chemotherapy. Across studies, staff were reported to value key aspects of the community hospital setting including ease of access and a sense of 'homeliness', with improvement in the discharge process from acute to primary care reported in one setting. Cost (effectiveness) results were mixed. The cost of post-acute care was either similar or lower in community hospitals than in acute hospitals. Drug and intervention costs for emergency care were reported to be lower at one community hospital compared to the acute hospital, resulting in lower overall costs. However, the cost of delivering chemotherapy in community hospitals was marginally higher than in a cancer centre. Overall, although evidence of effectiveness of community hospital remains limited in terms of geographical scope and is primarily focused on post-acute care, our findings suggest that community hospitals can offer an effective and efficient alternative to acute hospitals.

Experiences of community hospitals in five countries

This review of the nature and scope and distribution of community hospitals in Australia, Finland, Italy, Norway and Scotland found that the term 'community hospital' is not easily transferable across system settings.

In line with the scoping review, the country review showed that community hospitals and related structures provide a wide spectrum of health services, which can be further conceptualised as a continuum between community hospitals serving a 'geographic purpose', typically rural populations, at one end to a specific population focus, mainly older and frail people, at the other end. However, boundaries may be blurred where the local community constitutes a specific group, such as indigenous populations.

Overall, the community hospital as such represents a 'fluid' concept, with the greatest advantage perhaps being their flexibility to respond to local need. The evidence presented here underlines the potential for community hospitals to occupy a niche within the local service delivery structure. This 'niche' may stretch from viewing community hospitals as a locale for service integration locally, as in Scotland, to their function as a component of locally integrated health and care services, such as in Finland, Italy and the newly established local (community) health centres in Norway.

Community hospitals face a number of challenges, such as attracting suitable staff and maintaining a diverse skillset. There was also a perception that as delivery systems are evolving, boundaries between services provided by community hospitals and those offered elsewhere locally might blur or indeed overlap, impacting on the effectiveness and efficiency of service delivery and potentially undermining the value of the community hospital and similar structures.

© Queen's Printer and Controller of HMSO 2017. This work was produced by Pitchforth *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This 'first look' scientific summary may be freely reproduced for the purposes of private research and study and extracts may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Case studies of innovative models of community hospitals in three countries

The cross-case analysis of innovative community hospital models in three countries shows that although models have evolved differently, they commonly provide a range of health and social care services in a less medicalised environment compared with acute hospitals, and serve as a potential bridge between primary and secondary care. Common features include the breadth of services provided within an overarching ethos, and to predominantly older populations. It was also evident that all placed priority on preventative services and home rather than hospital care. There was scope in all four models for community hospitals to be flexible in how they developed services but there was also evidence that this could be limited by a number of factors such as the constraints of physical space to organisational changes and pressures in the wider healthcare system. It was clear from the different cases that community hospitals have great potential for integrating services that traditionally may have been separated. Creating a place for co-location of these services was seen to promote multidisciplinary working yet a number of challenges remained. The ability to effectively share patient information was hampered by the incompatibility of IT systems. The importance of maintaining one's professional identity and traditional boundaries also prevailed to a greater or lesser extent. While a sense of 'localness' was valued in all the models, the extent to which communities were involved and engaged varied considerably, ranging from no involvement beyond care transactions to co-design and the creation of public spaces. Finally, staffing requirements often created opportunities and challenges for hospitals. Working within community hospitals was considered to provide a layer of challenge on top of typical roles in primary care, making staff recruitment and retention difficult in some cases.

Limitations

For the purposes of this study we defined community hospital as a service model that (i) provides a range of services to a local community, (ii) is led by community-based health professionals, and (iii) provides inpatient beds. This definition was informed by a review of existing definitions of community hospitals and consultation with members of the steering group for this project. By using this somewhat restricted definition, in particular the requirement that the model has inpatient beds, our evidence reviews may have excluded some service models that might have usefully informed the work presented here. On the other hand, the definition helped to identify service delivery models in other countries that could be considered comparable to the community hospital model in the UK. However, it is important to note that even within England, there is no single definition that captures the wide range of service delivery models that are presently considered under the umbrella term of a 'community hospital.' Indeed, our findings emphasise that the notion of a single, overarching definition for community hospitals may be misleading, given that the concept and range of services is so inherently diverse.

In this study we were only able to draw on a small number of countries to explore the diversity of community hospitals in system settings other than England, and even

© Queen's Printer and Controller of HMSO 2017. This work was produced by Pitchforth *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This 'first look' scientific summary may be freely reproduced for the purposes of private research and study and extracts may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

fewer for a detailed analysis of individual community hospital models. Clearly, it remains challenging to derive lessons from other systems contexts, given different policy contexts. At the same time, it is important to recognise that health systems are facing similar challenges and there is considerable potential to learn from approaches implemented elsewhere to inform domestic policy choices.

Finally, our research also set out to investigate the wider role(s) and impact of community engagement in community hospital service development and provision. We were unable, as part of the evidence reviews, to identify robust published evidence that assessed this aspect in a systematic way. Important issues relating to community engagement were brought out in the case studies but it did not emerge as a key area of focus in the country review.

Conclusion and research recommendations

This study shows that the concept of a community hospital encompasses a range of service delivery models that defy the formulation of a single, overarching definition. This reflects the evolution of the nature and scope of services delivered by community hospitals over time in response to changing population needs as well as the broader changes in the nature of the delivery of healthcare services itself.

Evidence on the range of services provided in community hospitals and, in some contexts, their potentially integrative role suggest that a more strategic role for community hospitals may be timely within NHS England. Better definition of their specific role in service delivery may enable community hospitals to take on proactive, preventative and step-up functions, away from their frequently reactive role in responding to demands elsewhere in the system; however, this would need to be tested. It will be important, within any process, to recognise local and national contexts that have driven the way that community hospitals have developed.

While promising, we identified a number of important challenges community hospitals are facing. These include the need for developing sustainable models of staffing, particularly in rural areas, and for overcoming persisting barriers to integrated care even where services are co-located, including inadequate IT systems. Although thought to be important, further consideration needs to be paid to the role of the community within community hospitals, in particular whether and how community hospitals can systematically identify and respond to local needs.

Informed by these observations, we recommend that future research should:

- (1) assess the effectiveness, efficiency and cost-effectiveness of community hospitals beyond post-acute care;
- (2) evaluate the evidence of how community hospitals can and do contribute to new models of care that are currently being developed within the NHS in England;

- (3) explore means of ensuring that community hospitals are configured on the basis of an assessment of local need and models of community engagement;
- (4) consider optimal staffing profiles and training needs of health professionals in community hospitals;
- (5) analyse the extent to which characteristics of community hospitals identified in this study reflect a unique combination of geographical location and specifics of the community hospital in a given setting, which was largely, although not exclusively, rural, and whether these can be transferred to more urban settings.

Funding:

Funding for this study was provided by the Health Services and Delivery Research programme of the National Institute for Health Research.