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Research paper

Evaluation of community matron services in a large metropolitan city in England

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ABSTRACT

Investment in community matron service development is an important feature of health policy in the UK, and underpins a national strategy to improve care for people with long-term conditions. These new services are under pressure to demonstrate added value in terms of patient experience and a reduction in unplanned hospital bed usage. The focus of this article is an evaluation of community matron services in a large primary care trust.

The results of this city-wide service evaluation demonstrated high levels of patient and general practitioner (GP) satisfaction with community matron services. The themes identified by patients and GPs included improved communications and co-ordination of services. In addition to this, patients and carers commented on increased levels of confidence as a result of responsive and accessible services, as well as a perception that there was a reduction in unnecessary hospital admissions.

Keywords: community matron, long-term conditions, service evaluation

How this fits in with quality in primary care

What do we know?
Development of community matron services underpins a national strategy to improve care for people with long-term conditions.

What does this paper add?
This service evaluation demonstrated high levels of patient and general practitioner (GP) satisfaction with community matron services. The themes identified by patients and GPs included improved communications and co-ordination of services, higher confidence as a result of responsive and accessible services, and a perception that there was a reduction in unnecessary hospital admissions.

Introduction

In the UK there are 17.5 million people (5% of the population) that report living with one or more long-term conditions, for example diabetes, chronic obstructive pulmonary disease, heart failure, or arthritis.[1] A literature and policy review noted that most general practitioner (GP) consultations and over 60% of emergency hospital admissions are related to long-term conditions.[2] Capacity to respond to the needs of people with long-term conditions in primary care, providing early intervention and treatment, is limited,

and as a consequence people with long-term conditions account for 42% of hospital bed occupancy.[1]

The NHS has been described as an organisation geared to 'rescue patients when they become ill, in an episodic manner', usually through hospital admission, and advocates a model where resources are harnessed to provide high-quality care over time.[3] Community matrons and a range of intermediate tier services aim to increase the capacity and responsiveness of primary care.

The community matron role, introduced to the NHS in 2005, combines advanced clinical practice and the ability to diagnose illness and prescribe treatment with case co-ordination and case management.[4] The purpose of the community matron role is to proactively support people with complex health needs to maintain optimum health through health promotion, medication titration and self-care, and to support rapid, planned intervention in primary care in the event of health deterioration.

The focus of this article is an extensive evaluation of a community matron service in a large primary care trust (PCT) in the north of England.

Literature review and background

A variety of models of case management are described within health and social care services, and a plethora of literature, research and theory are linked to the concept of case management. Case management is defined as the organisation and follow-up of an individual's care by a professional or team of professionals.[2] The evidence that case management is effective as a broad concept is contradictory.[5–7] International findings demonstrate that when nurses provide a combination of case management and advanced clinical practice, results are more positive.[2]

A systematic literature review identified 23 international studies, of which 12 related to nurse-led case management. Nine of the nurse-led case-management models reported a reduction in both hospital admissions and length of stay; three studies found no difference in the number of admissions, and of those one found no difference in length of stay and two studies found an increase in length of stay for patients receiving case management from nurses.[8]

The predicted demographic profile in western Europe has prompted an international policy focus on the management of long-term conditions. Though the size of the problem in Britain is disputed on the grounds that self-reported illness is a doubtful measure and a poor basis for policy development, there is a general acceptance that an ageing population poses challenges to traditional methods of healthcare delivery.[9,10]

English health policy promoted the potential of the new role of community matron in a 2005 policy document *Supporting People with Long-term Conditions: liberating the talents of nurses who care for people with long-term conditions*.[1] The Department of Health based much of the policy direction described in *Supporting People with Long-term Conditions* on the experience of North America, focusing on the 'Evercare Model' and applying the 'Keizer Permanente's' stratification of the population.[1]

UK literature focuses on the potential risks, merits and impact of the community matron role, based on the Easy Care model described in *Liberating the talents* and the *Community Matron Competency Framework*.[1,11] Evidence tends to be anecdotal, with authors sharing personal experience of service development and some of the barriers to implementing national policy in terms of resource and political support.[12–15] The only large-scale study of the Evercare model, not a randomised controlled trial, found no evidence that the role reduced hospital admission, a key policy driver.[6]

There have, however, been some in-depth academic reviews of the international evidence for case management. The King's Fund and New York University on behalf of the NHS Modernisation Agency undertook a comprehensive literature review in 2005. This review formed part of the Predictive Risk Project and assesses the evidence base of case management.[8]

The King's Fund examined the evidence for effective methodologies for case finding, i.e. by identifying the target population through population profiling and risk indicators, strengths and the limitations of case finding models are analysed.[8] The report concludes that statistical predictive models using regression analysis have the strongest evidence base.[8]

The King's Fund literature review challenges the 'implicit assumption' within current health policy that the shift to community care will prove to be less costly than traditional hospital-based models of care. The paper points out that those assumptions rely on transferability and are based upon economic modelling from the US private health system, which may not translate to the UK model of healthcare.[8]

One study found that the risk of admission in frail older adults who are high users of service appears to fall over a period of four years without intervention.[16] The weakness of this study is that it does not take account of mortality, which clearly impacts upon future health usage. Like most of the authors cited above, there is recognition that rigorously designed randomised controlled trials are required to contribute to the evaluation of the community matron role and its cost-effectiveness.[16]

The paucity of national evidence resulted in varying levels of financial investment in community matron

development nationally and locally. A review of community matron services was commissioned after the merger of five PCTs. The purpose of this review was to identify best practice and develop a vision and recommendations for a city-wide equitable service model.

Methods

Service evaluation framework

The service evaluation framework included patient and carer experience of the service and GP views of the service. Clinical skills, clinical activity and a review of service models were included in the evaluation. Data on clinical skills included a clinical skills audit and evidence of degree and masters level clinical education. Activity levels were measured using the city-wide community information system (RIO), an electronic patient records system that has a performance management facility which reports matron caseload and the number of visits undertaken, and is able to analyse patient information, for example age, sex and clinical condition. Information on the service model was collected through community matron interviews, using a semi-structured interview with two matrons from each PCT area (10 in total).

This article will focus on the quantitative and qualitative information collected through a patient, carer and GP survey.

Patient experience methodology

A self-completion postal survey was designed using statements and response categories, and open questions with comment boxes (see Box 1 for an example of question styles).[17]

A total of 10 questions were asked to elicit patients' and carers' overall satisfaction with the service, views of the clinical skill of the matron, sensitivity and respect shown to the patient, and patients' and carers' perspectives of the impact of the service on hospital admissions and any components of the service that could be improved.

The survey was adapted from a validated patient questionnaire designed by Clinical Microsystems, Dartmouth College, USA, and available for use on the Clinical Microsystems website.[17]

The postal survey was sent to 228 patients who had experience of the community matron service. It had a covering letter detailing the purpose of the survey and explaining that participation was both confidential and optional. The cover letter stated that the information may be used for publication. The survey was attached to a stamped addressed envelope. No reminders were sent to patients, and nil returns were accepted in order to respect the right of patients to opt out of the service-evaluation process.

Patients were randomly selected using the patient information system (RIO). A sample size of 228 represented 10% of the community matron caseload. The community matrons were asked to identify any patients who were too ill or infirm to receive or respond to the questionnaire. Local ethics advice determined that ethical approval was not required; the survey was approved for use by the PCT executive leads for clinical governance and research.

GP survey methodology

GPs with an identified community matron were sent a letter asking if they would be willing to participate in a telephone interview about the role of the community matron in their area. To opt in to the evaluation, the GPs were asked to ring the interviewer, a nurse consultant, at a time that was convenient to them.

Respondents were asked three questions in conversations that lasted from five to ten minutes. Key points were noted by the nurse consultant conducting the interview, and the points were reaffirmed with the interviewee at the end of the conversation. GPs were asked at this point if they would have any objection to their comments being included in the evaluation report and in future publications. The questions asked were:

- could you describe your view of the community matron service?

Box 1 Question style

1 How would you rate your overall satisfaction with the community matron service?

Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor ☐

2 What can the community matron service do to improve care and services for you?

Comments/suggestions

- are there any aspects of the service that work well?
- can you suggest any ways to improve the service?

All GPs (129) with attached community matrons received a letter asking them to opt into the service evaluation. Forty-eight GPs (37%) responded and were interviewed by telephone.

Results

Patient and carer survey results

A total of 228 questionnaires were sent out and 123 were returned, a 54% response rate. Sixty-five percent of the responses rated their satisfaction with the new community matron service as excellent. Similar high ratings were received for technical skills of the matron, and the level of courtesy, respect and sensitivity shown to the patient (see Figure 1). Patients and carers were less happy with the method of contacting the community matron, with 56% responding excellent.

Fifty detailed comments were received from the comments box under the two open questions. Three themes emerged from the comments: service reliability and patient and carer confidence in the service; improved communication and care co-ordination; and reduction in hospital admissions. Each of these themes will be discussed in more detail.

Reliability of service and patient and carer confidence in the service

Seventeen responses referred to the reliability of the community matron services. Comments included:

> 'My community matron is always there if I am poorly, she is better than my GP, I could not manage without her.'

> 'She is totally reliable I have complete confidence in her care.'

> 'The service has been excellent. There is always someone there if I need anything.'

> 'Always contactable, reliable and will call or ring when she says she will. Always covers herself when off duty, and treats patients as if they are the only one!'

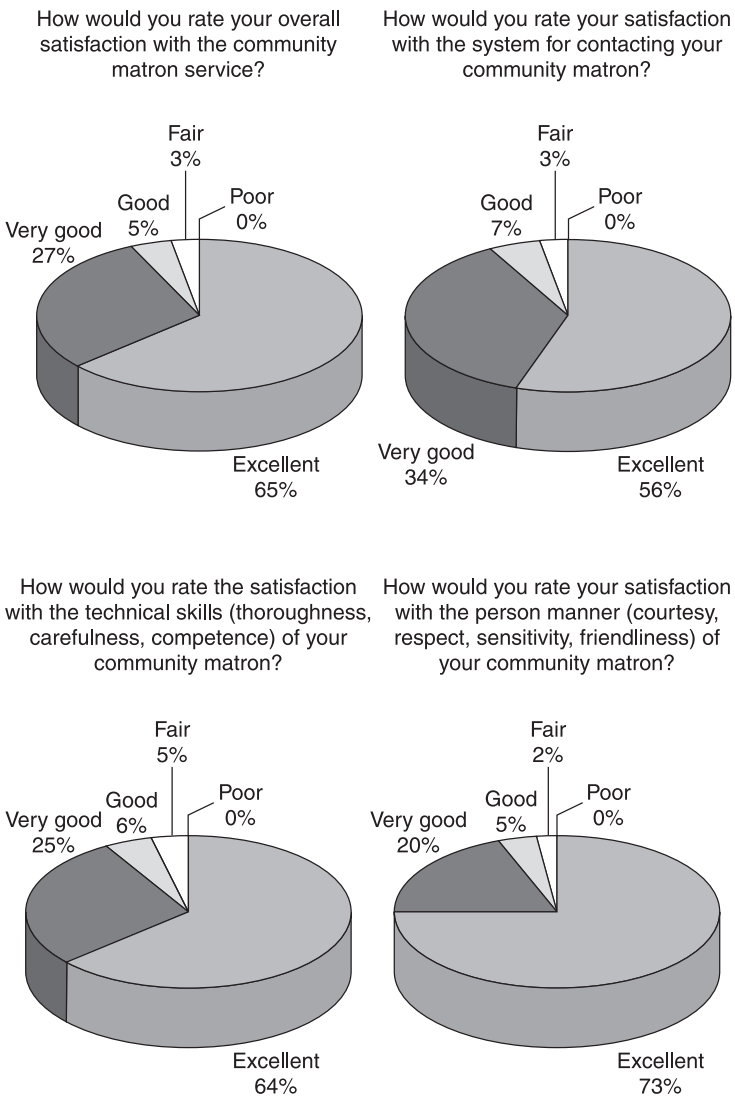

Figure 1 Patient and carer survey results

Ten patients commented on their level of confidence in the role:

> 'Being looked after by someone who is medically skilled is comforting and very welcome.'

> 'Apart from her efficiency, which I consider to be faultless, her friendly manner and the time she takes to explain things gives me the utmost confidence in her care to me.'

> 'We have complete confidence in her, 10 out of 10.'

> 'She is like or even better than my GP.'

Carers comments included ($n = 5$) a perception that the service had increased their ability to cope and given increased confidence in their caring role:

> 'This service has been a lifeline to family caring for our mum and is greatly appreciated. Having a contact number has boosted our confidence in dealing with Mum's condition.'

Care co-ordination and improved communication with other services

Community matrons are seen as a link to the GP and other services by responders ($n = 5$):

> 'She has also helped me to get all sorts of allowances and benefit that I knew nothing about.'

> 'The service has proved such a vital link between myself and the doctors and paramedics that it provides quality care between the services that benefit patients such as myself. I have been grateful for the community matron services these last months especially and may the service continue, from a very grateful patient.'

Hospital admission avoidance

A number of responders ($n = 16$) thought the community matron has helped them to avoid hospital admission either by their diagnostic skills, by giving useful advice or by prescribing medicines which 'made attacks bearable'.

> '... I also feel that I would have had many more visits to hospital as an inpatient was it not for my community matron.'

One carer commented that 'She helped to make us fully aware of the danger of chest and urine infections and the need to avoid them and so keep out of hospital'. Another patient said that 'Regular visits by my matron, combined with her liaison with the GP, have ensured, to date, that admission to hospital has been avoided'.

Box 2 GP telephone survey results

Theme: managing patients with complex needs

'The community matron has proved very useful in helping the practice manage difficult patients with complex needs.'

'She is able to complete reviews on patients with complex needs.'

'The matron manages her own caseload of chronically ill patients, particularly those with respiratory problems and the housebound.'

Theme: admission avoidance

'Has definitely contributed to preventing hospital admissions with early detection of patients who are deteriorating.'

'The community matron has reduced the need for the practice to send patients to A&E as she is able to visit patients throughout the day.'

'The work they do is useful from a patient perspective and has been useful in crisis intervention.'

Theme: improved communication

'Acts as a useful channel of communication between patient and GP.'

'On the whole the development of the community matron service has been positive for both the practice and the patients.'

Less positive comments

'The practice really valued the matron supporting our patients in care homes and the service was withdrawn without any warning. The practice is missing this service a lot.'

'The target population for the matron's caseload seems too narrow, it should include younger patients not just over 65s.'

'Difficult to know when she is available she is away on courses a lot.'

Results of the GP telephone survey

Three themes emerged from the GPs' comments. They viewed the community matron service as working well in terms of managing complex patients, admission avoidance and improving communication between patients and the practice (see Box 2 for an example of comments).

GPs in one area where the matron service had a strict age criterion (age 65 years and over) felt that younger patients with complex needs and people residing in care homes would benefit from this service. The most enthusiastic endorsement of the community matron services come from GPs that have a community matron based in their practice.

Only one GP surveyed commented negatively about the service, and did not think the service was value for money:

> 'I don't think this is a good use of resources; the role is poorly focused duplicating the practice nurse role. The practice could use the money for dedicated community practice nurses. The model of patient identification is flawed as data is out of date and inaccurate.'

Discussion

In keeping with the evidence from other community matron studies, high levels of patient and carer satisfaction are evident in the results of this study.[2,6] Response rates for this frail, elderly population are high at 54%. It was clear from the handwriting that many patients had made a great effort to comment on the service they received. This may reflect the level of patient and carer satisfaction expressed in the survey.

Whilst the quantitative data demonstrate a positive patient and carer experience of services, the three themes identified in the comments within the patient survey are endorsed by the GP survey. The results from both surveys suggest that services are perceived as reliable, and result in improved communication and care co-ordination, and a reduction in hospital admissions.

Patient and carer perceptions of the community matron service described in this study support a view that community matron services in this city are meeting the policy objective to:

- reduce reliance on hospital care
- increase the range and responsiveness of community services
- improve the quality of care for people with long-term conditions
- plan for, predict, and prevent crises in care management.[1]

The evaluation team was pleasantly surprised by the number of GPs who agreed to participate in the telephone survey. Responses were very positive; however, the authors recognise that patients and carers and some GPs are not as satisfied with methods of contacting some community matrons and would recommend a move to a single point of contact 24 hours a day, a model of service delivery provided in one area of the city where contacting the community matron is not perceived as an issue.

Limitations of the survey

There is a large body of literature describing the potential flaws in patient surveys.[18] Criticisms include the suggestion that surveys do not elicit an honest response and that respondents are not always representative of the whole population, as participants are self-selecting at the point that they choose to respond. Despite the potential pitfalls of the methodology, the survey was a pragmatic attempt to support service development. Response rates were above the national average for postal survey results.

Next steps

The evaluation of the community matron service provides a stepping stone for our vision for a city-wide model of service delivery. Recommendations for service development based on patient, carer and GP views include:

- a city-wide community matron service that is GP practice attached
- seven-day-a-week cover with a single point of access for referral and patient contact
- community matrons will work towards a caseload target of 50 patients within a performance management framework
- all community matrons working at masters level of advanced clinical practice.

Conclusion

The authors recognise the limitations of surveys as a method of gaining a representative view of patient experience of services; however, this service evaluation has proved to be a useful tool in informing a service development strategy and in influencing commissioners of service locally.

The inclusion of service users in service development is central to Department of Health policy and an indication of good practice as defined by health service standards.[4] This survey provided a mechanism for

significant numbers of patients, carers and GPs to influence service development and redesign.

Important themes identified by patients, carers and GPs interviewed are improvements in communication and co-ordination of care services; increased levels of patient and carer confidence as a result of a reliable service; and fewer hospital admissions. The themes are consistent with other UK studies of community matron services.[6] The study contributes to a growing body of evidence that demonstrates positive patient, carer and GP experience of community matron roles; it does not answer two crucial questions – is the role cost-effective, and does it deliver on the key policy objective of reducing hospital bed days? The authors suggest further research in the form of a randomised controlled trial with health-economic evaluation.

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CONFLICTS OF INTEREST

None.

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