

Research paper

Older people with complex long-term health conditions. Their views on the community matron service: a qualitative study

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ABSTRACT

Background The Department of Health in the UK has suggested that older people with complex health problems may benefit from a case-management approach to meet their needs. The NHS has since invested heavily in community matrons as one method of tackling managed care. Matrons are highly trained nurses, able to diagnose, prescribe and manage patients with long-term conditions within primary care. Early evidence suggests that the matron approach does not achieve the government targets of reducing unplanned hospital admissions.

Aim To explore the experiences and attitudes of older people who have a community matron so that we may gain an understanding of the successes and failures of this form of case management.

Design of study Qualitative study using one-to-one interviews with patients and carers.

Setting Nottingham and surrounding rural areas during 2006–2007.

Method A purposive sample of patients recruited from community matron caseloads. In-depth semi-structured interviews were audiotaped and transcribed. Analysis for emergent themes used a template approach and was validated by discussion with lay advisors and community matrons and by separate

analysis of a sample of interviews by an independent researcher.

Results Twenty-four participants were recruited. They often valued their matron as a personal friend as well as a professional. Many suggested that matrons improved their global health, reduced the workload of general practitioners, kept them out of residential care, reduced the need for social and psychological care, and supported their carers. Some were unclear why they had been selected for the matron service and knew of others they felt would benefit more than them.

Conclusions Matrons seem to be generally highly valued on a professional and personal level, almost filling the role of family doctor vacated by changing practices in modern primary care. Participants suggested several reasons why matrons could be economically justified, which need further investigation. The methods of case selection for these services also need to be questioned.

Keywords: community matron, long-term conditions, older people, primary care, qualitative methods

How this fits in with quality in primary care

What do we know?

Initial follow-up studies in the UK have not been able to detect a reduction in hospital admissions in older people receiving community matron support. Qualitative and survey studies have shown that patients and carers like the community matron service, and perceive improved outcomes such as improved quality of life, fewer admissions to hospital and reduced workload for general practitioners (GPs).

What does this paper add?

Patients suggested that matrons may reduce or delay the need for residential care, improve the support for carers, and reduce the need for social and psychological services, as well as preventing hospital admissions, reducing the workload of GPs and improving quality of life. These factors could be further assessed using quantitative research methods. A holistic approach to case management is particularly valued by patients and it was found that they like to have easy access to a valued health professional they know and trust. Case-selection methods need to be further evaluated in the UK setting.

Background

It is a key priority of the UK health service to improve the wellbeing of people with long-term health conditions.¹ Currently, about six in ten adults have some form of long-term health condition, equating to about 17.5 million people in the UK.² This figure is predicted to rise to become the leading cause of disability by 2020. Almost half of all people with long-term conditions have more than one condition, and those over 65 years are over-represented. The costs to the government of the most complex of people with long-term health conditions are high: 2% of people account for 30% of all unplanned hospital admissions and 80% of general practitioners' (GPs') consultations.³

The Department of Health produced a strategy for caring for people with the most complex long-term conditions using case management.⁴ Although several models exist, this strategy involved a new role for nurses, the community matron. Matrons have taken on case-loads of around 50–80 patients, usually older people with degenerative conditions and at least one chronic disease, who often need multiple medications and require intensive input in a community setting.⁵ The matrons' roles include clinical management of mental, physical and social needs, anticipating problems early in their evolution, diagnosing and prescribing, and liaising with GPs, community health and social services, and hospital teams.⁶

The government's target is to recruit 3000 community matrons by 2008 across the country, yet the concept of case management in the UK remains largely untested. Case-management models came from experiences in the USA and may not apply to the UK setting. The initial cohort of matrons were recruited in nine primary care trusts in April 2003 as part of a pilot project to assess whether managed care could reduce unplanned hospital admissions.⁷ This was based on

the Evercare model that had successfully reduced hospital admissions from residential care homes in the US.⁸ Gravelle *et al* were unable to demonstrate a reduction in unplanned admissions, number of bed days or mortality as a result of matrons' interventions over 13 months.⁹ The qualitative arm of the study did suggest that the patients liked the matron service and that there may be other benefits not demonstrated as statistically significant.¹⁰ Other qualitative studies have suggested that community matrons are popular with patients and may help improve their quality of life.^{11,12} In a small survey, Wright *et al* suggested that once matron services had been established for a few years, unplanned hospital admissions could be reduced.¹³ While recent studies suggest that local community matron services do help people with complex long-term health conditions,^{14,15} there are still no reports that give insight into whether the considerable investment into this model of care is worthwhile or cost-effective.

The aim of this study was to explore the views of patients and carers about their community matron and, in particular, to explore the principal strengths and weaknesses of the service to inform us how best to further evaluate whether matrons provide value for money.

Methods

Recruitment and sampling strategy

Community matrons within two primary care trusts (PCTs) in 2006 were asked to send out patient information leaflets and 'consent to contact' forms to all the patients on their caseloads. We chose one trust that covered the inner city of Nottingham and one that covered some affluent suburbs and surrounding villages so that we could recruit participants from varying

backgrounds. As the study was taking place, new matrons were employed by the PCTs and started building caseloads. We ensured that these new matrons were invited to help recruit, to ensure that patients from as many matrons' caseloads as possible were included in the study.

There were no exclusion criteria for patients to enter the study as long as they could give informed consent and were on a community matron's caseload. Recruitment, data collection and analysis were undertaken as an iterative process as in other qualitative research. We identified early in the study that many of the first participants recruited were coping rather better than expected. We then purposively sought more hard-to-reach participants, especially those with no carers, from minority ethnic backgrounds and those who had been difficult for the matrons to engage.

Data collection, analysis and validity

Interviews with patients were based around a topic guide (see Box 1) developed from a literature search of existing research, reports, published guidelines and discussions about community matrons and case management. The topic guide was reviewed and updated by our consumer advisors (RC, SP). It was piloted with two participants and changed slightly in emphasis towards discussing matrons' roles rather than participants' health in general. A further three interviews

were carried out, and these first five interviews were used to construct a template to be used to analyse all of the interviews.¹⁶ This template was reviewed after 13 interviews and remained unchanged for the rest of the study. In all, 24 participants were interviewed by two researchers, and all interviews were used in the analysis. The interviews were carried out in patients' homes and the patients often had their carer or spouse present. One couple were both on a community matron caseload and were interviewed together. Interviews lasted between 40 and 90 minutes each. All interviews were audiotaped and transcribed verbatim. Field notes were made after each interview.

Transcripts were examined closely and a framework of coding was constructed based on the conversations and interactions in the interviews. This process was carried out separately by KB, KS, RC and SP and brought together as a coding template in a discussion session after five interviews had been analysed. The template was used to code the remaining interviews using NVivo to manage the data. Coding was checked for accuracy by JS independently reviewing four interviews. After coding was complete, the codes were reduced to themes, also using the field notes, by discussion with all authors. Credibility and plausibility were checked through the involvement of the two consumer advisors throughout the analysis of discussions, and by presenting and discussing the findings at community matron meetings in both PCTs.

Box 1 Topic guide used to lead interviews

- 1 Introduction/trust building
- 2 Ask about understanding of the role of the community matron and the reason why they have been allocated one
- 3 Ask to give an account of their health problems, how they perceive their health, how their health affects their life, their function and their feelings, and what impact their health has on their family, friends and carers
- 4 Ask what help they receive, whether it meets their needs and whether they have needs that are not being met
- 5 Ask about their experiences of being admitted to hospital, what they perceived to be the cause of their admission and whether hospital admission could have been avoided or not
- 6 Ask to reflect on the help they receive from their community matron and whether this has led to improvements in their life and had any effects on their potential or actual admission to hospital.

If necessary, interviewer to prompt patients to talk about community matron involvement with:

- medicines
- hospital admission and discharge
- support and reassurance
- access
- information giving
- liaison with other services

- 7 Interviewer to offer the interviewee an opportunity to add anything else, if they wish
- 8 Close the interview. Reiterate what will be done with the tape. Thank participant

Results

The characteristics of the 24 participants in the study are shown in Table 1. Findings from the interviews were brought together into five main themes which are summarised in Box 2.

Table 1 Characteristics of the 24 participants in the study

Characteristic	Number or range
Sex	
Male	14
Female	10
Age (range), years	74–91
Ethnicity	
Caucasian	22
African-Caribbean	2
Others	0
Geographical area (PCT)	
City	11
Suburbs/rural	13
Main health conditions ^a	
Heart disease	10
Stroke disease	3
Diabetes	4
Respiratory disease	13
Cancer	1
Depression/anxiety	4
Dementia	4
More than three conditions	10
Length of contact with community matron service at time of interview (range), months	3–26
Patient lives alone	
Yes	10
No	14

^a *n* = more than 24 as most participants had more than one chronic illness

Matron as a friend

Most participants described the care, attention and support they received from their matron. Many valued the relationship they had built, often regarding the matron as a friend that they could rely on when they needed help. Many valued the emotional support they received and found their matron helped build their confidence.

Box 2 Themes of participants' views of their community matron service

Matron as a friend

Many regarded their matron as a friend and commented on the emotional support, confidence building and ease of access of the service.

Provision of personal care

Comments were made about how changing roles of their family doctor had led to a reduction in the personal care service provided by their GP. This was restored and improved by the community matron.

Matrons' skills

Virtually all participants were pleased with the ability of their matron to manage their chronic illnesses well, to sort out and explain their medication, and to organise a wide variety of services for them.

Outcomes of the service

Some participants felt that they had improved quality of life; others could self-manage their conditions and medication better since their matron had helped them. Many expressed views that matrons were keeping them out of residential care, out of hospital, reducing their need for social and psychological support and supporting their carers. Most felt that their GP's workload was reduced.

Case selection

Several participants were unsure why they had been selected for their matron's caseload and knew of others who they felt would benefit from having a matron more than they did. We felt that many of the initial people we interviewed were well supported by friends and family and so we purposively sought out some participants who were socially isolated, from more deprived areas or from ethnic minority groups.

'I think the caring is absolutely priority, I really do. Because [community matron] just takes her work so seriously she's so comforting you know. I mean she always gives me a hug as she leaves you know and as I say she's almost a friend, she really is.' (Interview 2.0)

'And I mean [community matron] can communicate with him, she makes him laugh and that, you know and she's brilliant.' (Interview 2.8, wife of patient)

'She gives, [community matron] gives, well I'm sure they all do, gives you a bit of confidence in yourself. If you feel a bit down and ready to fall out with anyone and she just talks quietly to you. Doesn't she? She does give you a lot of confidence.' (Interview 1.9)

'She's a tower of strength, you know, you feel when she's looking after you, you know you are going to be alright.' (Interview 2.3)

Matrons were considered easily available, often visiting regularly and inspiring confidence that help was at hand reliably and quickly when necessary.

'It was like nobody was there, we've got no children, our parents are dead, nieces and nephews you know are all over the place, you've got nobody and yet now we've got somebody and it makes a hell of a lot of difference to your wellbeing and everything.' (Interview 2.4)

'Knowing she's there, there's somebody there at the end of the telephone to come to me quickly because she does, even if she's got other, if it's serious she'll come to me straight away and it's a great comfort living on my own, like I do you see. Apart from that she's a very kind lady and she talks to me and I don't feel lonely anymore.' (Interview 2.1)

'I know they're ever so busy and the fact is if we rang [community matron] for something and she couldn't come then she would send [other community matron]. You know that there's somebody there that would come out ... whereas at the doctors they say "you can have a home visit but it will have to be after surgery". Well, after surgery could be anything between one and six. You know, and if you're anxious, you're not quite sure it's a long time. Whereas we know if we ring [community matron] she would be out within a couple of hours.' (Interview 1.9, patient's wife)

Some participants were not convinced that matrons could respond quickly enough for their needs.

'The trouble is when you phone up you want instant back up, where they're looking after you. You want somebody to come straight way not wait three or four hours which you have to do most times. If you want to see a doctor it's a two or three hour wait. You can't just say "I'm coming I want to see you straight away", it doesn't happen that way at all, only on telly! And it's the same with the matron.' (Interview 1.7)

Provision of personal care

Some participants compared the value of their matron with their old family doctor from decades previously. This was often coupled with dissatisfaction with changes in the role of their GP. GPs were often appreciated but sometimes criticised for lacking time, being difficult to access, and even lacking a caring attitude. Several participants recognised that the matron had taken over the role of main professional and that liaison over care was still happening and was working well with their GP.

'Doctors haven't got time now, doctors haven't got time. I mean I used to go to Dr [name supplied] like I said, always been with her and I said to my son "now I'm going to tell her about that and that", but I thought when you see all

those patients in the waiting room and I know most of them are for her, she hasn't got that time, when a matron has got that time, you see.' (Interview 1.6)

'All they actually were doing was putting me on tablets and they didn't understand what [wife's name] was going through. You can sit there and explain it to them but [it, to me] you're just a patient. All they do is look on the computer, put these down, put them down.' (Interview 2.4)

'I kept going to the doctors saying how short of breath I was and he just said "well you're getting old" and after the third time I really had to have an emergency appointment, a home appointment and I was straight into hospital.' (Interview 2.1)

'It's not doctor, touch you, salute. No, she'll often ring if I've sent for her or if I've rung and said [community matron] "I'm in trouble again". She'll say "I'm on my way" and when she gets here and sees how I am she'll say "I'll just give Dr [name supplied] a ring". I mean often at that time he's not available, he's in surgery. "Will you tell Dr [name supplied] to ring me please, it's urgent", and obviously when he's left his patients he's with he rings us straight back.' (Interview 2.0)

'Yeah. She's a good doctor and she's been here many, many times but she doesn't come anymore but she doesn't want me struggling to get to her and of course the community matrons come in and can pass messages on.' (Interview KB1)

Matrons' skills

Participants almost universally praised the skills levels of their matrons, describing how they were good at accessing services for them, providing regular checks, and commented on how thorough their assessments and checks appeared to be. Some described how matrons had helped them understand their medication and how to take it properly, some described how their matron had done tasks 'beyond the call of duty' or made themselves available when they ought not to. Some tasks carried out seemed inappropriate for the level expected from a highly trained, and highly paid health professional; however, some participants described how these low-skilled tasks had been carried out when really needed but then delegated to more appropriate providers or even incorporated into self-care.

'The first three weeks I think she more or less came every day, you know because she knew what she was doing for [patient's name] and she got his blood sugar down and injected him every day and seen to him. She supplied the incontinence pads for me and everything I got and she was brilliant, absolutely fantastic.' (Interview 2.5, patient's wife)

'She's covered all my needs. She really has, you know. I mean the main thing, especially two years ago when [husband's name] died, she listened and she arranged

for a bereavement counsellor, again to come home. You know, she'll do, organise anything for me.' (Interview 2.0)

'She was kind, she was wonderful, she talked to me and talked to me and talked to me and tested my heart, tested my blood pressure, tested everything, made appointments for me to see the professor at the hospital and she came with me, took me in the car and came back home with me, took me again and she made my life for me. It was a complete change. And she appointed a psychiatrist to come and see me and my whole life became happy and she was wonderful to me and I can never thank her enough.' (Interview 1.6)

'Well she's put a good word in for the thing on the stairs. Lift on the stairs. Put a good word in for that and she's enquiring about various things. I got a, had a heart scan on Wednesday 1st August and I wondered if she was going to, if the doctor sent me a letter and [community matron] said well if she doesn't she'd get a photocopy and give it to me, you know to see what's going off, so we knew what was going off. So I think she helps in that way, lots of ways.' (Interview 2.8)

'She's a good person and of course she is, she helps you in all ways you know. I mean now she got me that, I get my feet done over the surgery because before, I can't, I can't bend over and I can't, to do my toes and they were really bad; she used to do them.' (Interview 1.6)

'Very often she's had my medication changed because she's taken the initiative, gone back to the doctor and suggested to him this and that and he's taken her word for it. I think he's, I know Dr [name supplied] is very taken with [community matron] as well, you know, he takes notice of what she says and she has influenced the medication situation quite dramatically.' (Interview 3.1)

Outcomes of the service

Participants described several outcomes that were beneficial to them and attributed these directly to the interventions of their matron. These included better quality of life, improved physical health such as improved diabetic control or better chronic obstructive pulmonary disease (COPD) management, better mental health such as improving a depressive illness or help through a bereavement. Some participants believed that matrons helped GPs save time, and others felt that without their matron they would have needed residential care.

'I think it helps people. It keeps these people out of these nursing homes, these hospices, these wards that they'll have them in for a short period. It's nice to know that they can come home and someone can just come in and have a look as well as the doctor. I think she helps to keep them in their own home.' (Interview 1.6)

'It has saved me visiting the doctor and the problems in getting there.' (Interview 3.1)

'A lot of the problems I turned out to have were only identified when I came on to the scheme ... over the 2 years

I've had various ups and downs but these last few months I've been reasonably well, better than I have for quite a while.' (Interview 1.4)

'Well she encourages me too, well you know to be independent as far as I can and yes, knowing that she's there if needed, if you like, more determined to do other things, yes.' (Interview 3.1)

Patient: 'Last year I wasn't peeling potatoes and stuff and I cooked a dinner for six of us yesterday.'

Interviewer 'And how has that come about?'

Patient: 'You're not worried about anything, 'cause you know she's there. This is as good as I'll ever get.' (Interview KS01)

Some participants felt that hospital admission had been avoided, often by better support and improved self-management of their conditions. We could not identify any negative outcomes from this study except that a small number of participants felt that the presence of a matron was preventing them from seeing their GP.

'Well I'm sure if it hadn't been for that I would have had to go to the doctor more and he would have said "Well, I can't deal with it, we'll have to send you into hospital". Whereas with [community matron] here it's saved all that I'm sure. Oh yes, I think I would have been back in hospital before now if it hadn't been for [community matron], yes.' (Interview 3.1)

'Now when they introduced these community matrons I thought "I'm being fobbed off, the doctor don't want to know me anymore". I know that's not true really but haven't got, I can't talk to Dr [name supplied] now you see. All I can do is say to the community matron this, that and the other and they'll go and tell her. Is not the same thing as me going and telling her ...' (Interview KB1)

Avoiding hospital admission was a positive outcome for most participants, as many had negative experiences of hospital.

'I don't like laying in bed. I think you die in bed. It's a long way to go from Clifton to City hospital for my children. I like to stay at home.' (Interview KS01)

Case selection

Some participants were not clear why they had been selected to have a community matron and felt that other people they knew were more in need of the help a community matron could provide.

'Yeah, honestly, now I've got people over there, they're Welsh, come from the same village as me. I think I'm really ill, she's got diabetes and her husband, he's 80 odd, and he's got cancer, he's having chemo and ... you see I always thought that somebody should be calling on her because they've got to go over there to have their blood taken.' (Interview 1.6)

'Well I would say in cases of people that do live on their own, that don't know really, I mean because they get a bit sort of, they don't know what they're doing a bit and they don't know what time of day it is and you know all this sort of thing, well yeah in that case I mean the matron will be more helpful to them than say to me.' (Interview KB2)

We tried hard to find patients who had negative or different experiences of community matron services. In doing so, we did have participants from deprived inner-city areas, some with little social support and some from minority ethnic backgrounds (see Table 1). These participants did not have different views of their matron.

'Well I think perhaps the doctor thought that I needed somebody to keep an eye on me apart from going up to see the doctor, you know. It's a new thing coming out which I think is a good idea anyway. Takes a bit of pressure off the doctor because the matron can do anything for you anyway.' (Interview 2.8, man living alone in an upstairs flat on a council estate)

'I never understand the pen, why I never had the pen before. So we tried to phone the hospital let them know that I don't know how to use it, so they have to explain it to her and then she explain it to me. But still we never have any so she had to phone the doctor to let the doctor get some ... So you know, she's really good.' (Interview 3.0, African-Caribbean lady living on a council estate who is sole carer for her husband)

Discussion

Summary of main findings

Our participants were very positive about their experiences of community matrons. They valued the care, support and confidence building that matrons provided, as well as the thoroughness of the clinical management of their conditions. We felt that the community matrons had filled a gap that had appeared in modern primary care. Matrons were providing regular, anticipatory care with a holistic approach for housebound older people. This was a task that participants felt GPs were no longer able to provide. Several points were raised about the possible positive outcomes of the matron service that could be measured in subsequent studies.

Strengths and limitations of the study

This study has only explored patients' and carers' views in two PCTs, which provided very similar models of managed care. The matron role in other areas has sometimes been different. The model used by matrons in this study conforms very closely to the recommendations within government guidelines,⁶ and it is likely

that our findings will be generalisable to many UK settings. Qualitative methods are limited to describing possible explanations for what is happening within social interactions, and it is not possible to extrapolate our findings to claim that the community matron service is a success. We have tried to eliminate bias by covering as many matron caseloads as possible, and by searching specifically for alternative views of patients to those initially described. We have sought validation of our findings by discussion with lay representatives throughout the study and by discussion with matrons and their managers. Our findings gain plausibility and credibility through how they fit with other literature published about community matron services.

Comparison with existing literature

Investment into the community matron approach has been criticised because little hard outcome data are available, apart from one study which showed, after a 13-month follow-up period, that matrons failed to reduce emergency admissions and bed days in hospital.⁹ It may be that that study was not looking broadly enough at outcome measures, or following people up for long enough to see improvements occurring. Some qualitative studies have suggested that patients' views were that hospital admissions were reduced,^{13,14} our participants felt this to be the case and added that they felt that matrons also reduced GP workloads. Our findings, in addition, suggested that matrons helped carers and helped keep people out of residential care. The matrons in this study felt that longer follow-up of patients, and selecting patients who could respond best to anticipatory care, would lead to reduced hospital admission in future evaluations.

Some qualitative studies have suggested that matrons were popular and improved quality of life for patients.¹²⁻¹⁴ Our findings concur with this view, and support the findings of Sargent *et al* that the psychosocial support that matrons offer is highly valued.¹² They called this 'implementation surplus', as this support is not described in the Department of Health guidance about the matron's role. Our findings extend this idea further and suggest that matrons, by providing key working for a group of often housebound older people, become the holistic health professional providing the close one-to-one care that used to be offered by traditional family doctors. Changes to GP working patterns have made it increasingly difficult for them to provide such care to this group of people.

We found that some matrons were performing tasks that were beyond the call of duty, often simple things, such as nail and hair care, giving lifts, or making drinks. However, these tasks were often performed in initial contacts with new patients, becoming part of a process of relationship building before such tasks were then

passed on to more appropriate providers or became self-care tasks. Participants also spoke about the caring aspect of the matrons' role as being very valuable to them. Caring about patients was explored by Sargent *et al*,¹² who pointed out that there is evidence that older people feel less stressed when they feel 'cared for',¹⁷ and that this may improve patients' functional status.¹⁸ Providing holistic care like this may be in conflict with the concept of skill mix.¹⁹ Most primary health and social care teams use skill mix to optimise the efficiency of tasks carried out by their professionals. This has the disadvantage of fragmenting care, as several professionals are being utilised to care for one person's needs. Our findings, may suggest that, for older people with highly complex problems, the continuity of care provided by a single highly skilled professional may be a more appropriate way of providing quality care.

We did not formally analyse the discussions of our findings with local community matron groups; however, when discussing them with community matrons and their managers, several points were raised about the value of personal care. Matrons recognised the value of personal care but were concerned that this could be compromised if caseloads became too large. Some matrons actually identified close personal care as a strain on their personal resources, as some patients could be very demanding. Generally, the matrons recognised that this was often resolved by having a supportive team around them. They valued the varying backgrounds of their colleagues and could draw on different colleagues' expertise when trying to resolve difficult issues with patients.

The matrons also recognised that selecting the right kind of patient was important in ensuring that anticipatory care was successful. Both PCTs in this study initially used only a scoring system based on numbers of previous hospital admissions. Although this system often identified older people at risk of continuing hospital admission, sometimes these people were not going to be helped by case management. During the study, case selection had evolved to include incorporating a review with primary care teams about patients' suitability and criteria for accepting referrals from primary care teams and other sources. Some matrons were making initial assessments before deciding to take on new people to their caseload. One PCT has now adopted the virtual ward approach for their matrons.²⁰ Different PCTs have adopted different models of recruiting patients to community matrons' caseloads, and it is not clear from the literature which is the best method or methods.

Implications for future research and clinical practice

This study has identified several different outcomes that could be measured in subsequent studies to evaluate the community matron approach to case management. Our findings suggest that patients believe that matrons may reduce GP workload and keep people out of residential care. This could be measured in a cohort study, and the cost-effectiveness of matrons established using such outcome measures. Our findings also help to confirm that quality of life may well be improved in people receiving matrons' care and this could also be measured. Comparisons of case selection models could be made using a randomised controlled study as it is not clear how best to select patients for a community matron's caseload.

Conclusions

This study adds to the existing evidence from qualitative and survey findings that matrons are perceived to be a positive help to their patients. We have found that a holistic approach to case management is particularly valued by patients and that they like to have easy access to a health professional that they know and trust. This aspect of care seems to have been missing for some older patients with complex long-term conditions.

There are other outcome measures that could be used to assess the value of case management of matrons than measuring reduced hospital admissions; such as, quality of life of patients, reduced GP workload, and reduction in admissions to residential care. This study also highlights the importance of case selection in determining the value of the matrons' interventions. We have used lay advisors in every stage of this study and this has increased the credibility and plausibility of our findings.

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CONFLICTS OF INTEREST

None.

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