Research

Steve Iliffe, Vari Drennan, Jill Manthorpe, Heather Gage, Sue L Davies, Helen Massey, Cherill Scott, Sally Brearley and Claire Goodman

Nurse case management and general practice:

implications for GP consortia

Abstract

Background

Case management is widely promoted as a means of ensuring continuity of care, improving patient outcomes, and achieving efficient management of resources. Community matrons have been introduced recently as specialists in the case management of patients with multiple complex problems.

To understand how nurse case managers are seen by GPs and NHS managers.

(1) Telephone interviews with 41 community nurse managers recruited from 10 English strategic health authorities and two Welsh health boards; (2) face-to-face interviews with 12 nurse case managers, 12 GPs and five NHS community service managers in three study sites with different population and practitioner characteristics.

Method

Semi-structured individual interviews, by telephone or face to face.

Attitudes among GPs to nurse case managers were shaped by perceptions of the quality of community nursing on the one hand and the perceived benefit of case management as a method of reducing hospital use on the other. The dominant mood was scepticism about the ability of nurse case managers to reduce hospital admissions. Community matrons were seen as staff who were imposed on local health services, sometimes to detrimental effect.

Conclusion

The introduction of case management and community matrons may disrupt existing communities of practice and be perceived negatively, at least in areas where good working relationships between nurses and GPs have developed. Commissioners should be aware of the potential resistance to changes in skill mix and role in nursing services, and promote innovation in ways that minimise disruption to functional communities of practice.

Kevwords

case management; comorbidity; elderly; nursing; community health.

BACKGROUND

The management of long-term conditions and chronic diseases is the main challenge for primary care, worldwide. 1 It is estimated 17.5 million adults in England are living with a chronic disease, and that the incidence of chronic diseases and disabilities (long-term conditions) among those aged over 65 years will double by 2030.2 Eighty per cent of primary care consultations and two-thirds of emergency hospital admissions are related to chronic illnesses.2

In North America, comprehensive geriatric assessment with subsequent systematic management reduces hospital admission rates,3 and models of chronic disease management have evolved to exploit this impact and contain care costs for an ageing population.4 This experience has influenced thinking in the NHS, which faces rising rates of emergency admissions of older people with complex long-term problems. Across the UK the overarching policy frameworks draw on Wagner's model of chronic disease management. This is a whole-systems approach that includes the stratification of populations and targeted programmes to populations with different levels of complexity and sequelae of their conditions.5 Whole-systems approaches using case-management methods⁶ have been championed in the UK as a means of ensuring continuity of care, improving patient outcomes, and achieving efficient management of resources.^{2,7}

The core elements of any casemanagement activity are: identification of individuals likely to benefit from case management, assessment individuals' problems and need for services, care planning of activities and services to address the agreed needs, referral to, and coordination of services and agencies to implement care plans, and regular review, monitoring, and consequent adaptation of

In health policy in the UK, nursing is seen as the discipline with a remit to identify need, achieve continuity of care, promote coherence of services, and review the quality of care.8 There is an expectation that nurses will increasingly take responsibility for the day-to-day care for people with longterm conditions and complex needs.9 Four delivery models of nurse case management have been identified:

1. where case management is part of the tradition and focus of their discipline and/or clinical speciality, for example district nursing, rehabilitation nursing; 10-12

S Iliffe, FRCGP, professor of primary care for older people, Department of Primary Care and Population Studies, University College London. V Drennan, PhD, RN, FQNI, professor of health policy and service delivery, Faculty of Health and Social Care Sciences, St George's, University of London and Kingston University, London. J Manthorpe, MA, professor of social work, Social Care Workforce Research Unit, King's College London. H Gage, BA, MSc, PhD, reader in health economics, Department of Economics, University of Surrey, Guildford. SL Davies, BSc, MSc, RN, research fellow; C Goodman, MSc, PhD, RN, professor of health services research, CRIPACC, University of Hertfordshire, Hatfield. H Massey, research associate, School of Health Sciences and Social Care, Brunel University, London. C Scott, BA, MSc, RN, senior research fellow, School of

Health and Social Care, University of Greenwich, London. S Brearley, MA, visiting senior research fellow in patient and public involvement, National Nursing Research Unit, King's College London.

Address for correspondence

Professor Steve Iliffe, University College London, Department of Primary Care and Population Studies, Rowland Hill Street, London NW3 2PF.

E-mail: s.iliffe@ucl.ac.uk

Submitted: 3 December 2010; Editor's response:

31 January 2011; final acceptance: 14 February 2011.

©British Journal of General Practice

This is the full-length article (published online 26 Sep 2011) of an abridged version published in print. Cite this article as: Br J Gen Pract 2011; DOI: 10.3399/bjgp11X601370.

How this fits in

Long-term conditions and patients with complex comorbidities are the focus of clinical and policy attention, because of the demands they make on the NHS and social care services. Case management, a method of working with complex patients, has face validity as an approach to streamlining care and containing demands on services. Nurses are seen as the ideal discipline to implement case-management methods. Specialist case-management nurses (community matrons) have been appointed in England, but their inclusion within local health services has proved problematic, and this may have reduced their effectiveness. Part of the difficulty in introducing case management as a method of working, and community matrons as the experts in it, may be a result of the ensuing disruption of existing and functional communities of practice in general practice and district nursing.

- 2. within legislatively agreed systems led by social services/social work;13
- 3. as specialist posts for the case management of people with multiple conditions;14 and
- 4. as clinical specialists with dedicated case loads that focus on support of people with particular diseases and/or conditions. 15

Community matrons are examples in England of the third model, and were appointed to carry out case-management tasks for older people at risk of frequent hospital admission. The aim of this study was to elicit the views and experiences of nurse case managers and other key stakeholders about the development of nurse case management, and to identify the barriers and facilitators to its introduction. This paper describes the findings from stakeholder interviews carried out in a study of policy and practice of nurse case management in primary care, funded by the Service Delivery and Organisation (SDO) stream of the National Institute for Health Research.16

METHOD

A two-stage approach was taken, with a broad range of interviews being followed by a small number of in-depth case studies. Community nurse managers were recruited from across the 10 English strategic health authorities and two Welsh local health boards, to take part in telephone interviews. Participants for these semi-structured interviews were recruited through two routes: by letters and emails sent to nurse directors of primary care trusts, local health boards, and acute trusts identified in the Directory of Community Nursing (Professional Managerial and Health Care Publications Ltd, 2006), and by letters sent to members of the Royal College of Nursing (RCN) managers' forums in England via RCN professional officers. Forty-one informants were recruited from across the 10 English strategic health authorities and two Welsh local health boards, using a sample frame including inner-city/urban populations, rural populations, and mixed urban and rural populations, and interviews ceased once no new themes emerged. Interviews were carried out by two researchers experienced in using qualitative methods. The semi-structured interview schedule included questions on: drivers for introducing nurse case managers; models of case management in use locally, and their target patient populations; working relationships between nurse case managers and other community nurses, social services, GPs, and specialist medical services; and how these service developments were being evaluated. The findings of interviews were used to reframe and extend subsequent interviews. All the interviews, except one, were tape recorded with permission, transcribed, and compared with interview notes; interview notes were emailed back to the participants for verification and amendments.

Three in-depth case studies were undertaken prospectively following a sample of patients supported by different forms of nurse case management, including community matrons. Five primary care trusts (PCTs) in five different strategic health authority regions expressed an interest in participating in the case-study phase of the study. Three were selected to represent the greatest diversity in population, sociodemographic characteristics, and health economies, in order to optimise the authenticity and transferability of findings.¹⁷ These study sites were: an inner-urban area of a major city (site 1), a county area with small villages and different types of larger towns (site 2), and a coastal conurbation (site 3).

At each case-study site, semi-structured interviews with each participating nurse were used at baseline to gather data on their work activities: collaboration and communication methods with other professionals, organisations, and services; and their views on nurse case

management. Another element of the case study was a stakeholder analysis.¹⁸ This aimed to recruit key informants in each site to investigate the way in which nurse case management was perceived from the perspective of general practice and of NHS community services managers. The individuals were identified either through publicly available information on health service websites or else by the nurse case managers involved in the study.

Semi-structured interviews undertaken with key informants, either face to face or by telephone, as preferred. An aide memoire for the topics to be covered in this interview included: perceptions of different types of nurse case management, local influences on the development of nurse case management, experience of the contribution and impact of nurse case management, and factors supporting or inhibiting nurse case management. Data from interviews in the three case-study sites were recorded, transcribed, and stored in qualitative data-handling software. Tapes were then erased.

The transcripts and interview notes were analysed by three experienced qualitative researchers independently, using a Framework methodology, 19 and organised in NVivo software. Differences in analysis were discussed against the data until agreement was reached. Themes arising from the analysis of interviews were presented to the project's multidisciplinary steering group (consisting of lay representatives, GPs, a social worker, and community nurses) to assess their credibility, transferability, and dependability.

RESULTS

Forty-one community nurse managers were recruited. The health economies in which they worked were diverse, including

Box 1. Challenge to existing roles

- 1. 'As a GP I am involved in all aspects of managing chronic conditions with patients. I suppose that from their point of view my role is mainly diagnosis, medication, and initial information and then being here for their ongoing care, but I see it as the complete package. I will follow through wherever a patient needs it, and if a patient has a chronic illness I see my role as being to provide medical care and referral for all their health needs. I also refer on or write letters to social services and housing and so on, if a patient says they need it.' (GP)
- 2. I have an excellent district nurse linked to this practice. I think she does what you might call case management as well. She identifies some of my patients who have complex needs and talks to me about what extra care they might need, and goes out to those patients more than she would normally. She also inputs into the practice medical notes when she sees things she thinks I should know or if she
- 3. The other community matrons [CMs] are having the same problems. The CMs also have to give oncall support for the district nursing team now so sometimes she has to see their patients as well as her own when she is on call, especially those needing palliative care.' (Community matron)

17 that were inner urban or urban, 20 that were mixed, and four that were rural. In the three case-study sites, 12 GPs and five NHS community service managers were interviewed. All GPs were either working with community matrons or had met one designated for their practice or area.

The themes identified in the analysis of interviews were: challenges to roles; relationships with nursing services; negotiating entry to the workforce; the anticipated impact of case management; and finding a place for nurse case managers.

Challenge to existing roles

The GPs saw their own role as a clinical case manager, who worked with others to address patients' needs, and they viewed district nurses as also carrying out some case-management tasks (Box 1 quotes 1 and 2). The introduction of a new type of nurse who had been given that remit by managers within the PCT was therefore met by GPs, who expressed a range of reactions from puzzlement to exasperation.

It was evident that there were few nurses with the skill and experience to immediately take on the role of community matron. Not only did some practitioners already in post doubt the need for this new role, but some of those entering it found their new tasks very demanding. One community matron described how 1 week had been taken up with 3 days of training, two clinical supervision sessions, and a continuing care (for NHS funding) application. As there was no one with whom to share the tasks, she described working on her day off and over the weekend to get the work done. This was compounded by having to provide cover for other nursing services (Box 1 quote 3)

General practice relationships with nursing services

The GPs offered different views of the district nursing service. On the one hand, those with closely linked, long-time district nurse(s), who also used shared patient records with the practice, were viewed positively in their close working with the GP, and this was said to be to the patients' benefit (Box 1 quote 2).

On the other hand, those experiencing loosely linked district nursing teams with high staff turnover and little communication with the GP or the practice, except in writing, reported an ineffective district nursing service of poor quality, which their patients also commented upon (Box 2 quotes 1-3). Overall, GPs with a lesspositive experience of working with district

Box 2. Relationships with nursing services

- 1. 'Patients with multiple problems require telephone to telephone or face-to-face contact ... a 5-minute chat is better than a fax, which is what we get now from the district nurses. (GP)
- 2. Typically our patients are not impressed [with the district nursing service]; they never see the same person twice and, for patients with a chronic problem, it can be quite confusing. (GP)
- 3. 'The district nurses are task driven not case driven.' (GP)
- 4. There are some GPs who believe that the introduction of the community matrons was at the expense of district nursing and therefore they have a fundamental problem with the concept as they see it robbing another budget (NHS manager)
- 5. Officially I work alone not as part of the team. However in reality the six of us worked together quite closely and shared caseloads when one of us was ill or away from work for some other reason.' (Community matron)
- 6. I am assessing four new patients, but one of them may be too ill for what I can do for him. The trouble is that he doesn't fit in the community matron's remit either, so I may end up taking him on anyway.' (District nurse)

nurses saw them as focused on technical tasks, for example wound dressings or administering injections, rather than a broader patient focus.

Some informants noted that negative attitudes to the introduction of community matrons, on the part of GPs, had been exacerbated by the accompanying reorganisation of district nursing services, in which established district nurse links to general practice were dismantled or district nurse staff reallocated (Box 2 quote 4).

Seen from the nurses' perspective, relationships between nurses with casemanagement roles and other community nurses (and other services) were complex. Community matrons found themselves still engaged in district-nursing tasks, while district nurses performing management tasks felt they were under pressure to increase their workload (Box 2 quote 5). Some nurse case managers applied their criteria more strictly than others, and there appeared to be more flexibility and fluidity of definition when the case-management function was part of wider case loads. District nurses talked about picking up patients who did not quite fit the community matron criteria (Box 2 quote 6) and gave examples of referrals from social services of patients who had complex needs, but for whom no obvious nursing care was required, being 'offloaded' on to them.

Negotiating entry to the primary care team workforce

Referrals to specialist services by nurse case managers still had to be mediated through general practice, and being able to arrange this depended on others recognising the value and expertise of the community matron (Box 3 quote 1).

One of the consequences for nurse case managers of having to negotiate their relationships with other services and 'earn recognition' as the patients' key worker was that, from an organisational perspective, there was no clarity about who was responsible for the patient's care or for communicating information to the patient or to other professionals. There were examples given of blood test results requested by a clinical nurse specialist being sent to the GP, and social care services being organised for a patient by hospital staff, without reference to or communication with their community matron (Box 3 quotes 2 and 3).

The impact of nurse case management

All GPs were sceptical about the ability of community matrons to reduce hospital admissions or GP workloads by concentrating on very complex, often 'chaotic', patients with multiple long-term conditions. This scepticism varied according to the experiences of working with community matrons; those that worked more closely or over a longer period mainly reported very positive experiences (Box 4 quotes 1 and 2).

Finding a place

All but one of the GPs questioned the 'stand-alone' community matron post and offered an alternative view of team settings where nurses with advanced level skills should be located. While, in their view, more nurse practitioners should be trained to work within practice teams, other nurse case managers should be part of community rehabilitation teams or rapid response/intermediate care teams. The only GP who did not offer this view had a community matron based in and working solely with their practice's patients.

Many of the GPs considered the current

Box 3. Negotiating entry to the workforce

- 1. One of my patients has improved and that is excellent. She had an angioplasty following my referral of her to her GP, and his referral onto a heart specialist, and that's helped her a lot. I feel that this patient may have helped the GP to see that I can do a professional job and he's been a bit more accepting of me the past few days. He even made me a cup of tea and bought it into my office, which is unheard of.' (community matron)
- 2. 'I know I have some patients who are in the community matron's caseload and they sometimes get confused about whether to contact her or to call the surgery to see me. '(GP)
- 3. 'She's very good [the community matron] but sometimes she ends up doing things I think could be done here in the practice, or I get complaints from the district nurse that the community matron is doing something the district nurse should be doing.' (GP)

Box 4. The impact of nurse case management

- 1. The GPs have not been very receptive to the community matron role because they couldn't see what they were doing. This resulted in some difficulties for the community matrons but if the community matrons demonstrated admission avoidance and the like, then they have been more willing to work with them.' (Nurse manager)
- 2. I was pretty sceptical in the very early days about community matrons, I have to say. They seemed to be thrust upon us with very little planning, and having a new service of that nature suddenly having to fit in with our existing patterns of working was quite a challenge. However, they have worked very well, and I value what they do highly. They cater for that proportion of our patients who need more than we as a surgery can realistically provide in such depth, and have become an integral part of what we do.' (GP)
- 3. We tried not to ask for GP support to the community matrons on a monetary basis but sold the role as a bonus for practices, which benefits GPs and their patients. The community matrons do some practice nurse triage work and get support from the GPs on individual cases.' (NHS community services manager)

model of community matron as resource intensive and questioned whether the resources financing it might be used to greater effect in other ways. Only one GP could identify a reduction in demand on their services from some, but not all, patients receiving community matron services.

The managers of community services thought there was confusion or at least a lack of clarity in the minds of commissioners and others about the meaning of the term 'case management', who should be undertaking that type of role, and with which population group (Box 5 quote 1). They stated that the community matron posts had been established to meet targets set by the strategic health authority, in the face of ongoing resistance from local

The managers all reported that their organisation and the wider commissioning community were questioning the value of the community matron posts, as currently configured. The community matrons commented on how disruptive they found these challenges and changes, particularly in maintaining relationships with GPs and hospital consultants (Box 5 quote 2). There was a view that there was never enough time to embed the service or to learn from

changes. They also noted a dissonance in their concept of the role, derived in the main from centrally produced implementation literature, and that of others working around them.

In summary, in the authors' view, two factors seem to determine the experience of introducing nurse case management. The first is the perceived adequacy of existing community nursing services and their level of collaboration with general practice, and the second is GPs' attitudes towards case management as a technique for solving care problems among their patients. Different responses of stakeholders have been mapped onto theses axes, as shown in Figure 1. The matrix is skewed towards the category satisfactory working relationships between community nursing and general practice/ambivalent or negative about case management' because most responses fell into this category.

DISCUSSION

Summary

Attitudes among GPs to nurse case managers were shaped by perceptions of the quality of community nursing on the one hand and the perceived benefit of case management as a method of reducing hospital use on the other. The dominant mood was scepticism about the ability of nurse case managers to reduce hospital admissions among patients with complex comorbidities. Community matrons in particular were seen as staff who were imposed on local health services, sometimes to detrimental effect. The most positive views of community matrons came from GPs who saw them as a solution to a poorly functioning district nursing service, or whose scepticism about case management was reduced by positive experiences.

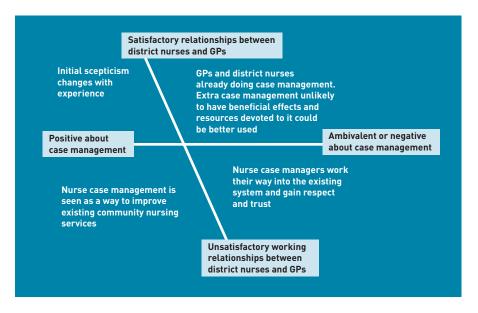
Strengths and limitations

A rich set of contextualised data was obtained by identifying nurses, GPs, and managers from within the three case-study sites. At the time of interview, the community matron posts had been established and filled for at least a year, so that the reaction to change or a new role per se was not captured. All qualitative analysis is a process of reduction and it is recognised that this can compromise the totality of the qualitative data,20 but the risk of the researchers importing their own views or interpretations was also minimised by the multidisciplinary background of the research team. The use of telephone and face-to-face interviews may have produced

Box 5. Finding a place

- 1. It is not likely that the community matron service will be increased and we are worried that as community matrons leave, for whatever reason, they many not be replaced — case management is seen as low priority because it caters for so few people at such high cost.' (NHS manager)
- 2. Now that GPs are moving to practice-based commissioning, some of them would like community matrons to go to the surgeries and set up there so that they can share responsibilities over to the community matrons. That's not our philosophy and it feels wrong. Whatever happens, we just have to go with it and make it work, but it's frustrating because it means we can never settle down to do what we want to do. There's talk of us having to move back to within the district nursing team, we really don't want to do that.' (Community matron)

Figure 1. Matrix of stakeholders' views of case management and their perceptions of existing relationship between district nurses and GPs.



subtly different ideas, experiences, and themes, but, in the authors' view, was justified on pragmatic grounds. In terms of the trustworthiness of the data and analysis, 17 confirmability was sought using the range of perspectives within the research team, and credibility, transferability, and dependability were tested by presenting findings to the project's multidisciplinary steering group.

Comparison with existing literature

The expectations attached to case management as a technique for enhancing the quality of care of complex patients so powerfully that it reduces their hospital admission rates have not been achieved, at least for frail older people.²¹ The scepticism of GPs towards the introduction of case management appears to have been well founded, even if it was partly founded on anxieties that nurse case managers would act in a proxy capacity for doctors, substituting nursing for medical labour.²²

The uptake of an innovation is determined by the compatibility of the innovation with existing practices, its ease of use, the relative advantages it offers practitioners, its modifiability, its evident effectiveness, how much it increases the adopter's social approval, and its voluntary nature. 23-25 The introduction of community matrons, and case management in general, was in conflict with some of these characteristics of change. While one GP adopted the principle and practice of community matrons enthusiastically, difficulties with compatibility, the anticipated lack of effectiveness of case management, and its imposition 'from above' overshadowed this response among most participants in this

study. Nevertheless, there was evidence that patients' experience of benefit from case management did alter perceptions of the value of the community matron.

The experiences described here can be framed in terms of the challenges posed to communities of practice by the introduction of community matrons and case management. Communities of practice are the semi-formal working arrangements that allow different disciplines to engage with each other in a joint enterprise, develop a shared repertoire of work tasks and styles, and learn from each other's experiences.26 In this study, sites functioned as communities of practice when a good working relationship between GPs and district nurses was reported. This organic way of working across discipline boundaries allows disparate but resilient groups of GPs and nurses to absorb the needs of their mutual patients, come to understand these needs (digestion), and go on to provide a response that is tailored to the patient.²⁷ Case management could add to that digestive process, but it had to work against scepticism and a perception that its prime practitioners, the community matrons, were not necessarily the best solution to the community's problems. such communities of practice, 'brokers' transfer ways of working from one community to another, but at the price of not finding a stable situation, being neither fully engaged with the new community nor completely outside it.28 This seems to describe the sometimes uncomfortable experience of some community matrons.

Implications for practice and research

The introduction of new working methods

Funding body

Service Delivery and Organisation (SDO) funding stream of the National Institute for project Health Research (NIHR): 08/1605/122.

Provenance

Freely submitted; externally peer reviewed.

Competing interests

The authors have declared no competing interests.

Acknowledgements

We thank all those who agreed to be interviewed as part of this project.

Discuss this article

Contribute and read comments about this article on the Discussion Forum: http://www.rcgp.org.uk/bjgp-discuss (like case management) or new staff applying these new methods (community matrons) may disrupt existing communities of practice and be perceived in a negative light, at least in areas where good working relationships between nurses and GPs have developed. Negative perceptions may change with experience of success, and new types of primary care worker like community matrons will need to negotiate roles in or close to existing communities of practice. Part of the lack of success of case management as a technique may be due to its poor fit with existing working relationships and work routines. Attention to these factors may allow the potential of nurse-led case management to be realised, and this needs to be explored further in experimental studies that take into account the need to work with the grain of clinical work, rather than across it.

A new iteration of commissioning

healthcare services in England has been proposed,²⁹ with predominant roles for GPs. Commissioners should be aware of the potential resistance to changes in skill mix and role in nursing services, and promote innovation in ways that minimise disruption to functional communities of practice. Policy makers may wish to consider the cost-effectiveness of winning local support for innovation among demonstrator sites versus the difficulties of national roll out that seems to be at odds with local priority setting. GP consortia may wish to engage more fully with developments in community nursing and help promote change in this service, but should include robust evaluation of processes and outcomes in any innovation. Patients and carers may benefit from clear explanations about professionals' roles responsibilities.

REFERENCES

- Bodenheimer T, Wagner E, Grumbach K. Improving primary care for patients with chronic illness. JAMA 2002; 288(14): 1775-1779.
- Department of Health. Supporting people with long term conditions: 2 liberating the talents of nurses who care for people with long term conditions. London: Department of Health, 2005.
- Stuck AE, Siu AL, Wieland GD, et al. Comprehensive geriatric assessment: a 3. meta-analysis of controlled trials. Lancet 1993; 342(8878): 1032-1036.
- Bodenheimer T, Wagner E, Grumbach K. Improving primary care for patients 4. with chronic illness: the chronic care model, part 2. JAMA 2002; 288(15): 1909-1914
- Wagner E. Chronic disease management: what will it take to improve care for 5. chronic illness? Eff Clin Pract 1998; 1(1): 2-4.
- 6. Dixon J, Lewis R, Rosen R, et al. Managing chronic disease: what can we learn from the US experience? London: King's Fund Publications, 2004.
- Royal College of Physicians, Royal College of General Practitioners, NHS 7 Alliance. Clinicians, services and commissioning in chronic disease management in the NHS; the need for co-ordinated management programmes. London: Royal College of Physicians, 2004.
- 8. Drennan V, Goodman C. Primary care nurses and the use of case management for people with long-term conditions. Br J Community Nurs 2004; **9(12):** 22–26.
- Wanless D. Securing good health for the whole population. London: Department of Health, 2004.
- Bergen A, Case management in the community: identifying a role for nursing. J Clin Nurs 1994; 3(4): 251-257.
- 11. Long AF, Kneafsey R, Ryan J, Berry J. The role of the nurse in the multi professional rehabilitation team. J Adv Nurs 2002; 37(1): 70-78.
- Evans C, Drennan V, Roberts J. Practice nurses and older people: a case management approach to care. J Adv Nurs 2005; 51(4): 343-352.
- Challis D, Darton L, Johnson L, et al. An evaluation of an alternative to long stay hospital care for frail elderly patients: I. The model of care. Age Ageing 1991; **20(4):** 236-244.
- Boaden R, Dusheiko M, Gravelle H, et al. Evercare evaluation interim report: implications for supporting people with long term conditions. Manchester: NPCRDC University of Manchester, 2005.
- Forbes A, While A, Dyson L, et al. Impact of clinical nurse specialists in

- multiple sclerosis: synthesis of the evidence. J Adv Nurs 2003; 42(5): 442-462
- Goodman C, Drennan V, Davies S, et al. The nursing contribution to chronic disease management: nursing case management (ENCAM). Report to SDO. Southampton: NIHR SDO, 2009.
- Guba E, Lincoln Y. Effective evaluation: improving the usefulness of evaluation results through responsive and naturalistic approaches. San Francisco, CA: Jossev-Bass 1981
- 18. Brugha R, Varvasovszky Z. Stakeholder analysis: a review. Health Policy Plan 2000; 15(3): 239-246.
- 19. Crabtree BF, Miller WL. Primary care research: a multi-method typology and qualitative road map. In: Crabtree BF, Miller WL (eds). Doing qualitative research: research methods for primary care. Thousand Oaks: Sage Publications Ltd, 1992: 3-28.
- Burnard P. Qualitative data analysis: using a word processor to categorise qualitative data in social science research. Soc Sci Health 1998; 4(1): 55-61.
- Gravelle H, Dusheiko M, Sheaff R, et al. Impact of case management (Evercare) on frail elderly patients: controlled before and after analysis of quantitative outcome data. BMJ 2007; 334(7583): 31
- Adams A, Lugsden E, Chase J, et al. Skill-mix changes and work intensification in nursing. Work, Employment and Society 2000; 14(3):
- Moore GC, Benbasat I. Development of an instrument to measure the perception of adopting an information technology innovation. Inform Syst Res 1991; 2: 172-191.
- Rogers EM. Diffusion of innovation. 5th edn. New York, NY: Free Press, 2003.
- Shaw B, Cheater F, Baker R, et al. Tailored interventions to overcome identified barriers to change: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2005; (3): CD005470.
- Barton D, Tusting K, eds. Beyond communities of practice. Cambridge: Cambridge University Press, 2005.
- Kahn W. Holding fast: the struggle to create resilient caregiving organisations. Hove: Brunner-Routledge, 2005.
- Wenger E. Communities of practice: learning, meaning and identity. Cambridge: Cambridge University Press, 1998.
- Department of Health. Equity and excellence: liberating the NHS. London: Department of Health, 2010.