Physicians’ view of primary care-based case management for patients with heart failure: a qualitative study

FRANK PETERS-KLIMM1, REBECCA OLBORT1, STEPHEN CAMPBELL1,2, CORNELIA MAHLER1, ANTJE MIKSCH1, ANNIKA BALDAUF1 AND JOACHIM SZECSENYI1

1Department of General Practice and Health Services Research, University Hospital Heidelberg, Germany, and 2National Primary Care Research and Development Centre, University of Manchester, UK

Abstract

Background. As part of a trial aiming to improve care for patients with chronic (systolic) heart failure, a standardized, multifaceted case management approach was evaluated in German general practices. It consisted of regular telephone monitoring, home visits, health counselling, diagnostic screening and booklets for patients. Practice-based doctors’ assistants (equivalent to a nursing role) adopted these new tasks and reported regularly to the employing general practitioner (GP).

Objective. To explore GPs’ perceptions of case management, subsequent changes in relationships within the practice team and the potential future role.

Method. Twenty-four GPs participated in five moderated, semi-structured, audio-taped focus groups. Full transcription and thematic content analysis was undertaken.

Results. GPs rated all elements and instruments of case management conducted by doctors’ assistants feasible, except for the geriatric assessment as patients had not been at risk. GPs perceived difficulties in their own role in delivering health behaviour counselling. Relationships between doctors’ assistants and patients and between GPs and patients or doctors’ assistants remained stable or improved. All GPs perceived a variety of role changes in doctors’ assistants including more in-depth medical knowledge and higher responsibilities yielding more recognition by patients and GPs. Some GPs suggested transferring the case management programme to other chronic conditions and that it should form part of a further education curriculum for doctors’ assistants.

Conclusion. This primary care-based case management model characterized by the orchestrated delegation of tasks to doctors’ assistants offers a promising strategy of enhanced chronic illness care, but it needs further adaptation and evaluation.

Keywords: focus group, qualitative research, primary care, disease management, case management, heart failure, chronic care

Introduction

Throughout the world, life expectancies are increasing and populations are ageing leading to an increase in the incidence and prevalence of chronic health problems [1, 2]. To address the rising rates of chronic conditions, an evolution in healthcare systems which moves beyond acute care models is imperative [3]. Although primary care plays a central role in chronic illness care, it has been suggested that primary care needs to be redesigned to enhance efficiency [4]. The chronic care model (CCM) is a comprehensive framework to coordinate activities within primary care systems to improve organizational and health outcomes and to foster more productive interactions between trained, proactive care teams and well-informed, motivated patients [5]. The six elements for providing high-quality care to patients within this model are delivery system design, self-management support, decision support, clinical information systems, community resources and health-care organization [5]. Incorporating elements of the CCM in the design of interventions has been
shown to improve process and health outcomes for patients with chronic illnesses [6].

The Heidelberg Integrated Case Management (HICMan) model represents a team-based chronic disease management approach for patients with (systolic) heart failure in primary care. It advocates delegating tasks to non-physician health professionals within the general practice team using standardized generic and disease-specific instruments and tools [7]; not substituting but supporting physicians for enhanced chronic illness care [8]. It therefore addresses the first four of the six elements of the CCM.

As in many other European countries, German general practices are typically small and office-based, run privately by the employing general practitioner (GP) [9]. Only about 6% of practices employ a nurse [10]. German GPs typically employ doctors’ assistants, but there is variability in their roles. The qualification and training of doctors’ assistants consists of a 3-year part-time curriculum in practice and vocational school. Doctor’s assistants fulfil some roles that in other countries, such as the UK, are delegated to phlebotomists, health-care assistants and practice nurses [11]. In Germany, the involvement of doctors’ assistants in chronic illness care is not part of the routine training of doctors’ assistants. The views of doctors’ assistants about this case management model (HICMan) have been published elsewhere [11]. This paper explores GPs’ perceptions of the feasibility of the implementation of case management by doctors’ assistants, its usefulness and benefit for patients and general practice.

Methods

The multifaceted primary care-based case management intervention

The elements, instruments and responsibilities of the structured case management are shown in Table 1, and have been described in detail elsewhere [7]. Briefly, doctors’ assistants were given a new role as a case manager, consisting of regular monitoring by telephone and by home visits over a period of 12 months. Patients with a higher symptom burden and at higher risk for deterioration were monitored more closely, i.e. patients with NYHA (New York Heart Association) functional status [12] III or IV 3-weekly versus I or II 6-weekly. Home visits included specific instruments, i.e. for additional screening, for depression (PHQ-9) [13], anxiety (GAD-7) [14], dementia (DemTect) [15], need of nursing care (Barthel index) [16] and risk of falling (walking-counting test) [17]. Tools included a monitoring list (for telephone monitoring and home visits), an assessment of health behaviour (see 5A, discussed later), disease-related evidence-based patient leaflets, booklets and a patient’s diary. All doctors’ assistants completed 6 h of training at their local university in November 2006. All participating GPs received an introduction to case management and—as part of the CCM-element self-management support—specific health behaviour counselling according to the ‘5A’ model that represents an evidence-based approach to induce a behavioural change and is the recommended counselling approach for behavioural changes according to the recommendations of the US Preventive Services Task Force (USPSTF) [18, 19]. The elements of this approach are assessment of present behaviour (ask and assess), patient counselling (advise), collaborative agreement with the patient about realistic goals (agree), assisting the patient during his lifestyle changes (assist) and frequent follow-ups (arrange). The doctors’ assistants supported this counselling by asking patients about three defined behaviours (Table 1) [20]. In addition, GPs received a short lecture on a corresponding heart failure clinical practice guideline [21] and screening.

Focus group

A qualitative, exploratory design was used to guide data collection and analysis. Focus groups are a socially oriented research method that can be used to gain an insight into peoples’ view of their everyday working lives [22]. Focus groups allowed doctors to discuss their views, draw comparisons, discover areas of agreement or disagreement and reflect their own and others’ experiences. After a detailed study of the literature, we compiled an interview guideline based on the HICMan trial protocol. Six questions were then developed and asked in every focus group:

(i) Why did you take part in the trial (motivation)? (introductory question)
(ii) How practicable, useful and beneficial did you find each instrument in the case management approach?
(iii) Did you experience any changes in your relationship with patients included in the trial?
(iv) Did you experience any changes with doctors’ assistant and practice team?
(v) Can all or some of this multifaceted intervention be used in daily routines?
(vi) What improvements do you suggest?

Participants

Thirty-one GPs from 29 practices participated in the HICMan trial [7] and 24 (from 23 practices) volunteered to participate in this study. These 24 participants (25% female) were aged 33–66 years with a mean of 49.1 years (SD = 9.3). Work experience (defined as time since certification) ranged between 0 and 33 years (mean 14.5 years, SD = 9.2). The 23 practices of the participants showed the following characteristics: 7 were solo practices, 16 were group practices with up to four GPs. They were located in the city (8), suburb up to 20 km circumference of the city (5) and rural (10) areas. List sizes (patients per quarter) were 500–1000 in 5, 1001–1500 in 10 and more than 1500 in 8 practices. Eight, 12 and 3 practices had 1–3, 4–6 and 7–11 doctors’ assistants per practice, respectively.

Data collection and analysis

From October to December 2007, five focus groups (four conducted by F.P.-K., GR principal investigator and an experienced qualitative researcher, and one by A.B., registered nurse
and study research nurse of the HICMan trial) were held in local University Departments. By this time, the participating doctor’s assistants and GPs had implemented case management since 8–10 months (out of 12 in total), meaning that at least two-thirds (4 and 10, respectively) of the telephone monitoring sessions and at least two home visits with each patient had been performed (from January to October 2007). Each focus group involved three to seven GPs and each lasted about 90 min.

The data were analysed using ATLAS.ti Software [23]. First, inductive content analysis with open coding was performed whereby each segment of the interview transcripts was coded using a paraphrase that connoted these words [24]. These open codes were descriptive in nature. The codes were clearly defined and linked with representative examples from the original text. Two researchers (R.O. and F.P.-K.) looked for similarities in the data and assigned the same code to data that had some common characteristics. The analyses proceeded to pattern and thematic coding, clustering the descriptive codes into groups of related conceptual subcategories or generic categories. Deductive content analysis was performed assigning the subcategories to the unconstrained categorization matrix. Coding of aspects that did not fit into the categorization frame created further concepts based on inductive concept analysis [25]. Subcategories and generic categories were added after agreement had been reached among the researchers (R.O., F.P.-K., C.M. and A.M.). In addition, the researchers (R.O., F.P.-K., C.M. and A.M.) met regularly to compare and to discuss coding schemes and reached consensus on the emergent subcategories.

Results

Motivation to participate
Most of the participating GPs stated that their motivation for participating in the trial was that they believed in increasing the integration of doctors’ assistants in chronic illness care. Some were interested in contributing to primary care research or were interested in heart failure (Table 2).
Interest in and willingness to contribute to health services

Heart failure as a relevant care problem in general practice

Participating GPs regarded the standardized telephone monitoring as feasible, but there were diverse views about its usefulness and patient benefit. Some felt that it supported patient adherence (e.g., to medication or self-care) and helped to detect early or prevent unfavourable incidents (like cardiac decompensation). However, a few did not value it, because of the missing added information or patient benefit (Table 3).

Home visits were perceived differently regarding their feasibility, usefulness and benefit. Some GPs judged the implementation being as easy, although barriers related to opportunity costs of doctor’s assistants undertaking home visits and therefore being absent from the practice. In small practices, for example, there was a lack of staff to compensate for the absence of the doctor’s assistant. Some doctor’s assistants needed to invest personal time to conduct home visits. However, many GPs felt that the home visits were useful for doctor’s assistants, as they were able to see the social background of the patient and it helped to establish a trustful relationship.

Depression and anxiety disorder screening was perceived as feasible, but there was disagreement regarding its usefulness and benefit, as the results did not lead to a change of clinical management.

GPs considered the training and conduct of the geriatric basic assessment by the doctor’s assistant as feasible, but judged that it was not indicated in this patient group as they were not at risk.

All participating GPs perceived the medication review as feasible, useful and beneficial for the patient.

Most GPs perceived the standardized assessment of patients’ health behaviour (‘ask and assess’) as feasible, useful and beneficial. However, in contrast, most GPs could not implement the next steps (‘advice, agree and assist’) of the 5A counselling as part of their daily routine or regarded it as tedious and unsuccessful. Many participants attributed this to a lack of adequate training as they found themselves not accustomed to this new type of stage-specific, operationalized type of counselling. Diverging views therefore emerged regarding its usefulness and benefit for patients, with some GPs perceiving changes in patient of behaviour and others not.

Patients’ leaflets, booklets and the patient’s diary were perceived as feasible, useful and beneficial for the patient.

Impact of case management on role concepts and relationships

This category describes all role changes affecting the practice team, and the relationships within the practice team and with the patients.

As illustrated in Table 4, all GPs perceived a variety of role changes of doctors’ assistants while their own role was not challenged. According to participants, doctors’ assistants acquired more in-depth medical knowledge as a result of case management, they were enabled to perform tasks with higher responsibilities and won more recognition from their employing GP (and patients), the patients and the wider practice team. Table 4 also shows the perceived changes in relationships. Some GPs reported that once doctor’s assistant adopted the new case management role, this led to transient competition and jealousy between doctors’ assistants where more than one doctors’ assistants was employed in a practice, but this was seen as a short-term issue of transition and not a long-term problem.

Most GPs felt their relationship with the doctor’s assistant was either unchanged or sometimes improved.

No GP reported worsening relationships with their patients; rather they remained stable and often improved. Moreover, GPs felt that relationships between doctors’ assistants and patients improved consistently.

GPs’ suggestions for improvement and future perspectives of case management

Table 5 lists the variety of GPs’ suggestions for improvement and future direction of case management in Germany.
Table 3  GPs’ opinion on feasibility, usefulness and benefit for the patients of elements of the case management

| Element                                      | Feasibility of implementation | Usefulness/patient benefit                                      |
|----------------------------------------------|-------------------------------|----------------------------------------------------------------|
| Telephone monitoring                         | Feasible (16 : 1)<sup>a</sup> | Partly useful with some patient benefit (16 : 4)<sup>a</sup>    |
|                                              |                               | Up until now we’ve had to intervene two times due to phone call, because the patient actually planned to wait for his next visit in two weeks time. And, for example, last week we acutely referred a patient to the cardiologist due to decompensation, because she said her breathing wasn’t normal. And that was only due to a remark on the telephone (FG 2 Doctor J) |
|                                              |                               | And the doctor’s assistants make the phone calls routinely and like doing them. But I haven’t noticed that I receive more information for myself (FG 1 Doctor D) |
|                                              |                               | In the end, maybe also due to my type of patients, patients and I had no benefit [of the telephone monitoring]. All in all it stayed the way it was. Maybe because patients needed to be seen regularly by myself anyway . . . for check of volume status and so on—still I am responsible (FG 3 Doctor R) |
|                                              |                               | There was a little more to complain about regarding the feasibility, but I’d already mentioned that on the phone, that we probably just have too few staff. Well I don’t know. It just felt like ‘Oh God, now we’ve got all the visits to do!’ (FG 1 Doctor C) |
| Home visits                                  | Partly feasible (10 : 10)<sup>a</sup> | Partly useful with some patient benefit (10 : 3)<sup>a</sup>    |
|                                              |                               | Okay, it was feasible. As I’d said, she also invested some of her free time into it, which was also a reason why implementation into practice worked (FG 5 Doctor Q) |
|                                              |                               | Well the implementation of the home visits wasn’t difficult at all (FG 1 Doctor B) |
|                                              |                               | There was a little more to complain about regarding the feasibility, but I’d already mentioned that on the phone, that we probably just have too few staff. Well I don’t know. It just felt like ‘Oh God, now we’ve got all the visits to do!’ (FG 1 Doctor C) |
| Depression and anxiety disorder screening    | Feasible (7 : 0)<sup>a</sup>  | Partly useful with some patient benefit (5 : 13)<sup>a</sup>    |
|                                              |                               | . . . a positive factor: This screening is applicable and feasible. You can implement it quite well and it retrieves information relatively quickly. Patients were able to fill in the form and you can achieve a quick result. Therefore, I would say reasonable and feasible (FG 2 Doctor I) |
| Geriatric basic assessment                   | Feasible (9 : 0)<sup>a</sup>  | Not beneficial (5 : 13)<sup>a</sup>                           |
|                                              |                               | The doctor’s assistant hadn’t performed the tests before (Geriatric Basis Assessment) . . . , but after the training she was immediately capable of putting it into practice (FG 5 Doctor Q) |
|                                              |                               | They were so good from head to toe, that you somehow couldn’t take any benefit from the tests (FG 3 Doctor L) |

<sup>a</sup>  Continued
Whereas some GPs suggested a reduction in the complexity of the case management programme, many already implemented single elements in their daily routine for all patients (e.g., the medication review). Many suggested transferring the concept of case management to other patient groups with chronic diseases, but some stated that financial issues needed to be clarified first, such as extra remuneration of doctor’s assistants performing such roles and the associated costs of undertaking home visits.

Many GPs stated that the increased integration of doctors’ assistants in patient care with greater delegation of roles and responsibilities represented the correct future direction for shaping general practice in Germany. Some stated that case management should be offered as a part of a curriculum for further education of doctors’ assistants.

Discussion

The participating GPs generally valued the case management programme that integrates doctors’ assistants in the management of patients with heart failure. However, there were diverse opinions about the usefulness and benefit for patients of the different elements of case management.

Table 3  Continued

| Feasibility of implementation | Usefulness/patient benefit |
|-------------------------------|---------------------------|
| Medication review (at home)   | Feasible (18 : 0)*        | Useful and beneficial (7 : 0)* |
|                               | *Well, listing [the medication] is always good. Things popped up during the review. These things did not come up until the doctor’s assistant really looked for what [medication] the patient has being taken and what he has at home... and what he is doing right or wrong. This review was quite well practical and feasible (FG 3 Doctor X)* | In my opinion checking the medication was the most important thing (FG 1 Doctor A) |
| Health behaviour counselling  | Feasible (8 : 0)*         | Just positive. It enables a patient focused approach (FG 2 Doctor H) |
| Assessment of stages of change as part of 5A (ask, assess) | Not feasible (1 : 11)*     | Partly useful and with some patient benefit (5 : 7)* |
| Counselling (advice, agree, assist) | *Well, all this changing of mind in the different stages, like the theory we’d learnt (during training). I couldn’t locate that practically in my daily actions. For example motivating (patients) to exercise (FG 1 Doctor E) Because of this lifestyle intervention, I now have to motivate patients to stop smoking or, even worse, to lose weight. I regarded that as very strenuous and tedious and not successful. I really have to say that and in spite of extensive training, which we had, I couldn’t—in spite of my best efforts—apply them to patients (FG 1 Doctor C)* | The patients cooperated well to achieve the next step. And they all achieved the appropriate grade of implementation related to their capabilities (FG 5 Doctor Q) |
| Patient’s diary               | Feasible (11 : 0)*        | Useful and with some patient benefit (17 : 6) |
|                               | *No problem. We eagerly wrote down the self-set targets and this worked quite well (FG 1 doctor B)* | It (patient’s diary) makes a lot of sense. Because when he comes to the practice and is put on the scales; that doesn’t mean his weight was okay in-between visits. And I can follow that up really well; all of a sudden I receive a call ‘My husband has put on 2 kilos, what should I do? Due to the patient diary!’ (FG 2 Doctor G)* |

*Verdicts on feasibility, usefulness and patient benefit are based on the number of quotes subcategorized positive versus negative (n:n) and on the authors’ overall judgement based on the content of the quotes.
Table 4 GPs’ opinion of impact of case management on role concept and relationships within the primary care team

| Perceived role changes |  |  |
|-----------------------|  |  |
| Doctor assistant has more in-depth medical knowledge | Yes, they know their dosage already, when we talk about ramipril or something similar. They understand that now and that’s the way it should be. Because the doctor’s assistant is seen a lot more often than we are (FG 2 Doctor G) |  |
| Doctor assistant can perform tasks with higher responsibilities | It has an effect on the whole General Practice, especially if the doctor’s assistant hadn’t had responsibility for more duties previously (FG 1 Doctor B) |  |
| Doctor assistant wins more recognition | She’s the youngest in my team and according to me it raises her value (FG 1 Doctor D) |  |
| Steady physicians’ role | My role hasn’t changed. I very much appreciated that my staff were so involved and dedicated (FG5 Doctor Q) |  |
| Perceived changes in relationships | Transient competition and jealousy between doctors’ assistants in the practice team |  |
| In my practice it was assigned to the newest doctor’s assistant in the team and to the one with no allocated role. And my most experienced staff member was jealous after a short period of time (FG 3 Doctor U) | Unchanging relationship between doctor’s assistant and physician |  |
| That had always been very open. There was no change in that respect. There was just an extra project which we now talked about, but nothing changed (FG5 Doctor Q) | Improved relationship between physician and patient |  |
| The other patient had been with us for a long time, but I had the impression he was a little reserved and I’m sure I occupied myself more with him and I had the feeling, that he now prefers to come (FG4 Doctor K) | Improved relationship between doctor’s assistant and patient |  |
| They (doctor’s assistants) then just built up a different relationship with the patients because they had seen their home environment (FG1 Doctor B) |  |  |

A local and regional implementation of alternative role concepts for doctor’s assistants in Germany—results from the HICMan trial

According to participants, some elements of case management could be used directly and quickly, such as medication review and patients’ diaries and booklets. Moreover, telephone monitoring, assessment of health behaviour (ask and assess), geriatric basic assessment, medication review, the patients’ diary and home visits are at least partly feasible. However, GPs stated health behaviour counselling (advise, agree and assist) was not feasible and GPs in smaller practices questioned the cost–benefit ratio of some home visits because of the long absence of doctors’ assistants from the practice.

GPs reported unchanged or improved relationships with doctors’ assistants and improved relationships with patients. There is potential for the approach to be transferred to other chronic conditions, but there are implications for workforce planning and remuneration and the training of doctor’s assistants.

In countries with a longer tradition of primary health-care teams, for example, in the UK, changes in roles and identities across professional boundaries in primary care between doctors and nurses created an initial culture of uncertainty among GPs [26]. In contrast, in our study for Germany (with little skill mix differentiation in primary care), the participating doctors reported that the new concept of delegating tasks to doctors’ assistants did not undermine their perceived professional role. These findings need to be interpreted carefully as to their generalizability, as we asked GPs about tasks that were performed mainly by their employed doctors’ assistants. First, it is possible that participants were prone to practice-based case management by their voluntary participation in the parental HICMan trial [7]. Second, the findings of our complementary qualitative study with the doctor’s assistants indicated that acceptability of adopting new tasks.

Table 5 GPs’ suggestions for improvement and future perspectives

| Implementation of medication review in daily routine | I was able to transfer the medication check-up into my therapy planning. It was sometimes a little difficult. Especially with new substances, we had a look at them and I think it was also a good lesson for the doctor’s assistant (FG5 Doctor P) |  |
| Transfer of concept of care to other patient groups | That would be a good addition for all chronically ill patients—cancer, heart failure, arthritic deformations (FG 1 Doctor C) |  |
| Financial issues | If you really wanted to implement it on a larger scale there would have to be some kind of reimbursement you could pass on to the doctor’s assistants. With their small salary, for all the extra effort . . . , there would have to be some kind of extra remuneration (FG1 Doctor C) |  |
| Unfavourable cost–benefit ratio of some home visits | The feasibility, if a staff member is gone during working hours for an hour there and an hour back, she is gone for about 2.5 to 3 hours, which means doing without her for nearly the whole morning—that can’t be handled (FG 1 Doctor B) |  |
| Increased Integration of doctors’ assistants in patient care under the principle of delegation | To delegate things to an experienced doctor’s assistant so that she specializes in that area. One has specialized on assessments for a few years and now she does the home visits and I think she will continue to deal with heart failure. Another one deals with the disease management programme. Delegation is a good thing and I will definitely promote that as long as it’s possible to minimize (FG5 Doctor Q) |  |
| Case management as part of a curriculum for further education of doctors’ assistants | There are a few different inter-connected issues. So in my opinion, if you really wanted to call it ‘home and family medicine’ where chronically ill patients are cared for routinely, then this kind of case management would be the ideal concept for the further education of doctor’s assistants (FG 1 Doctor C) |  |

Results from the HICMan trial
and roles for patient care in case management was closely linked to the support of the GPs [11].

The increasing prevalence of patients with chronic diseases is associated with increasing multimorbidity and complexity [27]. Internationally, meeting the needs of patients with chronic diseases while containing costs is important for redesigning health-care systems. This is interconnected with issues of skill mix and workforce planning. Shortage of primary care doctors and other health professionals emphasizes the challenge of maintaining an affordable health-care system [28]. According to Bodenheimer et al. [28], prevention and management of chronic diseases are best performed by multidisciplinary teams in primary care and associated reforms to payments that reward practices that incorporate multidisciplinary teams. In Germany, the Advisory Council for the Assessment of Trends in German Health Care System echoed in 2007 the same message as the WHO in 2002, in recommending the use of multiprofessional teams applying principles of a CCM [3, 29].

At the individual practice level, the principles of both substitution and delegation imply that non-physician health professionals with appropriate training can take over specific tasks while maintaining or improving patient outcomes [8, 30, 31]. The German Federal Medical Association is opposed to nurse–doctor substitution and favours delegation under the ‘therapeutic responsibility’ of doctors [32]. For example, community nurses implementing new tasks in cooperation with GPs are currently being evaluated [33].

To adapt to the requirements of ambulatory care, the regulations for training of doctors’ assistants in Germany were changed in August 2006 focusing on a ‘meta-professional’ approach stressing social skills like communication with the patient and with practice team members while reducing medical aspects of training [34]. The ‘Institute for Continuous Medical Education’ of the German Professional Organization of GPs has developed apprenticeship training for doctors’ assistants in general practice of 200 units aimed at ‘improved support of patients and GPs in general practice’ leading to the certificate ‘care assistant’. Forty units of this curriculum focus on case management and chronic disease management [35]. However, this new curriculum has not been evaluated yet.

The limitations of the study are that the participating practices were larger than most German practices, although the sample of GPs had a broad range of ages. Therefore, the findings might not reflect the views of GPs working in smaller/solo practices in Germany. Moreover, GPs were taking part in a trial and therefore may differ from other GPs. Opinions in focus groups are expressed within a group setting, and it is possible that they were influenced by the more dominant participants. However, the presence of a moderator helped ensuring that all members were given the opportunity to voice their opinions, and by conducting five separate focus groups the influence of certain individuals was reduced. Since we focused on thematic and content analysis, we did not explore the emotional and linguistic level, which could have given further insights into the motivation and attitudes of the participants. We explored doctors’ consultants’ views of HICMan [7], but patients’ views are a crucial source of information on the feasibility and acceptability of the case management programme, and are missing in this study.

Conclusion and perspective

Our findings suggest that enhancing the roles of doctors’ assistants by incorporating a heart failure case management programme is feasible and acceptable to German GPs. However, we believe that adaptation of the programme, its transferability to other conditions and a payment is crucial for its successful implementation. In the wider international context of primary care practice nursing, the delegation of tasks using tailored case management may be a promising strategy for improving the quality of care for patients with chronic conditions and for patient self-management.

Acknowledgements

We are indebted to the participants of the focus groups. This study is part of the project ‘Quality of life’ (No. 10 of the Competence Network of Heart Failure) that investigates health-related quality of life of patients with CHF.

Funding

The project is financed by the German Federal Ministry of Education and Research (BMBF) (grant-number 01GI0205/21).

References

1. O’Connell JB. The economic burden of heart failure. Clin Cardiol 2000;23:6–10.
2. American Diabetes Association. Economic costs of diabetes in the U.S. in 2007. Diabetes Care 2008;31:596–615.
3. WHO. Innovative Care for Chronic Conditions—Building Blocks For Action—Global Report. 2002. www.who.int/diabetesactiononline/about/icccglobalreport.pdf (12 January 2009, date last accessed).
4. Rothman AA, Wagner EH. Chronic illness management: what is the role of primary care? Ann Intern Med 2003;138:596–615.
5. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA 2002;288:1775–9.
6. Tsai AC, Morton SC, Mangione CM et al. A meta-analysis of interventions to improve care for chronic illnesses. Ann J Manag Care 2005;11:478–88.
7. Peters-Klimm F, Mueller-Tasch T, Schellberg D et al. Rationale, design and conduct of a randomised controlled trial evaluating a primary care-based complex intervention to improve the quality of life of heart failure patients: HICMan (Heidelberg Integrated Case Management). BMC Cardiovasc Disord 2007;7:25.
8. Laurent M, Reeves D, Herrmens R et al. Substitution of doctors by nurses in primary care. Cochrane Database Syst Rev 2005; CD001271.
9. Regional Association of Statutory Health Insurance Physicians. Qualitätsbericht 2006 [Quality Report 2006]. http://www.kvbawue
Goldstein MG, Whitlock EP, DePue J. Multiple behavioral risk in Qualitative Inhaltsanalyse. Grundlagen und Techniken [Qualitative Content Analysis. Fundamentals and Techniques], 7th edn, 1st edn: 1983. Weinheim: Deutscher Studien Verlag, 2000.

18. Goldstein MG, Whitlock EP, DePue J. Multiple behavioral risk in Qualitative Inhaltsanalyse. Grundlagen und Techniken [Qualitative Content Analysis. Fundamentals and Techniques], 7th edn, 1st edn: 1983. Weinheim: Deutscher Studien Verlag, 2000.

19. Whitlock EP, Orleans CT, Pender N et al. Evaluating primary care behavioral counseling interventions: an evidence-based approach. Am J Prev Med 2004;27:61–79.

20. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. Am J Health Promot 1997;12:38–48.

21. Muth C, Gentien P, Butzlaff M. Heart Failure—Clinical Practice Guideline No. 9 of the German Society of General Practice and Family Medicine [DEGAM]. Düsseldorf: Mikron Publishing, 2006.

22. Kitzinger J. Qualitative research. Introducing focus groups. BMJ 1995;311:299–302.

23. ATLAS.ti Scientific Software Development GmbH [computer program]. Version 5.2. Berlin, Germany, 2007.

24. Mayring P. Qualitative Inhaltsanalyse. Grundlagen und Techniken [Qualitative Content Analysis. Fundamentals and Techniques], 7th edn, 1st edn: 1983. Weinheim: Deutscher Studien Verlag, 2000.

25. Elo S, Kyngas H. The qualitative content analysis process. J Adv Nurs 2008;62:107–15.

26. Williams A, Sibbald B. Changing roles and identities in primary health care: exploring a culture of uncertainty. J Adv Nurs 1999;29:737–45.

27. Vogeli C, Shields AE, Lee TA et al. Multiple chronic conditions: prevalence, health consequences, and implications for quality, care management, and costs. J Gen Intern Med 2007;22:391–5.

28. Bodenheimer T, Chen E, Bennett HD. Confronting the growing burden of chronic disease: can the U.S. Health Care Workforce do the job? Health Aff 2009;28:64–74.

29. Fischer G, Glaeske G, Kuhlmeier A et al. Kooperation und Verantwortung: Voraussetzungen einer zielorientierten Gesundheitsversorgung [Cooperation and Competence: Pre-conditions of Goal-oriented Health Care], 2007. www.svr-gesundheit.de (26 May 2008, date last accessed).

30. Jenkins-Clarke S, Carr-Hill R, Dixon P. Teams and seams: skill mix in primary care. J Adv Nurs 1998;28:1120–6.

31. Jenkins-Clarke S, Carr-Hill R. Changes, challenges and choices for the primary health care workforce: looking to the future. J Adv Nurs 2001;34:842–9.

32. Flintrop J, Merten M, Gerst T. Delegation Arztlicher Leistung: Mangel macht vieles moeglich [Delegation of medical services: shortage (of doctors) renders much possible]. Dtsch Arztebl 2008;105:A-979.

33. van den Berg N, Meinke C, Heymann R et al. A GNES: Hausarztunterstuetzung durch qualifizierte Praxismitarbeiter—evaluation der Modellprojekte: Qualitaet und Akzeptanz. Dtsch Arztebl 2009;106:3–9.

34. Bristrup R. Medizinische Fachangestellte: Lerninhalte werden den modernen Erfordernissen angepasst [Medical assistants: learning contents are adjusted to modern needs]. Dtsch Arztebl 2005;102:A-2990.

35. Institut für hausärztliche Fortbildung [Institute of Continuing Medical Education in General Practice]. Versorgungssassistentin in der Hausarztpraxis—VERAH [Care assistant in general practice—VERAH]. www.hausarztverband.de/cms/uploads/media/verah_folder_12_02_08.pdf (26 May 2008, date last accessed).

36. Peters-Klimm F, Muller-Tisch T, Remppis A et al. Improved guideline adherence to pharmacotherapy of chronic systolic heart failure in general practice—results from a cluster-randomized controlled trial of implementation of a clinical practice guideline. J Eval Clin Pract 2008;14:823–9.

Accepted for publication 19 July 2009