What fosters or prevents interprofessional teamworking in primary and community care? A literature review

Andreas Xyrichis, Karen Lowton

Publication date
01-01-2008

Document Version
Accepted version

Citation for this work (American Psychological Association 7th edition)
Xyrichis, A., & Lowton, K. (2008). *What fosters or prevents interprofessional teamworking in primary and community care? A literature review* (Version 1). University of Sussex.
https://hdl.handle.net/10779/uos.23416601.v1

Published in
International Journal of Nursing Studies

Link to external publisher version
https://doi.org/10.1016/j.ijnurstu.2007.01.015

What fosters or prevents interprofessional team working in primary and community care? A literature review

Word count (excluding abstract, references and tables): 4752

Word count including references: 5877

Abstract

Background: The increase in prevalence of long-term conditions in Western societies, with the subsequent need for non-acute quality patient healthcare, has brought the issue of collaboration between health professionals to the fore. Within primary care, it has been suggested that multidisciplinary teamworking is essential to develop an integrated approach to promoting and maintaining the health of the population whilst improving service effectiveness. Although it is becoming widely accepted that no single discipline can provide complete care for patients with a long-term condition, in practice, interprofessional working is not always achieved.

Objectives: This review aimed to explore the factors that inhibit or facilitate interprofessional teamworking in primary and community care settings, in order to inform development of multidisciplinary working at the turn of the century.

Design: A comprehensive search of the literature was undertaken using a variety of approaches to identify appropriate literature for inclusion in the study. The selected articles used both qualitative and quantitative research methods.

Findings: Following a thematic analysis of the literature, two main themes emerged that had an impact on interprofessional teamworking: team structure and team processes. Within these two themes, six categories were identified: team premises; team size and composition; organisational support; team meetings; clear goals and objectives; and audit. The complex nature of interprofessional teamworking in primary care meant that despite teamwork being an efficient and productive way of achieving goals and results, several barriers exist that hinder its potential from becoming fully exploited; implications and recommendations for practice are discussed.

Conclusions: These findings can inform development of current best practice, although further research needs to be conducted into multidisciplinary teamworking at both the team and organisation level, to ensure that enhancement and maintenance of teamwork leads to an improved quality of healthcare provision.

Key words: Community care; Interprofessional care; Multidisciplinary teams; Primary care; Review; Teamworking

Key points

What is already known about the topic?

- The increase in prevalence of long-term conditions requires an integrated approach to promoting and maintaining population health, whilst improving service effectiveness.
- Interprofessional working is not always achieved in delivery of healthcare services; this may be due to a variety of reasons.
-

What this paper adds

- Two main factors, team structure and team processes, continue to have an impact on interprofessional teamworking in primary and community care in the 21st century.

- Within team structure, team premises, team size and composition and the availability of organisational support are important indicators of successful teamworking. Within team processes, setting clear goals and objectives for the team, ensuring regular team meetings and audit appear to foster effective teamworking.

Introduction

The place and importance of interprofessional teamworking has been debated within health and social care services over many decades. In the United Kingdom (UK) in 1920, the Ministry of Health recommended that teamworking was the way in which primary care could best be delivered, when its committee proposed that general practitioners (GPs) should work in teams with other healthcare professionals in health centres (Milne, 1980). Later publications supported this idea (Standing Medical Advisory Committee, 1963) but it was the Harding Report (Department of Health and Social Security (DHSS), 1981) that established teamwork as the best way that co-ordinated community care could be provided in the interest of improved patient care. Currently in Britain, the Department of Health (DH) and National Health Service (NHS) continue to reinforce the World Health Organisation's (WHO, 1978) emphasis on the importance of teamworking through numerous policy documents (Department of Health, 1987, Department of Health, 1996 and Department of Health, 2005).

Recent British publications continue to advocate in favour of teamworking. In 2004, the NHS Improvement Plan (Department of Health (DH), 2004a) and Choosing Health (Department of Health (DH), 2004b) reported that the DH would work to improve effective partnerships in practice not only between healthcare agencies but between government departments as well. Moreover, Creating a Patient Led NHS (DH, 2005) reported that regulatory, institutional and cultural barriers create discontinuity of care for patients since organisations and professionals fail to 'join up' around the patient. It is likely, therefore, that specific barriers between professional groups need to be identified and addressed so that that a 'joined-up' health service can provide continuity of care for patients (DH, 2005).

The literature suggests that professional specialisation has led to a fragmentation between professions, which is likely to result in staff members being unable to look at problems holistically (Mariano, 1989; Hilton, 1995). Teamworking is recommended as a

way of providing holistic care since team members' skills, experience and knowledge are pooled together to produce the best outcome (Gilmore et al., 1974; DHSS, 1981). Moreover, interprofessional working could achieve greater resource efficiency and improve standards of care through a reduction in duplication and gaps in service provision, enabling the delivery of holistic services (Hallett and Birchall, 1992) and better continuity of care. A belief that the success of healthcare is due to individual abilities can be helpful for some patients at certain times, although many services can no longer afford the duplication, delays and mistakes that can occur when professions do not work together (Øvretveit et al., 1997).

Primary and community care encompass not only medical care but social care, health promotion, and illness prevention strategies aimed at maintaining and enhancing the health of the population through health education and early identification of health problems (Poulton and West, 1993). For such an all-encompassing service to be delivered a mixture of various skills and professionals is required, which is perhaps why a team approach to care has been consistently advocated. However, despite continued government recommendations, evidence suggests that teamworking in healthcare is far from achieved in practice (UK Audit Commission, 1992; Poulton and West, 1993). Earlier reviews (West and Slater, 1996; Borrill et al., 2001) identified a range of issues that may affect teamworking. However, since numerous healthcare reforms have taken place in the first years of the 21st century (Bolton, 2004), this review aims to contemporise our understanding by identifying barriers and facilitators to interprofessional teamworking, and to make recommendations for building effective strategies that enable an improved quality of health service provision.

This review aimed to identify and explore factors that inhibit or facilitate interprofessional teamworking in primary and community care settings. An important aspect of determining the validity of a literature review is its replicability; we have

attempted to enhance the credibility of this review by making details of the literature search explicit (Cooper, 1998).

Methods

For the purpose of this literature review and considering time and cost limitations, we included an electronic search of three bibliographic databases, a web-based search, a hand search of relevant journals, and an ancestry approach (Cooper, 1998).

Many different terms are used to describe the collaborative work between professionals such as 'interprofessional collaboration' and 'teamwork'. Indeed, the terms 'multiprofessional', 'interdisciplinary' and 'multidisciplinary', are often used interchangeably in the literature (Payne, 2000; Leathard, 2003). 'Collaboration' is a complex phenomenon that is vaguely defined and inappropriately used, both in research and practice settings (Henneman et al., 1995). This confusion has hindered its usefulness as a variable in studies and may account for the lack of consistency reported in healthcare literature of the levels of collaboration occurring in clinical settings, and the inconsistencies in reports of the correlation between collaboration and patient outcomes (Zimmerman et al., 1993; Henneman et al., 1995). However, any grouping of terms is debatable and different terms may be considered more appropriate for different circumstances since interpretations can be influenced by personal and professional values, beliefs, and knowledge, and can differ between different groups of people and even professionals (Pietroni, 1992). In this review, we used all possible terms to describe professionals of different backgrounds working together as a team.

Three bibliographic databases were used for a comprehensive search; Medline, Cinahl, and Embase. Keywords used included "interprofessional"/ "multidisciplinary"/ "teams"/ "teamwork"/ "primary care"/ "community care" with synonyms and Boolean operators (OR, AND) being used as appropriate (see Table 1).

Insert Table 1 around here

Searching databases is rarely sufficient to justify a comprehensive review, so a web-based search via internet search engines was also conducted in order to access relevant websites. Additionally, we searched through e-journals as they can provide easy and fast access to articles ahead of print publication (Hart, 2001). Hand searching relevant journals was also found to be productive, as was using an ancestry approach, a process that involves the researcher examining the reference lists of the articles already acquired for unknown studies (Cooper, 1998).

Database searches identified a total of 387 abstracts, of which 18 were considered for inclusion. Internet search engines provided valuable background information but no research papers, while searching e-journals resulted in identifying ten additional research articles for inclusion. Hand searches of relevant journals and using the ancestry approach were also productive with five and eight articles being identified, respectively (Fig. 1). In addition, two papers were later located through informal search channels (Cooper, 1998).

Insert Figure 1 around here

A predefined set of exclusion and inclusion criteria was used to identify as relevant and current evidence as possible for review. Exclusion criteria were articles not relevant with the topic under investigation, not written in English, dated prior to 1994, non-research

articles, and papers that were not published in accessible peer reviewed journals. Papers from non-acute healthcare areas such as primary care and community care were included, as well as articles from countries outside the UK.

Findings

The search yielded a final total of 43 articles. After a preliminary reading of the full papers, ten articles were identified and included in the review. Reasons for excluding 31 articles were: review papers (5); discussion papers (5); not focused on primary or community care (4); not identifying barriers or facilitators to teamwork (17). In addition, the two papers identified through informal channels were not considered in the research synthesis since their findings did not add anything new to the literature review (Williams and Laungani, 1999; Elston and Holloway, 2001). The ten reviewed articles used a broad range of research design, with seven studies conducted in the UK and one study each in Canada, USA, and Republic of Ireland. Due to the nature of the topic, most of the studies adopted a qualitative approach. Three studies used semi-structured interviews and three used focus groups. Furthermore, a longitudinal study used the System for the Multiple Level Observation of Groups (SYMLOG), and three studies adopted a survey approach. A summary of the included papers is presented in Table 2.

Insert Table 2 about here

A thematic analysis was used to interpret the large amount of information presented in the papers, since this approach allows clear identification of prominent themes, is flexible, and is a means of integrating qualitative and quantitative evidence (Dixon-Woods et al., 2005). For this study the first six stages from the seven-stage framework for analysing data by Colaizzi (1978) were used (Table 3).

Insert Table 3 around here

Colaizzi's (1978) method derives from empirical phenomenology, which has been argued to be the most common form of phenomenological research (Hein and Austin, 2001). This method is a descriptive technique used to elicit the true meaning of a phenomenon and has been adopted successfully by a number of nurse researchers (Hallett, 1995; Kociszewski, 2004). Colaizzi's (1978) approach places emphasis on rigour and replicability since it is a systematic approach with the steps used in the analysis of data made explicit. Hallett (1995) argues that this is well fitted to the meticulous researcher who strives to achieve rigour within his/her work.

From the analysis of the data two main themes emerged, each containing three categories, summarised in Table 4.

Table 4 about here

Team structure

The structure of the team emerged as a very important factor for effective teamworking; it was identified in one form or another in seven of the ten studies. The first category, team premises, was considered as important as it was reported to enhance information transaction, facilitate communication, and increase personal familiarity (Cook et al., 2001; Molyneux, 2001; Rutherford and McArthur, 2004). Characteristically one team member from Cook et al.'s (2001) study reported:

> 'When you were separate, a busy SW (social worker) or CPN (community practice nurse), a lot was done by leaving a message and eventually you would catch up with each other. Now (with the Community Mental Health Team (CMHT)) you can respond to things more quickly.' (Cook et al., 2001:145).

In contrast, team members having separate bases or buildings can result in them being less integrated with the team, which may limit team functioning and effectiveness. This is clearly illustrated in Wiles and Robinson's (1994) report where community midwives reported to be the least integrated members of the team; one reason suggested for this was that their clinics were being held in different locations from the team's base.

The size and composition of the team was the second emerging category. As reported by Poulton and West (1999), larger teams appear to have lower levels of participation compared with smaller sized teams, which was found to significantly correlate with team effectiveness. Molyneux's (2001) qualitative study and Rutherford and McArthur's (2004) ethnographic study report similar findings that smaller sized teams appear to function better than larger teams, since too large a team was reported to be cumbersome. On the other hand, Borrill et al. (2000) found that larger teams were externally rated by Health Authority management, the NHS parent Trust and GPs, to be more effective in dimensions of clinical practice and teamworking although any possible explanations for this were not provided by the authors.

In addition to the size of a team, its composition was found to be an important factor influencing interprofessional working. Borrill et al. (2000) found that teams with greater occupational diversity reported higher overall effectiveness and the innovations introduced by these teams were more radical and had significantly more impact both on the primary care trust (PCT) and on patient care. Furthermore, Molyneux (2001) and Rutherford and McArthur (2004) identified that the status of team members has implications for the effective working of the team, as it may inhibit members from participating in the decision-making process and from providing input in team meetings. Characteristically one nurse in that study reported:

> 'I think we all feel restricted within our own grades…as to how far you can go really.' (Rutherford and McArthur, 2004:356)

The issue of leadership was another important issue that emerged from the analysis. Wiles and Robinson (1994) reported that there was a lack of understanding as to who was the leader of the Primary Health Care Team (PHCT), while Field and West (1995) argue that lack of leadership caused frustration to team members and led to poor decision-making. Rutherford and McArthur (2004) reported similar findings, where one practice nurse stated that the consequence of poor leadership was 'things fall[ing] apart' (Rutherford and McArthur, 2004, p. 355). In addition, Borrill et al.'s (2000) study revealed that lack of clarity about leadership predicted lower levels of team effectiveness and was associated with poor quality teamworking.

The final issue classified in this category is the stability of the team in regards to its members. Authors reported that teams with a high proportion of full-time staff and those that had been working together for longer as a team, were found to be more effective. On the other hand, staff reported disappointment when they felt that they were likely to be moved to another area; this acted as a barrier to the effective working of the team (Field and West, 1995; Borrill et al., 2000; Cashman et al., 2004).

The third category within the theme of team structure was organisational support. Organisational support both for teamworking and for the team's members is crucial to the effective working of a team since the team works for and within an organisation and will therefore be affected by the interaction with the wider organisational context (Borrill et al., 2000). Cashman et al. (2004) found that the team's level of effectiveness dropped over time; the reason provided by participants was the lack of organisational rewards for the team's improved working, which caused team members to feel concerned and disappointed. Perhaps a more important issue within the theme of organisational support

is the encouragement of innovation and implementation of change. Borrill et al. (2000) reported that high support for innovation in the team predicted overall team effectiveness and was powerfully related to quality of teamworking. In addition, Poulton and West (1999) found that teams open to innovation and change were more likely to work well as a team, structure their work more effectively, and be more effective in their healthcare delivery. However, organisational support appears to be limited in some instances, which can be an important barrier to effective teamworking. Field and West (1995) and Cashman et al. (2004) stated that when the teams they studied did not receive support to implement changes, team members were left feeling powerless, discouraged, and gravitated to 'old ways' as the following response illustrates:

> 'When we have control we move forwards, when we don't we backslide.' (Cashman et al., 2004:193).

Team processes

Team processes was the second theme that emerged from the analysis and includes three categories; team meetings, goals and objectives, and audit.

Borrill et al. (2000) highlighted the importance of regular team meetings, finding them to be associated with effective teamwork and with greater levels of innovation. However, Wiles and Robinson (1994) found that three quarters of their participants reported not having regular team meetings while most professionals only met with each other if they had encountered problems that needed to be discussed. Similar problems are discussed in Field and West's (1995) study where just one out of the six studied practices set aside time for regular team meetings while presenting time pressure as the barrier for this; for example a GP observed, 'It's quicker to go it alone.' (Field and West, 1995, p. 124). In that practice, however, a high degree of participation was achieved as a consequent

result of having regular team meetings. Molyneux (2001) also reported positive results of team meetings, where the team considered meetings to be of high value:

> 'Some people might think that's time wasted but in my view it's been time very well spent.' (Molyneux, 2001:31).

Rutherford and McArthur (2004) similarly reported that team meetings were particularly important for the effective working of the group, as they identified them to have assisted in breaking down professional barriers and improving interprofessional communication.

Enhanced communication achieved through team meetings was identified as an important facilitator for effective teamworking. Lack of communication was reported as causing misconceptions about each profession's roles and responsibilities. In Hanafin and Cowley's (2003) study exploring multidisciplinary communication in the Irish public health nursing service, constructive working relationships were found to correlate positively with effective interprofessional communication; 70% of respondents in this study confirmed this. Similarly, Dieleman et al. (2004) reported from their study of community-based teams in Canada that open communication was considered important for collaboration. This is further advocated as important for collaboration in Rutherford and McArthur's (2004) study where a GP reported:

> 'Whether we are doctors, nurses, receptionist or whatever, unless we communicate amongst each other… everything breaks down.' (Rutherford and McArthur, 2004:357).

Regular team meetings and enhanced communication amongst team members also assist in resolving interprofessional conflict and promote positive interpersonal relations. However, conflict appears to exist in some teams in respect of professional identity, which can act as a barrier to positive relations in the team and effective teamwork. Wiles

and Robinson (1994) reported that health visitors were unhappy and fearful of the extension of the practice nurse role into their area of expertise (health promotion). Moreover, GPs sometimes had difficulties accepting redistribution of power, as one GP noted:

> 'It's sometimes difficult for us to let go of our power base and as they (nurses) take on more responsibility for developing the service, we can feel that our role is being eroded.' (Cook et al., 2001:148).

Furthermore, positive interpersonal relations help achieve an encouraging work environment for team members, enhancing communication and effective teamwork. Molyneux (2001), Cook et al. (2001), Dieleman et al. (2004), and Cashman et al. (2004) all reported that a climate of mutual respect and trust was fundamental for effective teamwork to exist.

Clear team goals, the second category, is one of the most important factors for the promotion of effective teamworking according to Poulton and West (1999), since their study revealed that clear, shared objectives had the biggest single effect on the primary healthcare team's effectiveness. Team goals are further advocated by Borrill et al. (2000) who reported that the clearer the team's objectives, the more effective the team, while Cashman et al. (2004) stated that their team's common goals and direction was one of the reasons for improving team functioning. However, blurring and misunderstanding of professionals' roles and responsibilities are common and important issues inhibiting effective working. Wiles and Robinson (1994) and Field and West (1995) identified that a lack of clear understanding for each professional's role and responsibility was an important barrier for effective teamwork, and was also found to promote professional conflict and intractable personality differences amongst team members.

Clear goals and objectives facilitate good team functioning as they help to clarify each professional's roles and responsibilities and provide the team with a vision, so that individual creativity can be pooled to produce creative team outcomes (West and Markiewicz, 2004).

Lastly, audit is a vital process by which the team's effectiveness can be evaluated in order to sustain good performance or improve performance in areas where this is warranted (West and Markiewicz, 2004). In Field and West's (1995) study, primary healthcare team members expressed frustration that there was no evaluation of the team and that individual contributions were unacknowledged, resulting in difficulties for staff in maintaining their self-respect, since, as no opportunities for comparison existed, their expertise, skills and contribution appeared undervalued. Moreover, it was identified that regular appraisals could offer a range of incentives including a chance to discuss problems, consider appropriate solutions to improve team functioning, praise individuals for their contribution, and provide support where needed.

Audit is essential for providing teams with effective feedback in order to sustain and improve their performance, and for providing energy and incentives to team members by giving publicity to team successes (West and Markiewicz, 2004). Moreover, work within organisational psychology suggest that regular team feedback on team performance and the competitive nature of relations are contextual factors influencing team effectiveness (Hackman, 1990; Tannenbaum et al., 1992). We were surprised to find therefore that only one study addressed audit within teamwork and conclude that this factor, overlooked when facilitating teamwork, requires further investigation.

Discussion

The analysis of studies included in this review revealed that the structure of the team, including the geographical proximity of team members, its size and composition, and the support an organisation provides, is vital for successful teamworking. Using thematic analysis, the findings were separated into themes and categories to allow in-depth consideration of issues; however it should be noted that these categories are not mutually exclusive, and the functioning of a team will also depend on how these factors interrelate. Nevertheless, various team processes such as setting regular team meetings, with clear goals, objectives and regular appraisals, have an effect on the levels of teamwork obtainable amongst a team and subsequently on the team's effectiveness.

The review was as comprehensive as possible; including multiple perspectives and methodological orientations within the time and resource constraints. The studies included for analysis were carefully selected and critically appraised in an attempt to include high-quality research. With an awareness of the limitations of each paper (Table 1), we acknowledge that even though this review was thorough; it was not exhaustive, as some papers using keywords outside of our search strategy may have been missed. In particular, there is a risk that grey literature, being published beyond peer-reviewed journals, may report less robust research and can be difficult to locate and retrieve.

The issues of team goals and team conflict were common in the literature, although this is to be expected as researchers and government have advocated these issues as important for teamworking from early on (DHSS, 1981; Cartlidge et al., 1987). Evidence tends to suggest that teams fail to work effectively when explicit team goals are lacking (West and Slater, 1996). However, in-depth exploration of what team goals should be and in what way and by whom these should be developed is lacking in the literature.

Cartlidge et al. (1987) suggest that good interpersonal relations can promote teamworking by inhibiting team conflict, but from the reviewed studies only one reported lack of team conflict (Molyneux, 2001), while others identified some form of team conflict as a barrier to teamwork either at an interpersonal or interprofessional level. West and Markiewicz (2004) argue that debate is desirable in teams, and the team's diversity and differences should be a source of excellence and creativity, but when conflict is experienced as unpleasant by members it can destroy relations and lower team effectiveness. Lack of understanding of each other's roles and tasks, absence of clear goals and poor organisation support are regarded as facilitating the appearance of such conflict (Payne, 2000).

Team meetings and team premises were identified as important by fewer studies even though the NHS Management Executive (1993) clearly stated the need for regular team meetings to be established. West and Poulton's (1997) research found that teams working in primary healthcare rarely set team-level objectives while failing to set aside time for regular team meetings, and subsequently score lower than other teams working outside the healthcare arena. In an attempt to address such problems the Royal College of General Practitioners, in partnership with the Royal College of Nursing and the Institute of Healthcare Management, have recently developed the Quality Team Development (QTD) programme, which aims to assess and promote team functioning within primary healthcare (Royal College of General Practitioners Quality Team Development (QTD), 2000). We await the findings with interest.

Support for innovation, a process of developing new and improved ways of doing things, was identified as influencing teamworking in 60% of studies. West and Wallace (1991) advocated innovation in their report of an exploratory study of eight primary healthcare teams using questionnaires, achieving a 72% response, since they found that team innovativeness was highly associated with team collaboration and suggest the importance of these teams being innovative in order to be effective. West et al. (2005) continue to suggest that the quality of teamworking is powerfully related to team innovativeness. This is also advocated by the DH (2005), since it stated that primary healthcare must adapt to the changing healthcare system while highlighting the important role of innovation in achieving this.

A more surprising finding of this review was the low proportion of studies addressing issues of organisational responsibility such as rewarding team members for their efforts and establishing regular appraisal systems (audit). Whilst much attention has been given in exploring teams' internal processes, less thought is given to exploring how the wider organisations support and promote their teams. The importance of incentives seems to have been acknowledged by the DH since a recent publication (DH, 2005) reports that lack of systematic incentives for staff can lead to perverse outcomes and cause frustration and conflict for patients and staff. It continues by stating that the incentive system will need to be reviewed and adjusted so that rewards for individuals, teams, and organisations encourage desired outcomes for patients.

Experts in the area of teamwork suggest that audit and individual rewards provide a way of appraising team members and acknowledging their contribution while offering incentives for further improvement and increasing members' commitment towards

achieving their team's goals (West and Markiewicz, 2004). Furthermore, recent research investigating human resource management practices in relation with organisational performance in 61 hospitals in England revealed that appraisal had the strongest relationship with patient mortality (West et al., 2002), with the bigger the extent and sophistication of appraisal systems used, the lower levels of patient mortality encountered. This finding highlights the importance of audit within healthcare and suggests that more research should be conducted in this area.

Importantly, this study reveals that despite continuous healthcare reforms, similar barriers exist in contemporary settings as those reported by earlier reviews (West and Slater, 1996; Borrill et al., 2001). We therefore question the type of support primary care practices have been receiving and to what extent this has been informed by research findings. Moreover, in attempting to improve practice, we question whether more financial investment in collaborative primary care practices is needed, or whether attention should be redirected to conducting more empirical work to identify other solutions and improving dissemination of research findings.

Implications for primary and community care team members

Some barriers identified in this review, such as team size and base, may be out of nurses' control, but others may be more amenable to change. The Department of Health, 2004c and Department of Health, 2004d recent policies Agenda for Change and NHS Knowledge and Skills Framework have provided opportunities for nurse development. Both policies advocate nurses' role in supporting reward systems, innovation, and implementation of change. In addition, nurses could facilitate the development of team goals, audit and appraisal systems by grasping opportunities offered for greater occupational diversity. It remains to be seen how these changes will affect the interprofessional field of primary and community care.

Although team goals should be developed from within an interprofessional agenda, there is a tendency for the medical profession to assume a leadership role within primary and community healthcare teams and to dominate decision making and goal setting (Coombs, 2003; Riley et al., 2003; Shaw et al., 2005). Undoubtedly this input is vital at a patient level, although nursing professionals, as the largest professional group dealing with direct patient care, should place themselves in a position where their professional input is acknowledged both for patients' benefit and for the effective functioning of the interprofessional team.

Finally, drawing from the findings of the current review, we suggest that skilled facilitators with the requisite funding could prove useful in promoting equality of team members and resolving team conflicts. Funding for interprofessional education must increase, as when professionals engage in a process of learning from and about each other, positive stereotypes and relations are more likely to be fostered, which in turn may enhance the promotion of collaborative practices (WHO, 1988; Carpenter, 1995; Leathard, 2003). Organisational structures and strategies such as rewards systems must be aligned if team functioning is to be sustained, and training needs to be provided to enable healthcare professionals to gain the knowledge and skills required for effective teamworking.

Conclusion

We conclude that the functions of interprofessional healthcare teams working in the 21st century are complex, being influenced by many interrelating factors. Governmental support for teamwork in healthcare is ongoing, although further work needs to be conducted at both a team and organisation level to ensure that enhancement and maintenance of teamwork leads to an improved quality of healthcare provision over the coming decades. Taking this review's suggestions into consideration may facilitate

healthcare teams' ability to meet the demands of an ever-changing healthcare system. Even though these suggestions might be substantial, the prospective benefits for health services provision and patients' wellbeing are well worth the pursuit.

References

Audit Commission, 1992. Homeward bound: A new Course for Community Health. HMSO, London

Bolton, S.C., 2004. A simple matter of control? NHS hospital nurses and new management. Journal of Management Studies 41 (2), 317-333

Borrill, C., West, M., Shapiro, D., Rees, A., 2000. Team working and effectiveness in health care. British Journal of Health Care Management 6 (8), 364-371

Borrill, C., Carletta, J.C., Carter, A., Dawson, J.F., Garrod, S., Rees, A., Richards, A., Shapiro, D., West, M., 2001. Team working and effectiveness in health care : findings from the Health Care Team Effectiveness Project. Aston, Aston Centre for Health Service Organisation Research, Aston University

Carpenter, J., 1995. Doctors and nurses: stereotypes and stereotype change in interprofessional education. Journal of Intrerprofessional Care 9 (2), 151-161

Cartlidge, A., Bond, J., Gregson, G., 1987. Interprofessional collaboration in primary health care. Nursing Times 83 (46), 45-48

Cashman, S.B., Reidy, P., Cody, K., Lemay, C.A., 2004. Developing and measuring progress toward collaborative, integrated, interdisciplinary health care teams. Journal of Interprofessional Care 18 (2), 184-196

Colaizzi, P., 1978. Psychological research as the phenomenologist views it. Cited in Valle, R., and King, M., 1978. Existential Phenomenological Alternatives for Psychology. Oxford University Press, New York

Cook, G., Gerrish, K., Clarke, C., 2001. Decision-making in teams: issues arising from two UK evaluations. Journal of Interprofessional Care 15 (2), 141-151

Coombs, M., 2003. Power and conflict in intensive care clinical decision making. Intensive and Critical Care Nursing 19 (3), 125-135

Cooper, H., 1998. Synthesizing Research. SAGE, London

Department of Health, 1987. Promoting Better Health. HMSO, London

Department of Health, 1996. Primary Care: Delivering the Future. The Stationery Office, London

Department of Health, 2004[a]. The NHS Improvement Plan. Putting People at the Heart of Public Services. Department of Health, London

Department of Health, 2004[b]. Choosing Health: Making Healthier Choices Easier. Department of Health, London

Department of Health, 2004[c]. Agenda for Change: Final Agreement. Department of Health, London

Department of Health, 2004[d]. The NHS Knowledge and Skills Framework. Department of Health, London

Department of Health, 2005. Creating a Patient - led NHS. Delivering the NHS Improvement Plan. Department of Health, London

Department of Health and Social Security, 1981. The Primary Health Care Team. Report of a Joint Working Group of the Standing Medical Advisory Committee and the Standing Nursing and Midwifery Advisory Committee. (The Harding Report). HMSO, London

Dieleman, S.L., Farris, K.B., Feeny, D., Johnson, J.A., Tsuyuki, R.T., Brilliant, S., 2004. Primary health care teams: team members' perceptions of the collaborative process. Journal of Interprofessional Care 18 (1), 75-78

Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., Sutton, A., 2005. Synthesising qualitative and quantitative evidence: a review of possible methods. Journal of Health Services Research Policy 10 (1), 45-53

Elston, S., Holloway, I., 2001. The impact of recent reforms in the UK on interprofessional working in primary care centres. Journal of Interprofessional Care 15, 19-27

Field, R., West, M., 1995. Teamwork in primary health care: 2. perspectives from practices. Journal of Interprofessional Care 9 (2), 123-130

Gilmore, M., Bruce, N., Hunt, M., 1974. The Work of the Nursing Team in General Practice. Council of the Training of Health Visitors, London

Hallett, C., 1995. Understanding the phenomenological approach to research. Nurse Researcher 3 (2), 55-65

Hallett, C., and Birchall, E., (1992) Co-ordination and Child Protection. HMSO, London

Hanafin, S., Cowley, S., 2003. Multidisciplinary communication in the Irish public health nursing service: a study. British Journal of Community Nursing 8 (12), 544-549

Hart, C., 2001. Doing a Literature Search. SAGE, London

Hein, S.F., Austin, W.J., 2001. Empirical and hermeneutic approaches to phenomenological research in psychology: a comparison. Psychological Methods 6(1), 3-17

Henneman, E.A., Lee, J.L., Cohen, J.I., 1995. Collaboration: a concept analysis. Journal of Advanced Nursing 21, 103-109

Hilton, R.W., 1995. Fragmentation within interprofessional work. Journal of Interprofessional Care 9 (1), 33-39

Kociszewski, C., 2004. Spiritual care: a phenomenologic study of critical care nurses. Heart and Lung 33 (6), 401-411

Leathard, A., 2003. Interprofessional Collaboration. Brunner-Routledge, London

Mariano, C., 1989. The case for interdisciplinary collaboration. Nursing Outlook 37 (6), 285-288

Milne, M.A., 1980. Training for team care. Journal of Advanced Nursing 5, 579-589

Molyneux, J., 2001. Interprofessional teamworking: what makes teams work well?. Journal of Interprofessional Care 15 (1), 30-35

NHS Management Executive, 1993. New World, New Oppurtunities. Department of Health, London

Øvretveit, J., Mathias, P., Thompson, T., 1997. Interprofessional Working for Health and Social Care. Macmillan Press, London

Payne, M., 2000. Teamwork in Multiprofessional Care. Palgrave, London

Pietroni, P., 1992. Towards reflective practice- the languages of health and social care. Journal of Interprofessional Care 1, 7-16

Poulton, B., West, M., A., 1999. The determinants of effectiveness in primary health care teams. Journal of Interprofessional Care 13 (1), 7-18

Poulton, B., West, M., 1993. Effective multidisciplinary teamwork in primary health care. Journal of Advanced Nursing 18, 918-925

Riley, J., Harding, G., Meads, G., Underwood, M., Carter, Y., 2003, An evaluation of personal medical services: the times they are a changin'. Journal of Interprofessional Care 17 (2), 127-139

Royal College of General Practitioners Quality Team Development (QTD) program. [online]. Available: http://www.rcgp.org.uk/qtd. [accessed 10.07.05]

Rutherford, J., McArthrur, M., 2004. A qualitative account of the factors affecting team-learning in primary care. Education for Primary Care 15, 352-360

Shaw, A., de Lusignan, S., Rowlands, G., 2005. Do primary care professionals work as a team. Journal of Interprofessional Care 19 (4), 396-405

Standing Medical Advisory Committee, 1963. The Field Work of the Family Doctor.(Gillie Report). HMSO, London

Williams, G., Laungani, P., 1999. Analysis of teamwork in an NHS community trust: an empirical study. Journal of Interprofessional Care 13, 19-28

West, M.A., Borrill, C., Dawson, J., Scully, J., Carter, M., Anelay, S., Patterson, M., Waring, J., 2002. The link between the management of employees and patient mortality in acute hospitals. International Journal of Human Resource Management 13 (8), 1299-1310

West, M.A., Markiewicz, L., 2004. Building Team-Based Working. BPS Blackwell, Oxford

West, M.A., Poulton, B.C., 1997. A failure of function: teamwork in primary health care. Journal of Interprofessional Care 4 (11), 205-216

West, M.A., Slater, J., 1996. Teamworking in Primary Health Care. Health Education Authority, London

West, M.A., Tjosvold, D., Smith, K.G., 2005. The essentials of teamworking. John Willey and Sons, Chichester

West, M.A., Wallace, M., 1991. Innovation in health care teams. European Journal of Social Psychology 21, 303-315

World Health Organisation, 1978. Declaration of Alma-Ata. International Conference on Primary Health Care. WHO, Alma-Ata

World Health Organisation, 1988. Learning Together to Work Together for Health. WHO, Geneva

Wiles, R., Robinson, J., 1994. Teamwork in primary care: the views and experiences of nurses, midwives and health visitors. Journal of Advanced Nursing 20, 324-330

Zimmerman, J.E., Shortell, S.M., Rousseau, D.M., Duffy, J.D., Gillies, R.R., Knaus, W.A., 1993. Improving intensive care: observations based on organizational case studies in nine intensive care units. Critical Care Medicine 21 (10), 1443-145

Figure 1: Success proportion of each search method.

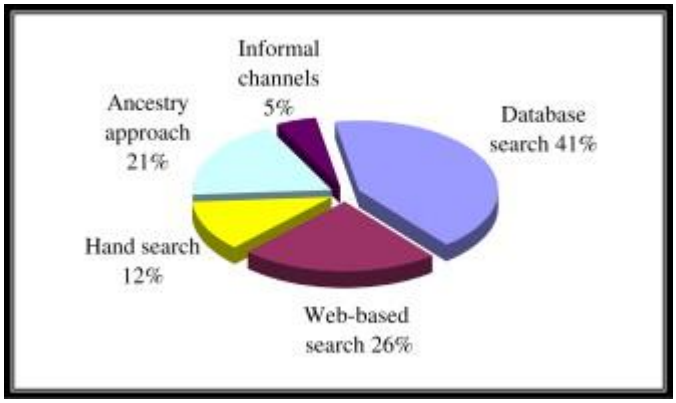

Table 1: Search strategy used

Stage 1	**Stage 2**	**Stage 3**
Search terms used		
Interprofessional Multidisciplinary Interdisciplinary Inter-professional	Team Teams Teamworking Co-operation Collaboration	Primary care Community care
Combined with Boolean operator **OR**	Combined with Boolean operator **OR**	Combined with Boolean operator **OR**
Results. Stage 1	Results, Stage 2	Results Stage 3
Combined with Boolean operator **AND**		

Table 2. Papers identified for review

Author(s)	Study aims	Methodology	Setting	Sample	Findings
Wiles and Robinson (1994)	To examine the various members of the nursing profession's views and experiences of teamwork and the extent to which these have been affected by recent changes to primary care	Qualitative study based on interviews using a semi-structured questionnaire	Primary care	133 Healthcare professionals (20 General practitioners, 20 Practice nurses, 20 Receptionists, 20 Practice managers, 19 District nurses, 17 Health visitors, 17 Midwives)	Five topics emerged as important to teamworking: team identity; leadership; access to GP; philosophies of care; team members' roles and responsibilities *Limitations*: Possible bias through choice of participant for interview. One representative from each professional group was interviewed, this choice being made by the practice manager The data were analysed manually but details of the method used are not provided
Field and West (1995)	To explore attitudes to change, team working and team building	Qualitative study using semi-structured interviews	Primary care	96 Members of PHCT in six practices (including practice nurses, managers, doctors,	Three topics were identified as issues for poor teamworking: failure to set aside time for

Author(s)	Study aims	Methodology	Setting	Sample	Findings
				receptionists, secretaries, cleaners, chiropodist, interpreter, counsellor, dispenser, health visitors, district nurses, midwives, school nurse and social worker)	regular meetings, to define objectives, clarify roles and handle change; differences in status, power, and assertiveness among team members; the assumption that the GPs were team leaders *Limitations*: Reliability and validity of the study are not addressed No details of interview structure or method of data analysis
Poulton and West (1999)	To explore the determinants of effectiveness in primary healthcare teams	Survey approach using postal questionnaires	Primary care	528 Members of 68 PHCTs (106 General practitioners,	Shared objectives, participation, and support for innovation were the best predictors of overall effectiveness, with shared objectives having the biggest single effect on PHCT effectiveness. No significant relationships were found between team size, team tenure,

Author(s)	Study aims	Methodology	Setting	Sample	Findings
					and fund-holding status and team effectiveness
				63 Health visitors,	*Limitations*:
				44 District nurses,	Details of random sampling are not provided
				56 Practice nurses,	Due to quantitative nature of the study, in depth examination of internal processes that affect teams with high and low effectiveness was not possible
				118 Receptionists,	
				42 Practice managers,	
				99 others, e.g. midwives, counsellors, psychiatric nurses)	
Borrill et al. (2000)	To investigate how teamworking processes contribute to the effectiveness of teams and which team characteristics make a critical contribution to the effective delivery of	Questionnaire survey as part of a larger study	Primary care Community mental health	3832 Members of 100 PHCTs	Teams with clear objectives, higher levels of participation, emphasis on quality and support for innovation provide effective healthcare. Moreover, clear leadership contributed to effective team processes while

Author(s)	Study aims	Methodology	Setting	Sample	Findings
	healthcare				regular team meetings were associated with greater levels of innovation
				113 CMHTs	*Limitations*:
				193 SHCTs	Precise details of the survey respondents' professional group were not provided
			Secondary care	No details regarding professional groups are provided	Measurements for team effectiveness are properly referenced. However, more details could have been provided to enable a fuller understanding of results
					In-depth exploration is lacking as this is a preliminary report
Cook et al. (2001)	To draw from findings of two evaluations of teamworking arrangements to illustrate the impact of team development on decision making	Action research using focus groups and interviews	Community care	One CMHT comprising 24 healthcare professionals	Authors concluded that the shared geographical location of team members, the team's autonomy, the holding of shared goals, increased understanding of each professional's role, and the development of positive interpersonal relations (e.g. trust) facilitated both teams to

Author(s)	Study aims	Methodology	Setting	Sample	Findings
					increase the speed and quality of decision making, increase innovation, and provide a client-centred quality health service
				(7 Social workers, 4 Community psychiatric nurses, 6 Community support workers, 4 Health and social service managers) Six integrated community nursing teams (ICNT). No specific number of professionals is provided	*Limitations*: Details of the professionals comprising the ICNTs are not provided
Molyneux (2001)	How and why co-operative and positive working relationships and practices developed within one interprofessional healthcare team	Qualitative study using semi-structured interviews	Hospital setting	6 Health care professionals	Findings suggest that personal qualities and commitment of staff; communication within the team and the opportunity to develop creative working methods within the team are important elements for effective teamworking

Author(s)	Study aims	Methodology	Setting	Sample	Findings
				(2 Occupational therapists, 2 Physiotherapists, 1 Speech and language therapist, 1 Social worker)	*Limitations*: The small sample size does not provide conclusive evidence The researcher was part of the team; strategies for avoiding personal, subjective bias are not provided
Hanafin and Cowley (2003)	To explore multidisciplinary communication in the Irish public health nursing service	Survey approach using a postal questionnaire as part of a two-phase case study	Irish Public Health Nursing Service	615 Public health nurses (PHN)	In general, PHNs reported 'good' working relations with other professional groups, although there were differences among different groups (e.g. eye specialist) A statistically significant correlation was found between working relationships and effective communication *Limitations*: 54% response rate

Author(s)	Study aims	Methodology	Setting	Sample	Findings
Cashman et al. (2004)	To evaluate an interdisciplinary healthcare team development through member's assessments of progress towards expressing values consistent with an effective team as measured through SYMLOG	Longitudinal study utilising SYMLOG	Community Care in New England, USA	6 Healthcare professionals (1 Physician, 1 Nurse practitioner, 1 Physician assistant, 1 Registered nurse, 1 Health assistant, 1 Case manager)	The researchers identified four forces that can make team development difficult: heterogeneity of team composition; role conflict and role overload; constraints placed on members by the larger organisational structure; lack of organisational rewards; and members' lack of knowledge about the process of team development *Limitations*: The small sample size does not provide conclusive evidence The team under investigation was a demonstration team and might have been subject to demonstration effect (the team might have tried harder since the intention was to demonstrate a positive effect)

Author(s)	Study aims	Methodology	Setting	Sample	Findings
Dieleman et al. (2004)	To examine the perceptions of pharmacists, physicians and nurses in 6 community-based teams	Pre- and post-test design using questionnaires	Community Care in Edmonton, Canada	22 Healthcare professionals (6 Family physicians, 6 Community pharmacists, 10 Office nurses and home-care nurses)	Open communication, respect for other team members, understanding of their roles and expertise, and being open to learning were identified as important for collaboration *Limitations*: The small number of self-selected providers limits this study's generalizability
Rutherford and McArthur, (2004)	To explore the lived experiences of team learning among the professionals of one PCT	A qualitative phenomenological approach using focus group	Primary care	28 Healthcare professionals (7 Community nurses, 6 Community midwives, 5 Practice administrative staff, 4 Practice nurses, 6 General practitioners)	Four themes were found to have an impact on team learning in primary care: resources; organisational factors' teamworking factors; and the doctor/nurse relationship *Limitations:* The study was conducted in one PCT area. The generalisability of the results may therefore be limited

Table 3.

Colaizzi's (1978) seven-stage framework

1. Read all of the subjects' descriptions in order to acquire a feeling of them
2. Return to each protocol and extract significant statements
3. Spell out the meaning of each significant statement, known as formulating meanings
4. Organise the formulated meanings into clusters of themes
5. Refer to these clusters of themes back to the original protocols in order to validate them
6. Formulate the exhaustive description of the investigated phenomenon in as unequivocal a statement of identification as possible
7. Improve validity by returning to each subject asking about the findings so far

Table 4.

Themes derived from thematic analysis

Themes	Categories
Team structure	• Team premises • Team size and composition • Organisational support
Team processes	• Team meetings • Clear goals and objectives • Audit