PHCM9129
Prevention and
Management of
Chronic Disease

Section 6

6. Multidisciplinary team care

Basic concepts

This section is about multidisciplinary team-based care for patients with or at risk of chronic disease. We will explore the role of team care in the prevention and management of chronic disease, its impact on quality of care and patient outcomes and how it is implemented in primary health care.

Learning objectives

By the end of this section you will be able to:

- Define multidisciplinary team care and its role in the management and prevention of chronic illness
- Describe the implementation of team care
- Describe its impact on quality of care and health outcomes for patients

6.1 What is team care?

Enhancing inter-professional team care has been a key element of primary health care (PHC) reform in many countries [1]. Team-related reforms have been built around the recognition that care is becoming increasingly complex for populations affected by multi-morbidity and long term physical and psychological conditions. More comprehensive care can be provided by health professionals from multiple disciplines working together as a team [2].

Wagner describes patient care teams as comprising diverse healthcare professionals '*who communicate regularly about the care of a defined group of patients and participate in that care on a continuing basis'* [3]. Members of the patient care team in a practice can include nurses, GPs, specialists, pharmacists, lay healthcare workers, administrative staff, Indigenous or community health workers and allied health providers; the most important member of the multidisciplinary team is the patient. Teamwork may be also considered as *'a dynamic process involving two or more healthcare professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted, physical and mental effort in assessing, planning, or evaluating patient care' [4].*

Each member of the team can play an important role in the structured care of patients [5]. For example, within general practice, nurses can provide patient education and assessments, monitor medication compliance, document care plans, and maintain the patient register and recall system. Administrative staff can organise appointments, maintain the health provider directory, manage the recall system, monitor practice systems such as communication and billing, and assist with setting up templates for care plans [6]. As a patient's condition changes over time, the composition of the team may change to reflect the changing clinical and psychosocial needs of the patient [7].

Prevention

Team care can facilitate preventive care through defining roles and responsibilities in relation to specific prevention tasks across the 5As such as structured assessment (including risk and readiness to change), goal setting, providing tailored individual and group patient education, appropriate referral and follow up.

Chronic disease management

Wagner and others have proposed that multidisciplinary care teams are essential to the effectiveness of primary health care services in assessing and managing patients with chronic disease [3]. Defining team roles, agreeing on treatment goals and guidelines and facilitating communication between providers are essential requirements for effectively carrying out some of the key tasks of chronic disease management.

- Identification, enrolment
- Common assessment
- Care planning across multiple providers
- Providing self-management support and education
- Supporting the patient journey as they move along care pathways between services and settings (e.g. hospital to community)
- Monitoring quality of care and outcomes for individuals and populations.

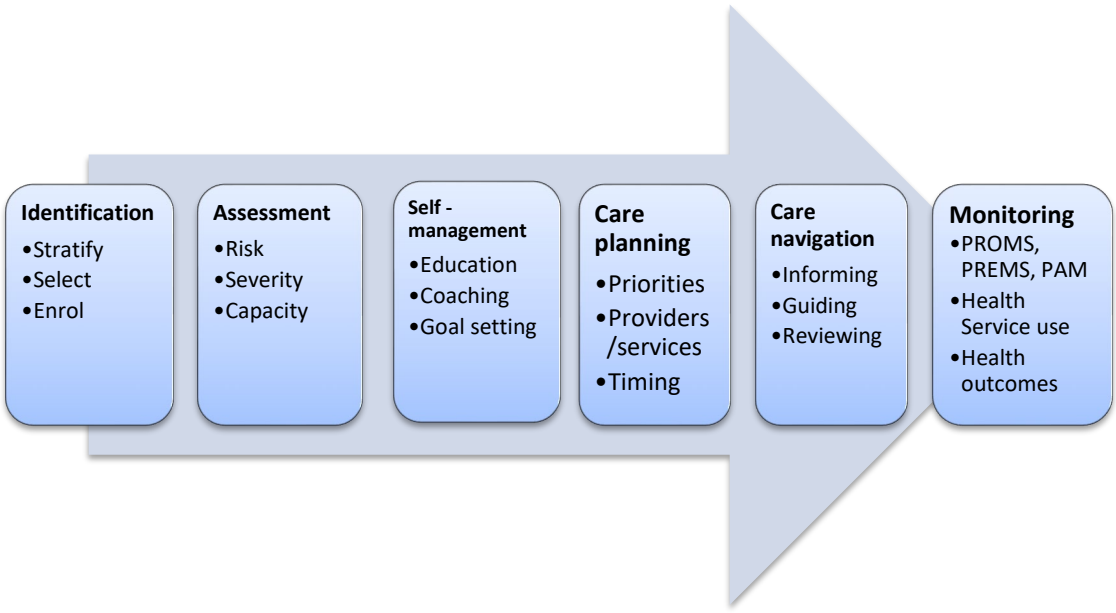
Care Coordination

Teamwork can be organised across services and providers using a formal model of care coordination. Care coordination has been defined as:

> "…the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities, and is often managed by the exchange of information among participants responsible for different aspects of care" [8].

Care coordination may involve elements of self-management support, care planning and care navigation. Usually it targets higher-risk patients who are then formally enrolled in the care coordination program. Goals and priorities are based on the assessment both of risk, severity and patient capacity (including health literacy). Care planning is usually for a period of time (e.g. a year) after which the plan is reviewed. These elements are illustrated in Figure 1.

Figure 1: Steps in care coordination



The theory of relational coordination is useful for understanding the dynamics of care coordination [9]. This postulates that the quality of coordination is related to the frequency, timeliness and accuracy of communication and its use to solve problems in the process of care. It is also related to features of the relationship between

providers including shared goals, knowledge about each other's roles, and respect or trust between providers/services. The communication and relationship tend to mutually reinforce each other.

In mental health care, the collaborative care model has been extensively applied. This involves primary care providers working with a care manager, psychologist and psychiatric consultant to care for patients with low- and high-prevalence mental illness and has been demonstrated to impact on quality of care and outcomes [10].

Care Navigation

Patient navigation can be defined as an intervention that aims to overcome individual barriers to access to a health service or provider. Patient navigation aims to reduce delays in accessing the services, with an emphasis on timeliness of diagnosis and treatment and a reduction in the number of patients lost to follow-up [11]. Manderson [12] reviewed navigation interventions targeted at patients with chronic disease transition from hospital. Significant positive economic outcomes (including reduced hospital readmissions, fewer hospital days and lower mean hospital and reimbursement costs) were reported in six of nine studies, significant positive psychosocial outcomes (including improved short-term quality of life, patient satisfaction and adherence to self-care) were identified in four of nine studies and significant positive functional outcomes were reported in two of nine studies (short-term improvement in physical quality of life and 12-month improvement in function measured by the Functional Status Index).

6.2 How effective is team care?

Previous research conducted by CPHCE described cross-sectional associations between teamwork and the quality of care provided for patients with chronic illness [13, 14]. Multidisciplinary patient teams have been demonstrated to provide better evidence based care and to achieve health outcomes [2]. Redefining the roles of primary health care team members has been shown to improve the quality of diabetes care [15]. Primary health care teams that work well together have been able to improve access and quality of care in general practice in the UK [16]. Inter-professional team based care has been demonstrated to improve quality of care and outcomes in patients with chronic disease in primary care [17-20]. Teamwork may also reduce costs and improve care coordination for PHC organisations and enhance job satisfaction among health professionals [21, 22].

Planned multidisciplinary care for patients with asthma and chronic obstructive lung disease has been associated with better outcomes [23, 24]. Multidisciplinary team-based care has been demonstrated to improve outcomes in patients with diabetes in primary care [17, 18]. A systematic review of the impact of co-ordinated multidisciplinary care in general practice for patients after they have had a stroke demonstrated improvements in the process of care if not direct patient care [25].

Aspects of teamwork found to be most strongly associated with the provision of high quality evidence-based chronic disease care in general practice [26] include:

- Systems for training and monitoring staff performance

- Involving administrative staff in systems that support clinical care (e.g. maintaining register/recall systems, organising management plans, ordering patient education materials, maintaining service directories).

Successful teamwork is characterised by effective leadership, a shared sense of responsibility and common goal, cooperation, trust and respect, use of the skills of all team members and clear roles and responsibilities [27, 28]. However, the communication and relationships between different professional groups, the roles and satisfaction of PHC providers with their work is strongly influenced by local contextual factors such as the power dynamics, leadership, size and physical environment of the PHC clinic [29].

6.3 How is it implemented in primary health care?

Australia

In Australia a key strategy for implementing multidisciplinary team care in primary health care has been the multidisciplinary Team Care Arrangements (TCA) introduced through the Enhanced Primary Care (EPC) program in 1999 (subsequently modified in 2005). This provides patients with chronic complex conditions with access to Medicare funding for a limited number of allied providers visits as part of a multidisciplinary care plan [30]. TCAs have been increasingly adopted by GPs and allied providers over the past 15 years (Figure 2). Structured

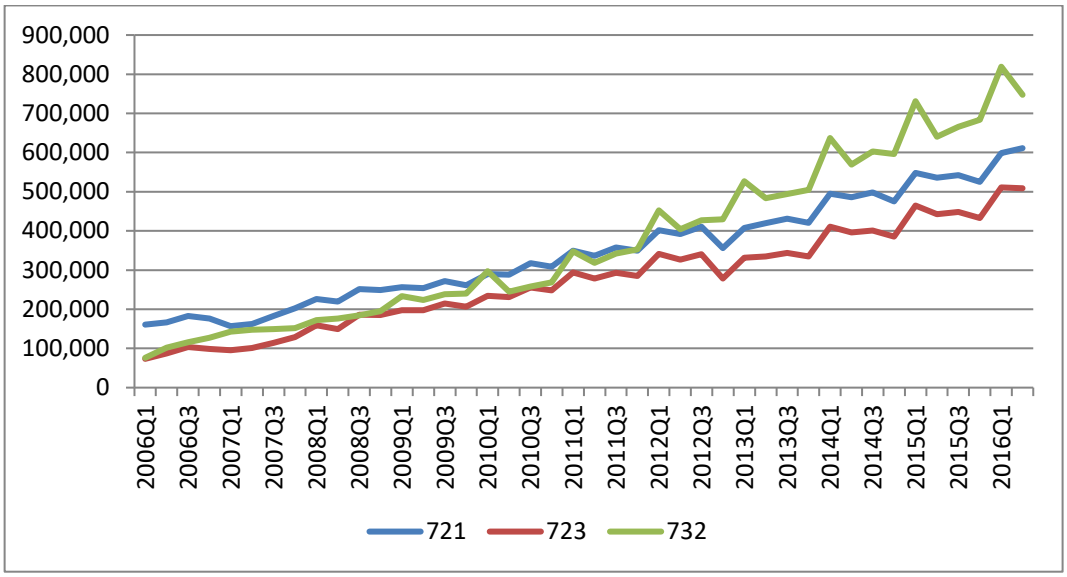


Figure 2: Medicare Item Claims for GP management plan (721) and multidisciplinary team care plan (723) and review of care plan (732) by quarter 2006 to 2016 (Source Medicare Australia)

multidisciplinary care planning is associated with improved intermediate outcomes (such as HbA1c) especially for patients with initial poor control [31]. The frequency of TCA is in turn related to the degree to which chronic disease care roles were shared by practice nurses and administrative staff within the practice, emphasising the

importance of defining roles and developing teamwork within the practice to enhance quality of care [3].

There is little evidence for impact of care planning alone on risk of hospitalisation or health outcomes. To be effective care plans need to be reviewed and to provide improved access to multidisciplinary team care [31]. Recent work by the Centre for Primary Health Care and Equity (CPHCE) suggested that their impact is dependent not only on whether access is improved but also on the amount (number of sessions) of allied health care provided (CPHCE Sydney Primary Care Cohort sub-study of the 45 and up study) [32].

National and state governments have attempted to facilitate team care by the creation of more integrated primary health care services that include a range of health professionals [29, 33] They have also sought to address capacity and workforce shortages by introducing funding to encourage greater flexibility and development in the roles of team members with extension of the roles of practice and community nurses, nurse practitioners, allied health providers and pharmacists in the care of patients with chronic illness [34, 35].

While multidisciplinary care teams are essential to the assessment and management of patients with chronic disease, these teams need to work together more effectively [36]. In the current Australian context these teams are required to operate across service boundaries often hampered by differing organisational, financial, professional, and team pressures. Studies of collaboration between GPs and other health services have found that it is possible, but not easy, and often falls short of expectations. A qualitative study examined the organisation of care for chronic disease in Australian general practice [5] and found that while all health care professionals recognised that communication was an integral part of forming good working relationships, it was often inadequate.

Multidisciplinary team care for patients with chronic disease is also a major rationale for the creation of more integrated primary health care services such as the GP Super Clinics and HealthOne. Teamwork is also critical to the implementation of the patient-centred medical home model. The patient-centred medical home model requires a shared understanding among team members regarding intentions, roles, and responsibilities [37]. Australian research demonstrates, however, that colocation alone was not sufficient for achieving integrated multidisciplinary care [38]. Constraints such as the lack of effective incentives for collaborative care in fee-for-service billing arrangements were barriers to interdisciplinary care.

Overseas

In 2003, The Commonwealth Fund conducted a National Survey of Physicians and Quality of Care [39]. The survey explored physicians' opinions on the effectiveness of potential strategies to improve quality of care (Figure 3). Most physicians cited teamwork and increased communication among health care professionals (35%), however some remained sceptical. One-third (32%) agreed or strongly agreed that teamwork made care more cumbersome, while one-quarter (24%) agreed or strongly agreed that a team approach could increase the likelihood of medical errors. Physicians in solo practice were less supportive of team care than those in larger groups or in hospital settings. Specialty and gender were also significant factors: 41% of primary care physicians said that teamwork would be very effective in

improving care, compared with 33% of specialists; 32% of male physicians said that teamwork would be very effective, compared with 45% of female physicians.

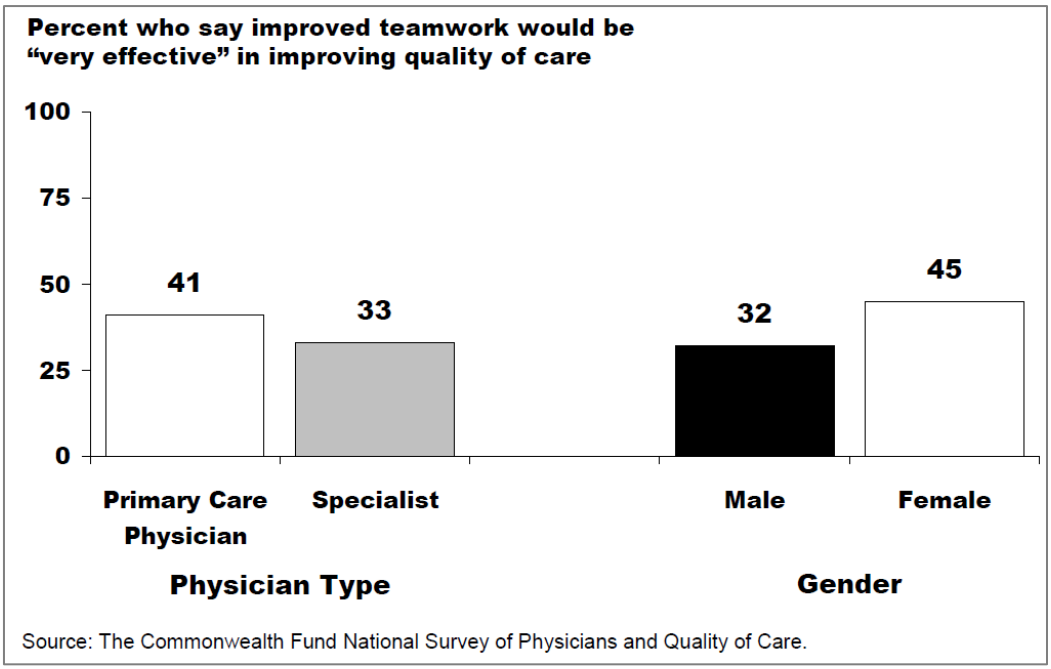


Figure 3: Perceived effectiveness of team care by physician type [39]

In the 2015 survey of physicians there was widespread use of nurses and case managers (Figure 4) [40]. However, countries with fee-for-service models did not reimburse nurses at the same rate as doctors for doing the same services. Fewer respondents in these countries reported using nurses or case managers, with the exception of Australia, where progressive nurse-specific benefits and practice incentive payments for care coordination appear to have been effective in encouraging the use of teams [40].

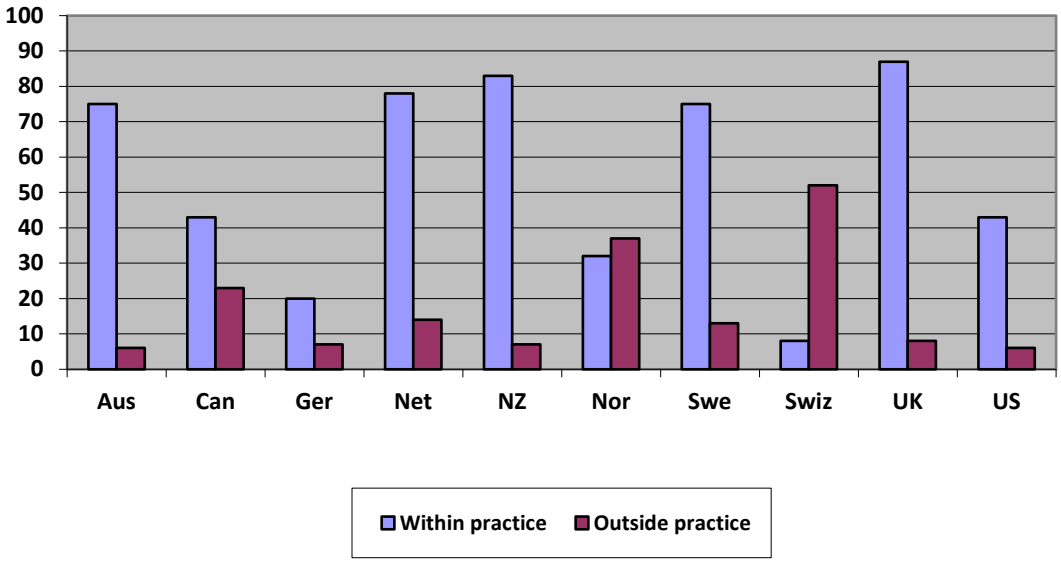


Figure 4: Primary care doctors report on frequency of use of nurses or case managers to monitor and manage care for patients with chronic disease [39]

The implementation of teamwork has been modified by a number of contextual factors including practice model, co-location of services, leadership style and space [41, 42]. Teamwork innovations can promote better communication, better relationships and greater satisfaction of the workforce. However, it can also contribute to conflict if professionals have poor understanding of each other's roles [4]. Roles need to be clearly articulated and negotiated if team innovations are to have the desired effects [7]. The development of inter-professional teamwork requires clinical leadership which is both able to make decisions (physician support is important here) and empowers all staff members to collaborate and develop flexible roles. This is especially important in the management of chronic illness in primary health care [43].

Learning Activity 1

Look at the Improving Chronic Illness site on teams
http://www.improvingchroniccare.org/index.php?p=Team&s=44

What team roles are discussed there?

Suggested further reading

PHCRIS RESEARCH ROUNDup: How does teamwork support GPs and Allied Health Professionals to work together? Issue 14, Sept 2010.
https://dspace.flinders.edu.au/xmlui/bitstream/handle/2328/26614/RRU%20Sept%202010.pdf?sequence=1&isAllowed=y

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