Allied health are key to improving health for people with chronic disease: but where are the outcomes and where is the strategy?

Sarah Dennis
Professor of Allied Health
Sydney School of Health Sciences
Faculty of Medicine and Health
University of Sydney
Sydney NSW 2006

South West Sydney Local Health District
Liverpool NSW 2170

Lauren Ball
Associate Professor
NHMRC Fellow
Menzies Health Institute - Centre for Health Practice Innovation
Gold Coast Campus
Griffith University
QLD 4222

Mark Harris
Professor of General Practice
Centre for Primary Health Care and Equity
University of New South Wales
Sydney NSW 2052

Kathryn Refshauge
Professor of Allied Health and Strategic Partnerships
Sydney School of Health Sciences
Faculty of Medicine and Health
University of Sydney
Sydney NSW 2006

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Abstract

The global burden of chronic disease has forced health systems to focus on improved care. This has led to improved health outcomes for some populations, but not for all people or for all conditions. The rising prevalence of chronic disease has also significantly increased demands on healthcare systems, with unsustainable costs to funders. To improve health and social outcomes for all people with chronic disease, it is critical to embrace allied health professionals as key members of primary health care teams. The recognised efficacy and cost-effectiveness of many allied health interventions suggests implementation into usual care would result in enhanced outcomes for people accessing health care, their families and communities, and for health systems. Our aim is to highlight the current unacceptable lack of allied health integration into primary health care teams and illustrate the potential value of improved and equitable access to allied health professionals for managing chronic conditions and multi-morbidity.

Introduction

Avoiding hospital presentation and admission for people with chronic conditions and multi-morbidity is a priority for Australia's health care system. Recent data from the Australian Institute of Health and Welfare (AIHW) indicates that 7% of all hospital admissions in Australia are potentially preventable (1) and that one in three avoidable hospital admissions relates to chronic conditions (2). In Australians aged 45-64 years, 35% have multi-morbidity (the presence of two or more chronic conditions without a defining condition (3)), increasing to 60% in people aged 65 and over (2). People with multi-morbidity are at greater risk of functional decline and hospital admission, and this risk increases further with each additional chronic condition (4). Unfortunately, the inverse care law applies, that is, these are the very people least likely to receive comprehensive care from allied health professionals (5).

Rehabilitation is a focus of the health systems approach of the World Health Organization (WHO) in response to the global problem of multi-morbidity (6). The specific aim of this approach is to optimise function and improve health outcomes for people living with chronic conditions (6). Multi-disciplinary team care in primary care settings has been shown to improve health outcomes for people with multiple chronic conditions (7). Allied health professionals are key members of such multi-disciplinary teams, with roles in rehabilitation

such as optimising dietary intake, physical function, independence and social wellbeing. Although the management of chronic disease in Australian primary care has been enhanced in the last ten years, with consequent reduced mortality rates for some conditions, care remains fragmented, and costs remain high (8). The need for further improvements is reflected in recent policy directions in Australia, with the introduction of the Team Care Arrangement (TCA) in 2005, Medicare Benefits Schedule (MBS) item numbers for better access to mental health for psychologists in 2006, trials of the health care home in 2015 (9) and introduction of the MBS items numbers for the management of eating disorders by psychologists and dietitians introduced in late 2019. Each of these policies recognises the critical role of allied health professionals in the management of people with chronic conditions.

The major problem facing Australian healthcare today is the inequitable access to such team care (10) and one factor is the poor integration of high quality allied health into primary care. Where allied health professionals work in the same building as other primary care services they are often hired on a sole trader basis without integration into general practice clinic teams (unlike PNs). They are reliant on referrals from GPs or PNs and only paid when they provide treatment for people and may be required to charge co-payments to cover their costs. Some comprehensive primary health care centres may provide access to allied health professionals who are publicly funded (11). The recent MBS Review (12) provided a powerful opportunity to consider methods for delivering evidence-based multi-disciplinary team care for people with long-term conditions in primary care. The review recommended that the General Practice Management Plan (GPMP) and TCA initiatives could be combined to avoid duplication. Beyond this suggestion, it was extremely disappointing that none of the four recommendations for the management of people with chronic conditions from the allied health committee was approved. These recommendations were to address funding for a comprehensive initial allied health assessment, flexibility to provide access to additional allied health item numbers for some people with complex health needs and access to item numbers for group allied health interventions for people with long-term conditions. All four recommendations were referred for further research (12), indicating there was not enough evidence to make a policy change. This outcome is frustrating and incomprehensible, given

the wealth of high-quality allied health research that has demonstrated the effectiveness of allied health interventions, including group interventions for long term conditions (13-18).

Data and evidence issues

One response from the MBS review to the allied health recommendations was to support building an allied health research base in primary care. This recommendation is welcomed, but fails to acknowledge the existing high-quality research supporting allied health interventions. A major concern in the allied health research community is the perceived need to provide an impossible level of evidence to influence change, particularly given that there is no current mechanism to capture process and outcomes from routinely collected allied health data at a national level as there is for general practice data.

As an example of a best alternative, an application was made to the Medical Services Advisory Committee (MSAC) for an MBS item number to enable private physiotherapists or exercise physiologists to provide an 8-week pulmonary rehabilitation (PR) program (MSAC Application No. 1405.1) (19). Despite the strong evidence for the health and economic benefits of PR (14, 20), the new item numbers were not approved. The economic analysis was strongly in favour of PR for both stable COPD and post-exacerbation, including Cochrane Systematic Reviews (21, 22), with the incremental cost effectiveness ratio (ICER), which is the cost per quality of life improvement (QALY), showing that PR is less costly and results in improved health outcomes and fewer hospitalisations than usual GP care. The only concern expressed by the MSAC panel was that there are no Australian studies demonstrating the effectiveness of PR programs provided entirely by privately employed physiotherapists or exercise physiologists in primary care. Therefore, in spite of strong evidence and agreement that the five visits funded by the TCA items are insufficient, allied health interventions will continue to be unavailable for people with chronic lung disease in primary care, forcing them onto long waiting lists for hospital programs where the likelihood of them attending is low, and their health outcomes will thus be sub-optimal.

The problem of underuse of allied health care

The utilisation of TCAs to facilitate multi-disciplinary team care is continuously increasing in Australia, but this increased uptake has mainly been by people aged over 80 years (23). The

incidence of chronic disease is also high in people much younger than 80 years old with high rates of multimorbidity in people aged 45-64 years (35%) and those aged over 65 years (60%) (2). The increase in claims for TCAs since 2005 relates to podiatry, nursing (which is not allied health) and physiotherapy, but claims for other allied health services have remained relatively low according to Medicare claims data reported by Harris et al (8) and from linked data from the "45 and up" study (23). Data are not available to show if these claims for allied health services actually result in a team based approach to care beyond the required information exchange between allied health and GPs.

To improve outcomes for people with chronic disease, inclusion of the appropriate health professionals in each care team is critical. However, there is no evidence that genuine multi-disciplinary teams are commonplace. Whilst referrals to allied health are increasing it is not clear if they are being used in the most effective way. The greatest growth in referrals has been for podiatry, with an increase in the age standardised rate ratio from 2.1 in 2006 to 5.6 in 2014, followed by practice nurses, who are not classified as allied health professionals. The rates of consultations related to chronic disease for all other allied health professions have increased since 2003 but not to the same extent as podiatry and physiotherapy with variation across the states (23, 24). Engagement with group programs for type-2 diabetes has been much greater for exercise physiologists than for dietitians and diabetes educators (24), despite the evidence for their central role in diabetes management. This pattern suggests a lack of policy commitment to prevention and evidence-based, effective management to proactively improve outcomes in younger people with chronic conditions. Such interventions reduce hospitalisations and delays or avoids a person's decline. Analysis of the 45 and up study has shown a reduction in avoidable hospital admissions with five or more physiotherapy services in primary care (25). The in-principle support by the MBS Review for greater allied health involvement in preventive health activities is reassuring, however no action will be taken without further research and there is no information available on how / when such research will be enabled.

The maximum number of sessions funded annually by Medicare across all allied health professions is five, in total. This may be insufficient for many people where all five sessions may be needed for one condition. Falls prevention programs provided within the TCA by

occupational therapists and physiotherapists, including self-management support, can significantly improve physical functioning and physical capacity in five sessions, although not to optimal levels and certainly not if some of the sessions are used to access allied health professionals for other conditions (26). This policy has therefore created a potential tension between allied health providers, which is contrary to multidisciplinary teamwork which is a premise of the team care arrangement. However, for many other conditions and for people with complex multi-morbidity, the evidence shows that more sessions are required (14, 27) and there is little possibility of addressing functional decline. Provision of allied health services through state funded community health and outpatients increases the number of allowable consultations, however, access is not universal and waiting lists can be long, making this a less effective solution.

COVID-19 has forced acceptance of, and funding for, a greater use of telehealth. Telehealth has now been used effectively to increase the “dose” of allied health by supplementing face to face sessions with telehealth coaching. This approach improved goal attainment and engagement in exercise programs but not health related quality of life for people with chronic conditions, as found in a pilot study in rural NSW (28). Telehealth has the potential to be a solution to increase the “dose” of allied health without increasing face-to-face visits.

Barriers to use of TCA

Whilst uptake of the TCA indicates there have been increases in referral to allied health professionals, there are still barriers to access to genuine team based care for people with chronic conditions, including costs to both patients and clinicians, and constraints of the TCA. GP referrals to physiotherapy significantly increased, particularly since 2009 according to the BEACH data (29). However, people were less likely to be referred if they held a health care card or were from low socioeconomic or non-English speaking background. Importantly, these populations are known to have a higher prevalence of chronic disease (30). Qualitative studies confirmed these data: those who were the most disadvantaged could not access adequate allied health care with a TCA because they were unable or unwilling to pay the gap fee for allied health care (31, 32). Similarly, interviews with practising dietitians, the only profession for which data are available, found that it was challenging to provide evidence based dietetic care for people referred via a TCA (33). A gap fee was necessary because

dietitians reported spending considerable time performing duties to comply with the TCA policy requirements, but for which they are not funded, and for the longer consultations required for counselling about dietary behaviour change (27, 33). The constraints of the TCA did not allow for provision of optimum intervention, especially if the person required care with other allied health professionals using some of the TCA funded visits (27). Of concern is that consultations funded via TCA were observed to be approximately 12 minutes shorter than those where a higher fee than the subsidised TCA was charged (34).

It is unclear how the time allocation under the TCA was formulated. It is possible that some allied health assessments and interventions may be possible within the face to face time allowed for by the TCA funding, such as podiatry because it is more procedural, but they often have higher practice costs associated with specialist sterile equipment (35). It is not possible to contain visits within the TCA allocated time when counselling is required, a problem given the complexity of many conditions and people's lives (34) and completion of notes and associated paperwork by allied health professionals is not funded. Most consultations require discussion and contextualising of interventions, and a human rights focus on health care further requires ensuring appropriate health literacy and partnering with patients. A recommendation to the MBS Review was that allied health clinicians be funded to provide a comprehensive assessment, but again this was referred for further research with no policy changes.

Future models

Multi-disciplinary team-based care is fundamental to optimising health outcomes in primary care, particularly for chronic conditions. Recently, the chair of the Royal College of GPs in the UK remarked that general practices with only a practice nurse working with the GPs have not adapted to new ways of working in partnership with other health professionals (36). Several strategies have been trialled to increase team-based care. Co-location, alone, of GPs with a range of other health professionals increased collaboration, but did not necessarily improve patient outcomes or experience if no other strategies were implemented (37). The patient centred medical home was trialled without a new funding model to facilitate the multi-disciplinary care required by people with complex chronic conditions, thus reducing the ability of health professionals to work as functional team. The fee for service model of funding for

allied health professionals within a healthcare team in primary care, remains a barrier to their involvement in effective chronic disease management particularly including effective communication and development of shared care plans (38). These funding barriers have not been addressed by the recent MBS Review (12). Similarly, shared clinical data reporting systems are rarely in place and rarely designed for easy access by allied health professionals, and consequently, despite increasing rates of co-location, allied health professionals do not have the same access to integrated electronic management systems for patients (39).

There are several possible solutions, all of which require modifications to the current TCA policy initiative. For the TCA to be an effective method of providing access to multi-disciplinary team care for people with chronic conditions, it needs to be flexible to enable evidence-based allied health interventions to be provided in a way that is affordable to the person, is sustainable for the health professionals and provides value for money for the health system. It is, therefore, essential to increase the number of TCA visits. There are few allied health interventions that require only five visits, and particularly for people with chronic disease and multi-morbidity. The presence of several conditions requiring intervention, or multi-disciplinary care, may necessitate more than five visits. These interventions should be viewed as a cost-saving because they reduce hospitalisation and delay declines in health and function (14, 15, 26). Alternatively, a “visit” could be defined as a “course” or “dose” of allied health care, for example a course of evidence-based pulmonary rehabilitation by exercise physiologists or physiotherapist, or a course of evidence-based dietetic advice for obesity. This would enable people to receive an evidence based treatment program. The quality of care provided could also be monitored. Furthermore, the possibility of carrying forward unused TCA visits to the following year would enable access when it is needed. Research already exists concerning the optimum “dose” of allied health interventions for long term conditions managed in primary care accompanied by robust health economic evaluation, now is the time for implementation.

It is clear that a revised TCA model, with embedded flexibility and revised funding models, would facilitate the availability of truly integrated allied health care of high quality that would undoubtedly reduce the demand and burden on more expensive hospital care for people with chronic disease and multi-morbidity.

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