

Supporting physical activity promotion in primary health care

A POLICY EVIDENCE BRIEF

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The Mitchell Institute's policy evidence briefs are short monographs highlighting the key evidence for emerging policy issues. We work with our partners in the Australian Health Policy Collaboration to seek expert advice on topics, content and context.



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Abbreviations

AEP	Accredited Exercise Physiologist
AHPC	Australian Health Policy Collaboration
CDMP	Chronic Disease Management Plan
COVID-19	Coronavirus disease of 2019
DALY	Disability-adjusted Life Year
GP	General Practitioner
MBS	Medical Benefits Schedule
PBS	Pharmaceutical Benefits Scheme
QALY	Quality-adjusted Life Year
SNAP	Smoking, Nutrition, Alcohol and Physical activity
UK	United Kingdom
US	United States
WHO	World Health Organization

What is the problem?

Most Australians do not achieve recommended levels of physical activity

In Australia, 38% of the burden of disease could be prevented by reducing and eliminating exposure to risk factors such as harmful use of alcohol, tobacco use, physical inactivity¹, and metabolic risk factors (e.g. high blood pressure) [2].

Physical inactivity is a major contributor to the burden of many chronic diseases, comparable to tobacco use and poor diet [3-5]. In 2015, tobacco use in Australia was attributable to 9% of total burden of disease and targeted as the leading risk factor for burden of disease in Australia. When physical inactivity (2.5%) is combined with overweight and obesity (8.4%), the burden is higher than tobacco use [2]. Furthermore, it is important to note that metabolic risk factors such as overweight (3.7%), obesity (4.7%), high blood pressure (5.8%), high cholesterol (3.0%), and high blood plasma glucose (4.7%) can often be attributed to physical inactivity [2]. Australia's Health Tracker 2019 [6], based on data from the National Health Survey 2017-18 [7], highlights concerning levels of physical inactivity: 47.3% of Australian adults (18-64 years) do not achieve the recommended level of 150 minutes or more of aerobic activity per week. When considering the national guidelines for both aerobic activity and strength training, 85% of Australian adults do not achieve the recommended levels of physical activity [8].

Physical inactivity has been identified as a significant economic burden, with conservative estimates showing annual global costs of INT \$53.8 billion, of which \$31.2 billion was paid by the public sector [9]. Australian modelling suggests that reducing the prevalence of physical inactivity by 10% will result in 6,000 fewer incidents of disease, 2,000 fewer deaths, 25,000 fewer Disability-adjusted life years (DALYs), and reduce health care costs by \$96 million per year [10].

People who are disadvantaged participate in less physical activity

In Australia and other high-income countries, physical inactivity and chronic disease rates vary by socio-economic position [8, 11-13]. Australia's Health Tracker by Socio-Economic Status [14] (see Figure 1) drew attention to the almost linear association between socio-economic position and physical inactivity levels. In 2018, adults living in areas of greatest socio-economic disadvantage were shown to be 1.4 times more likely to be physically inactive compared to those in areas of least disadvantage [15]. Consequently, Australians living in areas of greatest disadvantage experience higher rates of disease burden due to physical inactivity, at 1.7 times of those living in areas of least socio-economic disadvantage [15].

¹ Physical inactivity is defined as not achieving recommended levels of physical activity. For adults (18-64 years), it is recommended to accumulate 150 to 300 minutes of moderate intensity physical activity per week or 75 to 150 minutes of vigorous intensity physical activity per week. Muscle strengthening activities should be performed at least 2 days per week [1].

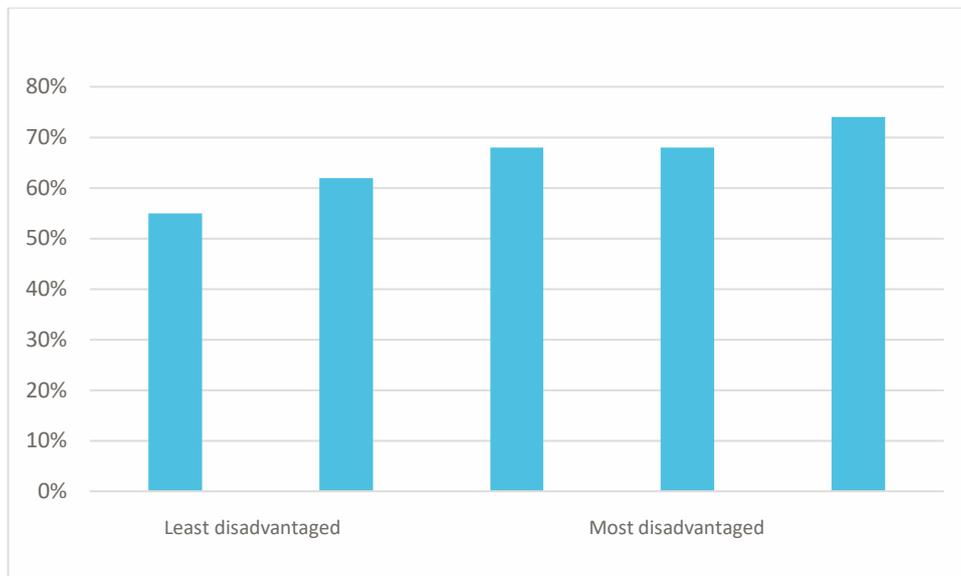


Figure 1. The proportion of physically inactive adults by socio-economic economic disadvantage [14]

People who experience socio-economic disadvantage encounter a range of barriers to physical activity including cost of living pressures; time pressures caused by work, family and carer duties; concerns about safety; low availability and poor quality of spaces, services, and facilities that support participation in physical activity [16-19]. Australian studies suggest that people living in areas of greater socio-economic disadvantage have less access to exercise practitioners. An analysis of Medicare Benefits Schedule (MBS) data for Accredited Exercise Physiologist (AEP)² services showed that there were fewer AEPs in disadvantaged areas and those who practised in disadvantaged areas had higher caseloads, compared to those in more affluent areas [20]. For people living in disadvantaged areas, this may mean longer waiting times for AEPs and reduced length of consultation times [20, 22, 23], leading potentially to poorer outcomes. Furthermore, additional research shows that there are fewer and lower-qualified exercise trainers (e.g. personal trainers, group instructors) in areas of greater disadvantage [24]. A limitation of this analysis is that it did not include services provided by Sports and Exercise Physicians, who are also funded under the MBS. Furthermore, additional research shows that there are fewer and lower-qualified exercise trainers (e.g. personal trainers, group instructors) in areas of greater disadvantage [24].

Evidence-based interventions to improve physical activity are rarely implemented in practice

To help increase population levels of physical activity, reduce health inequities and reduce the individual, societal and economic costs of physical inactivity, evidence-based interventions that are effective across social groups should be widely implemented in practice [26]. Robust evidence from controlled trials demonstrates that physical activity promotion interventions in primary care are effective at increasing physical activity [27] and are cost effective [28, 29]. Because of its effectiveness and potential for wide population reach, delivery of physical activity promotion interventions in routine primary health care (commonly general practices)

² AEPs are a minimum “four years university degree qualified health professionals specialising in the delivery of exercise for the prevention and management of chronic diseases and injuries” [20]. They are required to meet an extensive accreditation process that includes practicum experience in a range of settings and environments [21].

could help to tackle high levels of inactivity and subsequently lead to substantial clinical, population health and economic benefits [20, 27, 28, 30-33].

The World Health Organization (WHO) identified physical activity counselling and referral³, as part of routine primary healthcare services, as a “best buy” for prevention of non-communicable diseases and a cost-effective strategy for physical activity promotion [33, 35]. Physical activity counselling is considered to be the key method to promote physical activity in primary health care [36]. Patient activation⁴ is becoming a focus for some health systems as the means to measure and improve individual engagement in their health care and health maintenance [37, 38].

Primary health care practitioners experience a range of barriers that prevent them from adopting physical activity promotion interventions [39-41]. Some of the main barriers deterring them to provide physical activity advice include lack of time, lack of reimbursement, “insufficient counselling skills” [42], and other implementation-related issues [20, 42-51]. Australian data shows that general practitioners (GPs) refer their patients for physical activity counselling at a rate of only 0.14% of patient encounters [52]. Further, GPs are less likely to refer priority groups such as older adults and people from non-English speaking backgrounds [52] for physical activity counselling. Physical activity advice and counselling in primary health care in Australia are constrained by “limited implementation” [33]. Furthermore, there has been limited research on how to successfully implement and scale-up physical activity interventions [26].

In 2006, the Australian Government introduced *Chronic Disease Management Plans* [20]. The plan is funded through Medicare and it enables GPs to coordinate and organise multidisciplinary health care for patients with chronic conditions (e.g. diabetes, cancer, stroke, cardiovascular disease, and musculoskeletal conditions) [20]. GPs can develop team care arrangements, which allow GPs to collaborate with at least two additional health professionals. Through this team care arrangement, GPs can refer patients to AEPs (MBS item 10953) [40], to help individuals for whom physical activity is appropriate for the management of their condition [53]. Patients are able to claim a rebate for a maximum of five visits per year [20]. The five visits are the total available for allied health professional services and can be shared across different allied health professionals or provided by a single allied health professional [20, 54].

Social prescribing has been utilised to promote physical activity as a response to a person’s health risk or a health condition (e.g. Green Prescription in New Zealand [55]). Social prescribing is a means of enabling health professionals such as GPs, nurses and other primary care professionals to refer people to a various local, non-clinical services [56]. Physical activity

³ Prior to receiving physical activity advice/referral/counselling, individuals may undergo a screening process [34]. There are various screening tools – from one-question assessment tools to more complex ones [34]. There is no universally accepted definition of physical activity counselling and referral. However, physical activity counselling can broadly be defined as a method, used by a trained health professional, which can help individuals to increase their physical activity levels. In the International Classification of Primary Care, the BEACH coding system, under the clinical treatment “Counselling/advice—exercise” there are two labels and codes: “advice/education; exercise” (A45004) and “counselling; exercise” (A48005). Physical activity referral can be generally defined as a referral to an allied health professional or service. For example, a referral to an “exercise physiologist” (A66018), an “exercise program” (A68019) or for “physiotherapy” (A66006). In the literature, physical activity counselling and physical activity advice are often used interchangeably. However, for the purpose of clarity, in this brief, we will refer to physical activity advice as a type of short service, usually provided by GPs prior to making a referral for counselling with a trained practitioner.

⁴ Patient activation can be defined as the state in which the individual has the knowledge, confidence, and skills to manage their health [37].

promotion may be considered a specific example of social prescribing [57], and there are similarities, including linking up patients with 'non-medical' services such as physical activity opportunities [58]. However, there are a range of important differences. The term has a broad scope that goes beyond addressing physical activity, and describes linking a patient with services such as housing, employment, legal advice, and arts clubs [58, 59]. Few robust studies have been conducted on the effectiveness of social prescribing, although current evidence suggest that it shows promise in improving self-esteem, confidence, social wellbeing, and mental health [60, 61]. Although evidence of the effectiveness of social prescribing is emerging, evidence for physical activity promotion in primary care is well established [27-29].

In this evidence brief, we will first present evidence and then provide policy options to support evidence-based physical activity promotion in primary health care to increase physical activity and reduce inequities in physical activity participation.

The evidence

Benefits of physical activity

Participating in regular physical activity helps in the prevention and management of chronic disease and reduces the likelihood of early death [62-66]. Physical activity is a principal intervention for the primary and secondary prevention of many chronic diseases with the highest levels of morbidity and mortality in Australia - diabetes, musculoskeletal conditions, cardiovascular disease, cancer, and mental health conditions [3-5, 67]. National and international peak medical associations, including the Australian Medical Association, have recognised the important role of physical activity in chronic disease prevention and management [68, 69].

The significant impact of the coronavirus disease of 2019 (COVID-19) pandemic and required social restrictions and their impact on mental health for many individuals has been recognised, with indications that isolation and fear may increase depression, anxiety, and stress [70, 71]. Early interventions and preventive measures may be crucial to alleviate the consequences of the pandemic on mental health [71]. Regular physical activity can enhance resilience and a sense of achievement and have positive effects on coping with stress [3, 72]. There is a strong evidence that physical activity reduces the risk of depression and can help to treat depression [3, 73-75]. Importantly, along with prevention of chronic diseases and improved mental health, physical activity also contributes to community connectedness, social health and wellbeing [76].

Addressing inequity in physical activity participation

There is a growing concern that health inequities in Australia will increase in response to the COVID-19 pandemic [77, 78]. Improving access to evidence-based interventions that are effective across social strata is likely to increase physical activity participation among disadvantaged groups and contribute to reductions in health inequities [33, 79]. Reducing inequities requires that the additional barriers to participation faced by those who experience disadvantage be addressed [80, 81]. An approach such as proportionate universalism could be applied to mediate the additional barriers faced by people who experience disadvantage [33, 77]. Proportionate universalism suggests that health actions need to be universal, not targeted, but with an intensity and a scale that is proportionate to the level of social or health need or level of disadvantage in general [33, 82-84]. This approach has shown success in reducing health inequities [85, 86]. Further, the WHO *Global Action Plan on Physical Activity* recommends implementation of the action plan be guided by the principle of proportionate universalism [87].

Proportionate universalism could be applied by developing measures to increase the supply of exercise practitioners in disadvantaged areas, including rural and remote areas, where there is evidence of low supply of the eligible workforce and/or financial and other access barriers to the available workforce. Recruiting exercise practitioners and other health practitioners to disadvantaged areas is an ongoing challenge [24, 88-90]. There is limited reliable evidence on the effects of interventions to address the inequitable distribution of practitioners [88, 91]. Also, available studies are mostly focused on physicians or medical school graduates [92] and not

on other health practitioners, such as allied health practitioners, even though compared to nurses and doctors, allied health professionals are twice as likely to leave positions in rural areas [93]. However, there are some strategies that show promise in encouraging health practitioners to locate to disadvantaged areas [88, 90, 92]. Research suggests that recruiting and training students from rural and remote backgrounds to become health practitioners may increase the distribution of health practitioners to areas of greater disadvantage [94]. Also, rurally-orientated medical education programs (e.g., rurally relevant curricula and rural clinical placements) may influence students' decision to practice in rural areas [92, 95, 96]. Other studies show that the influence of personal and psychosocial factors (e.g., work-related distress, social and collegial support, access to social and recreational facilities, professional development opportunities) in attracting health practitioners to practice in rural and remote areas may have been underestimated and that they may even have a greater influence on workforce retention than rural background [93, 97]. One of the key negative factors influencing practitioners' level of satisfaction with working conditions in disadvantaged communities was "suboptimal remuneration" [94], which indicates that higher financial incentives and rebates might contribute to attracting and retaining practitioners in these areas. Current programs by the Department of Health like the *Workforce Incentive Program*⁵ [98] and the *Bonded Medical Program* [99] have been developed to help address workforce gaps between affluent and disadvantaged areas and could provide evidence as to their potential contribution to allied health workforce incentives and support to work in socioeconomically disadvantaged communities.

Proportionate universalism could also be applied by providing more services to support physical activity for people who experience disadvantage in recognition of their additional barriers to physical activity [33, 80, 81]. Additional sessions to support participation in physical activity for people who experience disadvantage acknowledges the complex needs of disadvantaged patients, who often experience multiple comorbidities [81].

Effectiveness of physical activity promotion interventions in primary health care

Primary health care has been shown to provide an effective platform for access to support with physical activity for individuals in disadvantaged communities and for individuals needing support with physical activity engagement. Characteristics of primary health care that are particularly relevant are:

- Primary health care is usually the first point of contact that an individual has with the Australian health care system [100].
- Health care practitioners are considered among some of the most trusted members of society [101]. They often have an important role in influencing positive behaviour change [101] and are considered a trusted source of lifestyle-related information and advice [102]. Health practitioners, especially GPs and nurses, establish ongoing

⁵ The *Workforce Incentive Program* provides incentives to encourage nurses, doctors, Aboriginal and Torres Strait Islander Health Worker, allied health professionals, and health practitioners to deliver services in rural and remote areas. From February 2020, Exercise Physiologists are included on the list of eligible health professionals under the program's Practice Stream. Practices participating in the program may use the hours of employment for Exercise Physiologists in calculation of the Workforce Incentive Program – Practice Stream quarterly payment [98].

relationships and trust with the patients, so their impact on building a more active population could be significant [101].

- Primary health care provides ongoing care over the lifecycle and primary health care practitioners have wide population reach. Approximately 85% of Australians visit a GP at least once in any given year [103]. People residing in areas of greater socio-economic disadvantage have a higher average number of encounters with GPs compared with patients in areas of least socio-economic disadvantage [104].
- Patients seem to be very interested in discussing health promotion issues with health care practitioners [105].
- Primary health care practitioners have a key role in the clinical management of patients with and at risk of chronic disease and are trusted sources of information and support. [101, 102]
- The multi-disciplinary nature of the primary care workforce, including nurses, social workers, physiotherapists, and other allied health professionals offers potential for the delivery of preventive care, such as physical activity promotion [106-110].

Robust evidence supports the effectiveness of physical activity promotion interventions in primary health care at increasing physical activity participation [30, 31, 33]. Further, effectiveness and acceptability of this approach have been demonstrated across diverse patient groups, including socio-economically disadvantaged groups [20, 32]. Evidence-based clinical guidelines recommend that primary care practitioners promote physical activity to their patients [111]. Furthermore, it has been recommended that in clinical medical practice physical inactivity needs to become an actively monitored risk factor and that health-care systems should provide physical activity support and counselling and support for the prevention and treatment of chronic conditions and diseases [26].

Systematic reviews show that the effectiveness of physical activity promotion interventions in primary care varies according to the nature of the intervention [27, 110]. To increase physical activity levels, best evidence supports targeting physically inactive patients through routine screening of patients for inactivity [30], followed by advice from a GP and referral to appropriately trained practitioners for physical activity counselling [111]. The *Victorian Active Script Programme* aimed to increase the number of GPs who provide effective, appropriate, and consistent advice on physical activity to patients [39]. The evaluation of the program showed that it was cost-effective (\$3647 per disability adjusted life year saved and \$138 per person to become sufficiently active to gain health benefits) and it increased the awareness of GPs to screen patients for physical (in)activity and deliver advice [39].

Evidence also suggests that GP referral to a trained physical activity counsellor might help to improve longer-term physical activity participation [112]. Furthermore, this is cost-effective as the cost of integrating a physical activity counsellor into primary health care teams is lower than many other interventions attempting to improve physical activity participation [113]. Evidence supports physical activity counselling that includes evidence-based behaviour change such as goal setting, monitoring, and supporting patient autonomy and preferences [114, 115] together with a multi-sectoral approach [110], whereby a physical activity counsellor connects people with local physical activity opportunities [115]. The relationship between patient activation and physical activity has not yet been widely explored but some evidence

suggests that the most activated patients report higher physical activity levels than less activated patients [37, 38]. A multi-sectoral approach progresses primary care-public health partnerships, which are increasingly recognised as crucial to supporting patient-centred care [116] and integrates healthcare services with other sectors to form place-based health systems that influence wider social, community, and economic drivers of health [33, 117]. This approach is also likely to be sustainable as it maximises the utilisation of community-based assets and minimises additional burden on GPs. Some researchers advocate for the multisectoral approach to be complemented with whole-of-systems approaches [33, 118, 119]. The WHO promotes the creation of “active systems” which includes strengthening policy frameworks, governance and leadership systems, at all levels of government, to effectively support implementation of actions aimed at increasing physical activity [120]. One successful example of a system-wide model developed and implemented in England to embed physical activity in clinical practice is the *Moving Healthcare Professionals Programme* [121, 122]. The program is a whole system, novel educational approach, to integrate prevention activities and physical activity promotion into clinical practice [122]. Adopting systems thinking and a whole-of-system approach to physical activity, which include many separate sectors, organisations, and agencies, may be a good way to move forward in tackling population physical inactivity [33, 122].

Evidence-based strategies to address the barriers and improve the uptake, implementation and sustainability of physical activity promotion in primary health care practice

Despite the evidence of effectiveness of physical activity promotion interventions in primary care, they are rarely or poorly implemented in practice [20, 33]. Although primary health care providers (physicians, general practitioners and nurses) are receptive to providing physical activity promotion in the clinical setting [44], external (funding models), organisational (systems, support, limited referral options) and provider level (time, skills, perception of patients’ motivation) barriers impede the promotion of physical activity to patients [43-50].

Evidence shows that low uptake of physical activity promotion in primary health care may be related to a lack of skills and inadequate physical activity training in medical school curricula [110, 123]. An Australian study found that only 42.9% of Australian medical schools that had PA training in their curricula reported that it was sufficient for their medical students [123]. Over half (58.8%) of the respondents reported barriers to implementing physical activity training into their medical curricula [123]. Overall, 57% of Australian medical schools did not provide a sufficient level of physical activity training to prepare their students for treatment of patients [123]. Incorporation of physical activity promotion across all parts of the medical curriculum has been proposed, in all modules and units including physiology, biology, units on disease prevention and processes such as cognition and mental health, non-communicable diseases, obesity, falls and gait disorders [123].

There is also evidence that indicates physical activity counselling can be effectively delivered by appropriately trained health professionals from a range of backgrounds [33, 110]. The *Make Every Contact Count* framework, developed by Public Health England and its partners, indicates there is scope to discuss physical activity in most encounters between health professionals and their patients [33, 124]. With GPs experiencing various barriers to providing

physical activity advice, nurses may be a good alternative, especially because they may be underused in their capacity to assist with patients' self-management practices [125]. In 2005, an Australian study that assessed the level of implementation of a Smoking, Nutrition, Alcohol and Physical activity (SNAP) health guide by GPs found that GPs were reluctant to implement it due to already heavy workloads [46]. Nurses, on the other hand, used the SNAP guide as a part of their consultations with patients to assess their behavioural risk factors [46]. This increased people's motivation to use the provided health information [46, 125]. Also, "nurse-led models of care" in chronic disease management have been shown to have positive effects on patients' overall satisfaction, quality of life and health outcomes [125-130]. Given the various demonstrated benefits of physical activity for mental health [109] and positive effects of combined psychotherapeutic and physical activity interventions [131] there is a strong potential for engagement of psychologists to deliver physical activity counselling in primary care [132]. A few studies have made the case for physical activity counsellors to be integrated into general practices and to provide ongoing, preferably intensive, and personalised physical activity guidance [133-135]. There is potential to further explore the feasibility of education and training delivery for psychologists and other allied health professionals such as social workers and Aboriginal healthcare workers to actively engage them in physical activity promotion in primary care in Australia [33, 107, 109, 136].

Training curricula to develop a multi-disciplinary workforce for physical activity counselling have been considered with evidence indicating these should be based on best available evidence of the strategies that support long-term engagement in physical activity, for example goal setting and monitoring, supporting patient's autonomy and preferences [114, 115], and connecting patients with local physical activity opportunities [115]. Physical activity counsellors should be trained in the field of exercise science and should be knowledgeable about locally available physical activity resources [133]. The 5-A model (assess, advise, agree, assist, arrange) of counselling and behaviour change has been shown to be effective and could be utilised in supporting the education and training for the delivery of physical activity advice and counselling services in primary care [42, 109, 110]. *Exercise is Medicine*, a global initiative managed by Exercise and Sport Science Australia, offers free-of-charge workshops to upskill practice nurses as well as GPs and to provide information to assist primary care practices in engaging their patients in conversations about physical (in)activity [33, 136]. *Moving Medicine* (UK) is an online resource specifically developed to support healthcare professionals to embed physical activity promotion into routine clinical care [137]. There are other existing resources that could be drawn upon to guide the development of online or face-to-face training packages [138, 139]. Under *Shaping a Healthy Australia* project, the Australian Government provided \$5million (2017/18 to 2020/21) to the Royal Australian College of General Practitioners to deliver tools and resources for general practices which aim to enhance knowledge and skills in encouraging positive lifestyle changes. The online tools are currently under development [140].

Evidence suggests that physical activity counselling provided over the phone may be as effective as face-to-face counselling in terms of improving physical activity levels [41] and this may improve accessibility for hard to reach groups, including people who live in rural and remote areas [141]. Additionally, *eHealth* tools can support accessibility, engagement, and personalised advice and counselling in disadvantaged areas [142]. Evidence suggests phone

and digital delivery of physical activity advice and counselling are effective in the general population [41] and in socioeconomically disadvantaged population groups [81].

Digital health is one of the key priorities of the Primary Health Networks [143]. Automated screening for physical activity and other lifestyle and behavioural risk factors have been shown to be feasible for implementation in primary care in the United States (US) [144]. Another study from the US found that office system interventions such as reminders in the form of chart stickers or computerized prompts have a strong potential to improve primary care-based behaviour change counselling, which includes physical activity advice and counselling [145]. This aligns with the rapidly growing practice of digital health to “promote, support, and monitor” physical activity and improve overall health and well-being of patients [146].

Other evidence-based strategies commonly used in delivery of interventions in primary health care, which could potentially improve the uptake, implementation, and sustainability of physical activity promotion in primary care health care practice, include: (i) conducting a regular summary of performance, which is considered to be effective and important for improvements of primary care practices [147, 148]; (ii) engaging a practice facilitator and/or change champion to support the delivery of the interventions in primary health care [149, 150]; (iii) mono- and multi-disciplinary co-location of various allied health professionals to support the delivery of interventions [151]; (iv) development of well-designed implementation or action plans, which can contribute to the successful implementation of interventions within healthcare settings [152]. A whole system approach and systems thinking in primary care should be considered at an early stage of the intervention development [33, 153, 154]. The systems approach, including partnerships with local governments, can assist in linking people with local, community-based physical activity programs, facilities, and services through social prescribing measures [33].

Case study – *Moving Healthcare Professionals Programme*

In 2014, Public Health England launched a *Moving Healthcare Professionals Programme* which aims to support healthcare professionals to promote physical activity [121]. The rationale behind the program development is based on the evidence that one in four people would be more physically active if advised by a GP or a nurse [155]. However, almost three-quarters of GPs are reluctant to advise their patients on the benefits of physical activity because of lack of skills, knowledge and/or confidence [155].

The *Moving Healthcare Professionals Programme* is a whole system, novel educational approach, to integrate prevention activities and physical activity promotion into clinical practice [122]. It provides evidence-based practical resources and primarily peer-led education and training to support healthcare professionals throughout their educational pathway and career [122, 155].

The program has four main components:

1. Training of existing healthcare professionals, which includes practical and free training on physical activity promotion and how to implement providing physical activity advice in practice;
2. Development of resources such as free e-learning modules on physical activity and *Moving Medicine*. *Moving Medicine* is an “evidence-based online resource” which helps healthcare professionals to access disease-specific evidence on the role of physical activity;
3. Upskilling the next generation includes tailored, site-based support for medical schools to integrate physical activity across their undergraduate curricula;
4. Testing innovative ideas such as a pilot project delivered by the University of Oxford Hospital Trust to embed physical activity in the processes and culture of a hospital [155].

An external, independent evaluation conducted in 2019 found that the training and education provided within the program effectively increased healthcare professionals’ knowledge about the benefits of physical activity as well as their confidence to discuss physical activity promotion as part of their clinical practice [121, 155].

Current policy landscape

In the last three decades, physical inactivity has become a “policy problem” and an increasingly important public health issue [156, 157]. Promotion of physical activity in primary health care is aligned with key international policies and initiatives, including the *WHO global strategy on integrated people-centred health services 2016-2026* [158], *WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020* [159], and the *WHO Global Action Plan on Physical Activity 2018 – 2030* [87]. The *Global Action Plan on Physical Activity* set targets for all member states to reduce physical inactivity by 30% by 2030 [87].

In *Sport 2030*, a national sport plan launched in 2018, the Australian Government committed to reducing physical inactivity by 15% by 2030 [160]. *Sport 2030* recognises that people of all ages should have the opportunity to be engaged in sport and physical activity throughout every stage of their life. It outlines a vision for Australia to be “the world’s most active and healthy sporting nation” and the intention to focus on initiatives and programs that target inactive people [160]. Under *Sport 2030*, the Australian Government committed to:

- introducing new programs developed to address the complex barriers to physical activity participation such as time, access, and cost;
- funding physical activity partners based on an agreed and clear set of outcomes;
- supporting national sporting organisations; and
- collaborating and partnering across portfolios, with state, territory and local governments, the corporate sector, and non-government organisations, which all share common vision for a more active Australia [160].

Targeted as a significant risk factor for non-communicable diseases, physical inactivity is also addressed in the *National Primary Health Care Strategic Framework (2013)* [161]. The framework emphasizes the importance of implementation of a prevention-focused model of health care, but does not provide solutions to reach delivery and system at scale [33]. In 2019, the Australian Government, Department of Health released *Australia’s Long Term National Health Plan*, which contains four pillars:

1. *Guaranteeing Medicare, stronger primary care and improving access to medicines through the Pharmaceutical Benefits Scheme (PBS)*
2. *Supporting our public and private hospitals, including improvements to private health insurance*
3. *Mental health and preventive health*
4. *Medical research to save lives and boost our economy* [162].

Priorities of the third pillar include the development and implementation of the *National Preventive Health Strategy* and building a more active Australia – “more Australians, more active, more often” - is in line with the objectives of *Sport 2030* [162]. Besides the development of a long term *National Preventive Health Strategy*, which aims to achieve a better balance in the healthcare system between treatment and prevention [162], the Australian Government is developing a *National Obesity Strategy* and a *Primary Health Care 10 year plan* to drive reform of Australia’s primary health care system to 2030. Even though physical activity promotion is an important part of several policies and frameworks, unlike many high-income countries

around the world, Australia does not have a comprehensive, standalone physical activity strategy on a federal level [163, 164].

Policy options

The following policy options would effectively support physical activity promotion in primary health care.

1. Consistent with best available evidence, physical activity promotion in primary health care could target insufficiently active patients, where clinically indicated, through routine screening of patients for physical activity levels, advice from a GP, nurse or potentially other health professional and a referral to appropriately trained practitioners for physical activity counselling.

- Based on the evidence that five sessions of physical activity counselling can effectively increase physical activity [41], a health care plan could provide for referral for up to five physical activity (counselling) sessions with an accredited health professional for physically inactive individuals for whom physical inactivity is an identifiable risk factor for preventable poor health and disease. This could be provided as a specific MBS item (additional to and separate from MBS Item 10593).
- Additional physical activity health workforce capacity could be provided through expansion of the eligibility criteria for provision of physical activity (counselling) under the Medicare Benefits Schedule [110]. Feasibility of education and training to support other health professionals such as nurses, social workers, psychologists and Aboriginal Health professionals to provide physical activity advice and counselling could be further explored. The *Moving Healthcare Professionals Programme* is a good example of adopting a whole system approach throughout the educational pathway of various healthcare professionals to support integration of physical activity promotion in clinical practice [122].
- Evidence shows that people from culturally and linguistically diverse backgrounds and Indigenous Australians are less physically active than other Australians, have higher rates of chronic diseases, and experience a range of barriers to physical activity participation [164-166]. To improve uptake and reach, we suggest services be culturally sensitive [164, 165, 167].

2. To reduce inequities in physical activity, a proportionate universalism approach could be applied to physical activity promotion in primary health care.

- To encourage students from disadvantaged communities to train as AEPs/physical activity counsellors, targeted additional scholarships and tuition waivers could be provided.
- Postgraduate AEPs/physical activity counsellors could be encouraged to locate to disadvantaged areas through incentive arrangements based on medical placements [95], programs and schemes available to medical school students that have shown to be successful [95].

- Additional counselling sessions could be provided for physically inactive individuals who experience disadvantage (determined by area level indicators of disadvantage, such as SEIFA or by individual criteria such as those on a health care card/pension) and for whom physical inactivity is an identifiable risk factor for preventable poor health and disease. Based on clinical indicators, they could be eligible for a higher number of individual sessions (refer 1(i) above) or group sessions. This could be modelled on the national program, *Better Access to Psychiatrists, Psychologists and General Practitioners* through the MBS, and would acknowledge the complex needs of disadvantaged patients, who often experience multiple comorbidities.
- Digital and telephone delivery of physical activity advice and counselling could be provided to increase the reach of physical activity advice and counselling for people living in rural and remote areas. An example is a *Get Healthy* service, implemented in New South Wales, which offers confidential information and telephone coaching programs on various health-related topics, including physical activity.

3. Uptake, implementation, and the sustainability of physical activity promotion by GPs and primary health care services could be supported by a range of strategies. Drawing on the best available evidence, the following strategies could be considered:

- Considering the importance of physical activity for the prevention and treatment of various mental and physical health diseases and conditions, it is not likely that the attention physical activity currently gets in medical training adequately prepares medical students to treat patients [123]. The curriculum for general practice could incorporate a greater focus on physical activity promotion as part of Fellowship requirements.
- Inclusion of AEPs/physical activity counsellors in primary care settings could be supported through practice incentive payments or targeted infrastructure funding.
- A national promotion program could be implemented through Primary Health Networks, for which dedicated funding would need to be ensured, to provide implementation guidelines and incentives to general practices including:
 - Physical activity promotion guidelines for general practice implementation;
 - Practice facilitators or change/champions to provide technical assistance, identify barriers to implementation and assist in problem-solving to facilitate implementation of physical activity promotion;
 - Support for system changes that will promote digitisation and enable the implementation of automated screening for physical activity and office system interventions such as reminders or computerized prompts to support the delivery of physical activity screening and advice in primary health care settings.

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