



#### **Abbreviations**

BMI COPD	body mass Index chronic obstructive pulmonary disease	NGO OHID	non-governmental organisation Office for Health Improvement and Disparities (England)
GAPPA HEPA MECC MVPA NCD NERS	Global Action Plan for Physical Activity (WHO) health-enhancing physical activity Making Every Contact Count (England) moderate to vigorous physical activity non-communicable disease National Exercise Referral Scheme (Wales)	PAVS PHE PHC SDGs WCRF	Physical Activity Vital Sign Public Health England primary healthcare Sustainable Development Goals (UN) World Cancer Research Fund
		WHO	World Health Organization

#### **Glossary of terms**

The relationship between "primary care" and "primary healthcare": this report follows WHO guidance when differentiating between primary care and primary healthcare. Primary care is a model of care providing interventions that are health promoting, preventative, curative, rehabilitative and palliative, acting as a point of first contact in supporting accessible, continuous, comprehensive and coordinated person-centred care throughout the life course. Primary healthcare refers to the broader, whole-society approach that involves primary care and integrated health services, multisectoral policy and action, and empowering people and communities. More information can be found here: https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/primary-care

Appreciating context-dependent definitions: the terminology used to describe those who benefit from physical activity promotion in primary care varies in different settings and different countries. In France, they are bénéficiaires [beneficiaries] and in Germany they are either versicherten [insured person] or patient/innen [patients]. They may be known as end-users, service users, recipients, or simply as those receiving interventions. This report has chosen to use the term "patients", as the initial intervention takes place in a primary care setting, even though the individuals may not be receiving the intervention for a specific health condition.

Differences between "brief intervention" and "prescription": the difficulty in finding set definitions for the concepts of "brief intervention" and "prescription" is addressed in Annex 2.

#### **About World Cancer Research Fund International**

**World Cancer Research Fund International** is a not-for-profit organisation that leads and unifies a network of charities based in Europe and the Americas, along with representation in Asia, giving us a global voice to inform people about cancer prevention.

We are a leading authority on the links between diet, nutrition, physical activity and cancer, and we work collaboratively with organisations around the world to encourage governments to implement policies to prevent cancer and other non-communicable diseases.

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#### How to cite the report

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### **Executive summary**

Physical activity plays a vital role in promoting and maintaining good physical and mental health, but too many of us are not reaching recommended levels of physical activity.

This report outlines why physical activity promotion within primary healthcare (PHC) is an important tenet of the comprehensive, cross-sectoral, systems-wide approach required to increase physical activity levels. It is a cost-effective way to increase physical activity and contribute to the prevention and management of many non-communicable diseases, including many cancers. The World Health Organization (WHO) is clear that promotion of physical activity in primary care is an essential tool that can make a difference, as part of systemic change.

First, it presents the emerging evidence for the benefits of promoting physical activity in PHC, from screening and brief interventions through to prescription and referral. It is crucial for the health of individuals and economies that effective policies on physical activity promotion in PHC are designed and enacted.

However, to date many countries do not have such a policy, with barriers to adoption including lack of national-level evidence, a perceived funding shortfall, or simply a failure to engage policymakers. This report offers a global policy perspective on developments and progress, as well as guidance on foundational policy processes and recommended components for effective policies to promote physical activity in PHC. The guidance offers several recommendations.

- a) Establishing sound foundational policy processes to ensure that policymakers understand the benefits:
- **Using the evidence** to make the case to policymakers, to design and implement physical activity promotion policies in PHC settings, and to ensure sustained take-up. This should include collecting evidence from persons with lived experience.
- Building shared policy understanding and objectives across government departments, using policy champions to drive progress forward.
- Taking context into account designing policy with regards to healthcare system models, political contexts, and social and cultural realities.
- Advancing health equity at every stage of policymaking.
- b) Integrating essential components to ensure policies are effective in the promotion of physical activity in PHC:
- Enhancing PHC professional training, capacity and confidence to ensure healthcare practitioners have the tools necessary to promote physical activity in their practice and with their patients.
- Increasing **health systems capacity** so that PHC professionals are provided with the time, tools and incentives to provide care that is preventive, rather than reactive.

- Providing adequate incentivisation for PHC professionals to incorporate physical activity promotion into their practice.
- Using clear communication and collaboration to ensure that policies are applicable
  and relevant to PHC practitioners, their practice, and the patients for whom they are
  providing care.
- **Providing a supportive environment for patients**, as promotion within PHC will only work if the external environment where we live, work and play is supportive of change.

The report draws strongly on the experience of developing and implementing physical activity promotion policy from experts from nine countries. Supplementary annexes provide additional information to support the main report:

- Annex 1 provides detailed snapshots of the policy state of play in World Cancer Research
  Fund (WCRF) International's network countries (the Netherlands, the United States and
  the United Kingdom: England, Scotland and Wales)
- **Annex 2** provides an overview of international policy recommendations
- Annex 3 covers a broad typology of ways in which policy may be implemented in practice

This Building Momentum report has been developed to be used as an advocacy tool that can help to build a robust case for the promotion of physical activity within PHC, emphasising the use of evidence-based best practices. Well-designed policy on physical activity promotion in PHC is an opportunity to join the growing number of countries that are contributing to and building the evidence base, improving the short- and long-term health and wellbeing of the population globally.







#### 1. Introduction

Regular physical activity has impressive effects on both physical and mental health. It helps to prevent and manage many non-communicable diseases (NCDs) - including many cancers, cardiovascular disease, type 2 diabetes, chronic obstructive pulmonary disease (COPD) and hypertension – as well as reducing symptoms of depression and anxiety, and helping older adults to maintain physical function. 1 It can also play a role in helping to prevent disease progression and improve quality of life for people living with NCDs. There are a range of policy measures available to governments to support populations in becoming more active - and in recent years there has been growing interest in policies to encourage the promotion of physical activity in PHC, which is the focus of the latest in the Building Momentum series.

This report begins by outlining the evidence that promotion within healthcare settings is an important, cost-effective option to increase physical activity, contributing to efforts to prevent and manage NCDs. It explains why designing and enacting a policy on physical activity promotion for adults in PHC can benefit the health of individuals and economies, and strengthen society, addressing barriers to policy development and to delivery of the policy in practice. Examples of policy are threaded throughout the report (drawn primarily from Europe): Annex 1 features detailed snapshots of the state of play in WCRF International

network countries (the Netherlands, the United States and the United Kingdom – England, Scotland and Wales). Finally, Annex 3 delves into some ways in which the policy may be delivered, setting out key characteristics of implementing a physical activity promotion in PHC and providing a broad typology. To be successful, policy must ensure both that physical activity is easy for those working in primary care to prescribe and easy for the patient to take up, providing continuing, consistent support.

This report is designed for those with an interest in introducing measures within PHC to promote physical activity, including (but not limited to) civil-society advocates, policymakers, healthcare professionals, physical-activity specialists, and community wellbeing groups. It draws on the practical experience of experts from a range of countries, highlighting the ways in which different initiatives to increase physical activity through PHC settings are being developed and implemented and the challenges that they face. This report aligns with and complements WHO recommendations in the Global Action Plan on Physical Activity (GAPPA),<sup>2</sup> the ACTIVE technical package<sup>3</sup> and the Toolkit on Promoting Physical Activity through Primary Health Care.4 It is not intended to act as a guide for the implementation of physical activity promotion in PHC: instead, it focuses on policy development.



This report addresses a burgeoning area in which there is a less advanced evidence base than topics covered by earlier WCRF International Building Momentum reports. Hence, unlike previous reports in the series, it does not have a section on what is required for "robust design". Instead of acting as a pre-determined policy roadmap, this report is meant to act as more of a navigation guide. It identifies potential obstacles and barriers along the policy development pathway, and provides evidence-based guidance on how to overcome them. WCRF International regards physical activity within PHC as an important opportunity to improve population health – an opportunity that, for a variety of reasons, is not yet being taken up by governments. This document adds a voice to those already calling for action, providing further support for the increased uptake and adoption of physical activity in PHC settings.

#### **Methods**

A short search of both peer-reviewed and grey literature identified national and international reports, research articles and policies from around the world, that are related to the promotion of physical activity in PHC settings. Search terms included "physical activity", "primary health", "prescription" and "policy". This report also draws heavily on reports and documents provided or highlighted by experts, both WCRF International's own Policy Advisory Group and interviewees for this report. The promotion of physical activity in social care or in health settings beyond primary care is not included.

Semi-structured interviews were conducted with 14 experts from England, Scotland, Wales, Netherlands, Portugal, Sweden, US, France and Luxembourg between summer 2022 and spring 2023. Experts were selected for their knowledge and experience of the topic either internationally or nationally. Most also have personal experience of the policy process in countries that have implemented policies for physical activity promotion in PHC settings. This provided valuable further insights into the practical enablers and barriers to policy development and implementation.



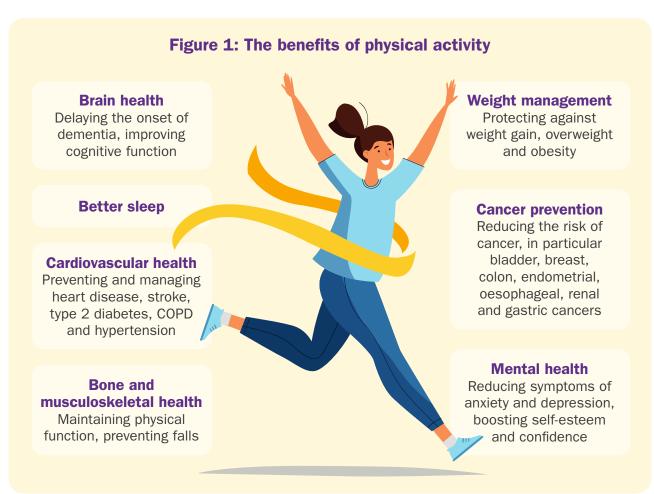
### 2. Background

# 2.1 Why is physical activity important in tackling cancer and other NCDs?

WHO's *Guidelines on Physical Activity and*Sedentary Behaviour,<sup>5</sup> published in 2020,
recommends that all adults should undertake
regular physical activity: at least 150 minutes
a week of moderate-intensity physical activity,
or 75 minutes of vigorous-intensity physical
activity, with muscle-strengthening activity on at
least two days each week. The health benefits
are myriad, with impressive effects on both
physical and mental health: people who meet
the recommended levels of physical activity
have a 20–30% lower risk of premature death.<sup>5</sup>
As the former Chief Medical Officer of England,
Dame Sally Davies, put it, "If physical activity
were a drug, we'd talk about it as a miracle cure."<sup>6</sup>



Physical activity has a clear dose-response effect on health – for example, recent studies show a clear reduction in cancer, cardiovascular disease and all-cause mortality<sup>7</sup> and in dementia<sup>8</sup> as daily step-count increases. Any level of physical activity is better than none:<sup>9</sup> "every movement counts".<sup>(i)</sup>



(i) Research for the Richmond Group of Charities in the UK suggests that this messaging is likely to be effective at encouraging people with long-term conditions to engage in physical activity: Britain Thinks, People with Long-term Conditions and Attitudes towards Physical Activity (2016) https://richmondgroupofcharities.org.uk/sites/default/files/richmond\_group\_debrief\_final\_1.pdf

#### **Sedentary behaviour**

The environment in which we live is structured in a way that causes many of us frequently to engage in sedentary behaviour patterns. 10 This can occur during both work (such as desk-based office jobs) and leisure (such as TV viewing or screen time) hours. Sedentary behaviour is linked to adverse health outcomes in children (including increased adiposity, poorer cardiometabolic health, poorer fitness, poorer behavioural conduct/pro-social behaviour and reduced sleep duration) and adults (all-cause mortality, cardiovascular disease mortality and cancer mortality, and incidence of cardiovascular disease, cancer and type 2 diabetes).<sup>5</sup> However, this can be addressed by even small amounts of physical activity, which can add up over the day, and has been shown to have a significant impact on health.8

There is strong evidence linking physical activity with a reduced risk of colorectal, breast (postmenopausal) and endometrial cancer. Increased levels of physical activity have also been associated with reduced risk of bladder, esophageal adenocarceinoma, gastric and renal cancers. 11,12,20 Of all the cancers prevented by physical activity, the largest effect is on colon cancer: around 10% of deaths from colon cancer could be prevented if everyone were to be active. 13,14 There are numerous metabolic, hormonal and immunologic pathways that are influenced by physical activity and which may be related to a reduced risk of cancer. Regular physical activity reduces adiposity, which in turn reduces cancer risk – this is likely to be an important pathway linking physical activity and cancer development. 12,15

Physical activity helps to prevent and manage other NCDs – including cardiovascular disease (heart disease and stroke), type 2 diabetes, COPD and hypertension – and can contribute to musculoskeletal health.<sup>16</sup> Physical activity - alongside diet, genetics and environmental factors - is also a factor in maintaining a healthy body weight. The growing prevalence of persons living with overweight and obesity has been a policy concern in high-income countries for some time, increasingly so in lowand middle-income countries. 17 Higher levels of physical activity are likely to be associated with a lower risk of developing obesity, with moderate-to-vigorous physical activity (MVPA) protecting against weight gain.<sup>18</sup>

For people living with NCDs such as cardiovascular disease<sup>19</sup> and many cancers (see "The role of physical activity in cancer treatment and survivorship"), physical activity can play a role in helping to prevent disease progression and improve quality of life. Evidence on physical activity for people living with and beyond breast cancer was reviewed as part of WCRF's Global Cancer Update Programme. The independent expert panel for this programme found strong evidence that physical activity improved quality of life and that this was probably a causal relationship.<sup>20</sup> They were not, however, able to make judgements about the best type or dose of physical activity or draw firm conclusions about the impact on different domains of quality of life.<sup>21</sup>

Regular physical activity is also important for older adults in helping them to maintain physical function and balance, and to prevent falls. <sup>22</sup> Being active can also have significant benefits for mental health and cognitive function, delaying the onset of dementia and reducing symptoms of depression and anxiety. It can contribute to social inclusion, confidence and self-esteem. <sup>23,24</sup>

# Box 3: The role of physical activity in cancer treatment and survivorship

There is emerging evidence that higher levels of physical activity after cancer diagnosis are associated with improved survival outcomes,<sup>25</sup> although the mechanisms through which this happens are still emerging: for example, sarcopenia (muscle loss in ageing) often presents with obesity, and can negatively impact treatment and health outcomes during cancer diagnosis and treatment.<sup>26</sup> Evidence indicates that being physically active before or after diagnosis of breast or colon cancer is associated with improved survival; it has been suggested that physical activity after diagnosis of these cancers gives greater mortality benefit than physical activity prior to diagnosis.<sup>27</sup> Despite these potential benefits, reverse causation and residual confounding have been raised as potential issues when interpreting the evidence and more research is required to tease out these effects.<sup>28</sup>

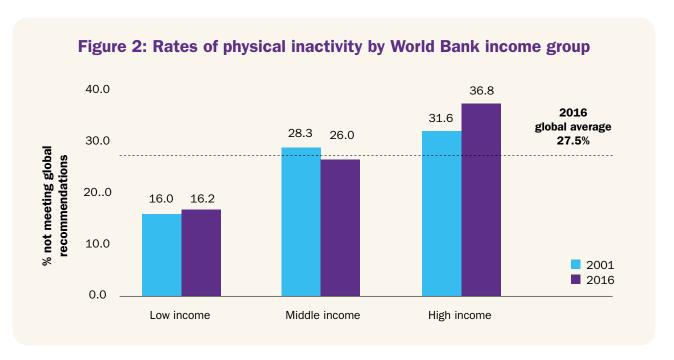
Physical activity is also associated with improved quality of life (including improving anxiety, depression and physical function) for people currently with cancer<sup>29</sup> and for cancer survivors.<sup>30</sup> The 2022 American Cancer Society Nutrition and Physical Activity Guideline for Cancer Survivors also notes that "preliminary evidence suggests that exercise during cancer treatment may improve treatment tolerance and response".<sup>31</sup>

#### 2.2 Global targets for physical activity

In recognition of the strong link between physical activity and major NCDs, in 2013 all WHO Member States agreed to a target of a 10% relative reduction in the prevalence of insufficient physical activity in adults and adolescents by 2025 (from a baseline of 2010).<sup>32</sup> This is one of nine voluntary targets on NCDs – targets that have since been extended by five years to align with the date for the achievement of the Sustainable Development Goals (SDGs). The target has been increased to a 15% reduction (from a baseline of 2016)<sup>2</sup> – so Member States will have had a period of 17 years (2013–30) to put in place and implement policies.

However, if current trends continue, the chance of reaching this target seems slim. Global estimates indicate that 28% of adults (1.4 billion people) and over 80% of adolescents do not meet WHO-recommended physical activity levels<sup>1</sup> – Figure 2 shows the differences between different regions. These rates have seen almost no improvement during the past decade, despite an increased awareness among policymakers of the importance of physical activity during the COVID-19 lockdowns. In most countries, the most socially disadvantaged groups, such as women, older adults, people of lower socioeconomic status (including differences in income, education, etc.), and people living with chronic health conditions or disability, are often the least active. 33,34 Monitoring physical activity levels and trends is essential to track progress towards the global physical activity target,<sup>35</sup> but also to identify high-risk populations, to assess the effectiveness of policy, and guide future policy and programme planning.





Source: Guthold, R. et al. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants (2018) Lancet Global Health 6(10): e1077–e1086 https://doi.org/10.1016/S2214-109X(18)30357-7

## 2.3 The impact of physical inactivity on health systems

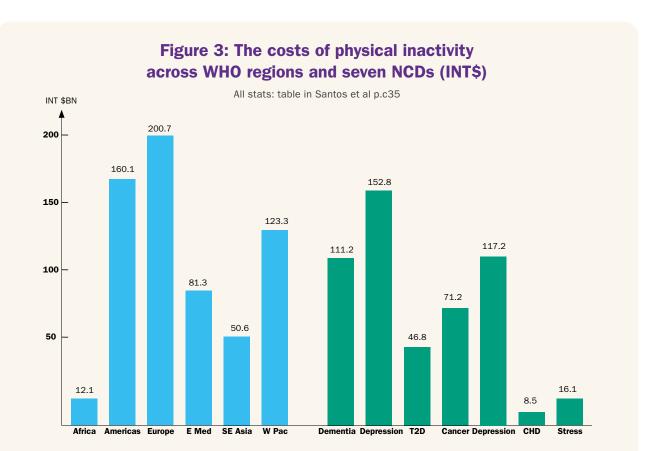
The benefits of increasing physical activity go far beyond health benefits to the individual: the costs of healthcare and lost productivity due to NCDs that are related to physical inactivity are very substantial – with consequent cost savings relating to NCD risk reduction through increasing physical activity.

The WHO Global Status Report on Physical Activity 2022 suggests that physical inactivity will cause almost 500 million new cases of preventable NCDs between 2020 and 2030. This is hugely expensive: the report estimates that the diagnosis, treatment and management of new cases of NCDs<sup>(ii)</sup> caused by physical inactivity currently costs INT\$47.6 billion (US\$27.4 billion) annually, and the cost from 2020 to 2030 will total INT\$523.9 (US\$301.8 billion) by 2030 (the date by which, theoretically, the target of a 15% reduction in physical activity should be achieved).<sup>36</sup>

The 2022 report also estimates the costs of the healthcare expenditure across seven major NCDs (including mental health conditions) and across all WHO regions: almost three-quarters of new cases would occur in low- and middleincome countries, but the majority of costs (63%) will fall on high-income countries. This is also likely to be a significant underestimate of the actual costs, as it does not include the indirect costs to society of the NCDs caused by physical inactivity (such as reduced productivity at work) and covers only the first year of treatment.(iii) It also uses 2016 data, which are the most recent, but which are out of date and may have worsened due to the impact of COVID-19. (WHO is currently working on updating global comparative estimates, which are due to be published in late 2023).

<sup>(</sup>ii) This includes seven cancers: colon, breast, endometrial, gastric, oesophageal, renal and bladder cancer.

<sup>(</sup>iii) A 2020 study estimated that if everyone reached the WHO's minimum guideline level of physical activity of 150 minutes a week, this would lead to an increase in global gross GDP of 0.15%–0.24% per year by 2050, worth up to US\$314–446 billion per year: Hafner M. et al. Estimating the global economic benefits of physically active populations over 30 years (2020–2050) (2020) Br J Sports Med 54: 1482–7 http://dx.doi.org/10.1136/bjsports-2020-102590



Source: Santos, A.C. et al., The cost of inaction on physical inactivity to public health-care systems: a population-attributable fraction analysis (2023) The Lancet Public Health 11(1): e32–e39 https://doi.org/10.1016/S2214-109X(22)00464-8

Note: The international dollar is a hypothetical currency that has the same purchasing power in the country cited as the US dollar would have in the USA at a given point in time. For example, Int\$40 in country A would buy a comparable amount of goods in country A as US\$40 would buy in the USA. It is calculated taking into account the exchange rate of national currencies against the US dollar at purchasing power parity (PPP). Amount in National Currency/PPP Exchange rate = International \$ Value

#### 2.4 Policies to promote physical activity

Policies – laws, regulations and guidelines – are important tools that governments can use to support or hinder the creation of environments that encourage physical activity, and which can contribute to tackling health inequalities (see Section 4.2.4). There is no one single policy solution to ensuring an active population at home, school, work and in the local community: a whole-system approach is required. Action needs to be taken across a wide range of areas - health, sport, education, transport and urban design. Targets for increasing physical activity will only be achieved with the involvement and coordination of a range of stakeholders, including government (local and national), nongovernmental organisations (NGOs), healthsupportive actors from the private sector, the health system, academia, the media and the

public. WCRF International's MOVING framework and database contains information about implemented policy actions, using a cross-sectorial and multi-stakeholder approach, targeted at getting people more active around the world.

The importance of this whole-system approach is clearly set out in WHO's GAPPA.<sup>2 39</sup> It sets out four policy strategic objectives – to create active societies, environments, people and systems – that are underpinned by 20 multi-dimensional, evidence-based policy recommendations, all of which are effective components in a population-based approach to increasing physical activity. This includes the promotion of physical activity in PHC.

### 3. Physical activity promotion in PHC settings

#### Figure 4: A timeline of international policy guidance and targets

The clear evidence that supports physical activity promotion in healthcare settings worldwide is reflected in many international policy guidance documents, which can be used by policymakers to guide national-level policy on physical activity.

2023 - Updated WHO NCD Best Buys

2022 - WHO Global Status Report, WHO Toolkit and BRIEF

2020 - WCRF International MOVING framework, WHO HEARTS

2018 - WHO GAPPA, ACTIVE Toolkit

2017 - Updated WHO NCD Best Buys

2016 - WHO Europe Physical Activity Strategy 2016-25

**2013** – WHO Voluntary global target on physical activity; WHO NCD Best Buys; European Council recommendation on HEPA

**2011** – ISPAH, Eight Investments that Work for Physical Activity

2010 - ISPAH, Toronto Charter for Physical Activity

2004 - WHO Global Strategy on Diet, Physical Activity and Health

Note: For more information on these documents, see Annex 2.

#### 3.1 Why PHC settings?

All of us, at some point in our lives, are seen by PHC professionals: GPs, nurses, midwives, pharmacists, dieticians, physiotherapists and community health workers. They are our first point of contact when we require medical attention - and they have greater access to the population than any other health professional. In the UK, for example, GP consultations averaged eight per person per year in 2015-18, with patients who required care for chronic NCDs (around 10% of patient-base) taking around 40% of all consultations.37 PHC professionals are ideally positioned to promote comprehensive interventions to prevent and manage NCDs<sup>38</sup> – including advocating for physical activity across the whole population and across the life course.39

Policy to encourage physical activity promotion in PHC as part of a broader, whole-systems approach has been included in many policyoriented documents from WHO and NGOs (Figure 4). For example, in 2010, the Toronto Charter for Physical Activity<sup>40</sup> included, in a section entitled Reorient services and funding to prioritise physical activity: "Screening of patients/clients for levels of physical activity at every primary care consultation, and provision of brief, structured counselling and referral to community programs for insufficiently active patients." WHO Europe's Physical Activity Strategy for the WHO European Region 2016-2025 states "Early identification, counselling and referral [for physical activity] at the primary care level should be integrated into standard practice and should respond to the different needs of patients."41

Additionally, within the "create active people" strategic objective, GAPPA states that a key policy area is to:

"Implement and strengthen systems of patient assessment and counselling on increasing physical activity and reducing sedentary behaviour, by appropriately trained health, community and social care providers, as appropriate, in primary and secondary health care and social services, as part of universal health care, ensuring community and patient involvement and coordinated links with community resources, where appropriate."

– GAPPA, action 3.2

WCRFI's MOVING framework also identifies "Give physical activity training, assessment and counselling in healthcare settings (G)" as one of its six key policy areas.<sup>42 (iv)</sup>

This report focuses specifically on primary care settings, rather than care in hospitals or social-care settings – although the latter settings can also be part of a holistic package of measures to increase physical activity. Interdisciplinary healthcare professionals can help patients of all ages become more active and prevent the increasing burden of NCDs<sup>43</sup> while also using physical activity to increase rates of rehabilitation and recovery. Where healthcare professionals are educated and empowered to deliver interventions and advice, every contact can count.<sup>44</sup>

In **France**, management of 30 different long-term conditions includes the availability of sports on prescription,<sup>45</sup> It is 'not really prevention – it is really for therapy of those with chronic diseases, where physical activity or sports will be part of their management.' (Jean-Michel Oppert, Sorbonne University, Paris, France)



Interventions through primary care – whether screening, brief advice, referral or prescription, or a combination - can help to encourage healthier behaviour and habits, as well as identify local opportunities for facilitating physical activity and providing any necessary recreational equipment (this can include local leisure centre classes, walking groups etc.). Together, policies that support physical activity interventions in PHC settings, alongside those that create supportive environments that foster regular, everyday physical activity, work in concert within a whole-systems approach to enable the population to be physically active over time where they live, learn, work and play (and the routes we take to get there). Improvements to population health outcomes using this approach have been shown,46 and are increasingly emerging in evidence.

**Note:** While the main body of this report focuses on policy processes and design, Annex 3 outlines key characteristics on the implementation of physical activity promotion in PHC settings and provides a broad, fourpart typology of interventions: screening, brief intervention/verbal advice, prescription and referral (although it is noted that these terms are loosely defined and used in different ways in different contexts). Examples of each are provided, based primarily on the interviews for this report.

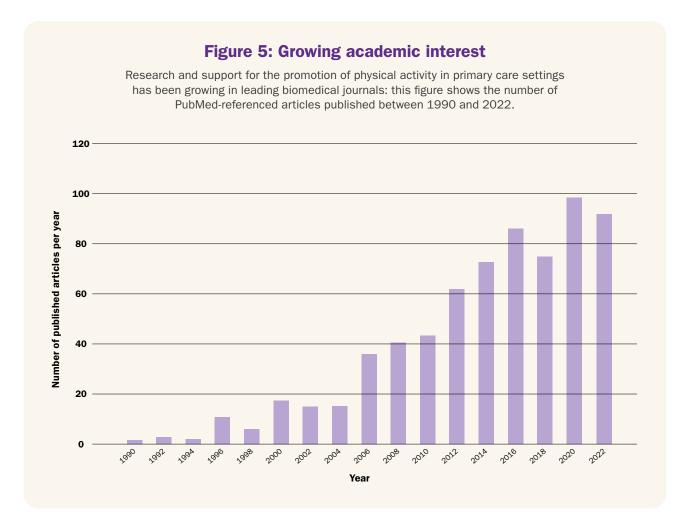
(iv) The MOVING framework recognises the importance of the WHO GAPPA and seeks to align with its recommendations. As such, efforts were made to ensure that all recommended policy areas of the WHO GAPPA featured in the MOVING framework and the MOVING policy domain names were taken from WHO GAPPA. Consequently, the MOVING framework and database can support advocacy activities that also implement the GAPPA recommendations.

#### 3.2 What is the evidence?

## 3.2.1 Health benefits of promoting physical activity in PHC settings

The body of evidence to support the benefits of physical activity interventions in PHC is consistently increasing, showing that brief interventions, prescription or referral can lead to a sustained uptake of physical activity. 4,47,48 These cost-effective interventions can result in positive changes in health outcomes by increasing levels of physical

activity, particularly for patients who are inactive and at risk for developing NCDs.<sup>39</sup> The success and sustainability of these interventions relies on PHC professionals to engage effectively in delivering physical activity counselling, which requires appropriate training, funding, and whole-systems support (including involvement of stakeholders beyond the health sector).



Note: Search terms were ("Physical activity" OR "Exercise") AND ("prescription" OR "referral" OR "Counselling") AND ("primary care" OR "healthcare settings"). This was updated by WCRF from a graph in Lion, A. et al. Physical activity promotion in primary care: a Utopian quest? (2019) Health Promotion International 34: 877–86. https://doi.org/10.1093/heapro/day038



Evaluating implementation in practice is challenging, and evidence to date has tended to come from short-term studies. While the evidence on the health benefits of physical activity is clear, there is a need for more evidence of the longer-term benefits of promoting physical activity in PHC. Evaluating, learning from experience and adapting should be a core part of any policy.<sup>49</sup>



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"A limitation of a lot of studies is that they just evaluate over one or two years. If you really want to show the effects on mental health or physical health, you need to follow the people for four or five years."

Dorine Collard, Mulier Institute, Netherlands A systematic review (2022) of randomised controlled trials of physical activity interventions delivered or prompted by PHC professionals<sup>(v)</sup> found that, on average, participants in intervention groups increased their MVPA compared to control groups, with trials that used self-reported data showing a slightly larger increase compared to control groups. The authors note, "even small changes in physical activity are clinically important" because of the dose-response link with all-cause mortality. In addition, the results suggest that the chances of patients meeting the MVPA guidelines increase by a third.<sup>50</sup> <sup>51</sup>

### Box 4: Physical activity after a cancer diagnosis

There is emerging research that supports that promoting physical activity in healthcare settings is beneficial for cancer patients – for example, prostate<sup>53</sup> and breast cancer.<sup>54</sup> It can also improve quality of life. Despite these benefits, a 2012 survey in the UK by Macmillan Cancer Support showed that 37% of people with cancer were not physically active at all, and the majority had not been spoken to by their GP (82%) or oncologist (77%) or clinical nurse specialist (79%) about the benefits of physical activity.<sup>55</sup>

In **Sweden**, a systematic review of the FaR® ("physical activity on prescription") programme found that in accordance with the Swedish model, FaR® probably increases the level of physical activity. As a model for exercise prescription, FaR® may be considered as part of regular healthcare to increase physical activity in patients.<sup>52</sup>

**Wales**: "The evaluation undertaken in 2009 was important for establishing NERS as effective and demonstrating its potential in improving health and wellbeing through building good physical activity habits. The results, together with the related publicity, resulted in a significant increase in referrals from health professionals to the leisure-based delivery partners" – Mary-Ann McKibben, Consultant in Public Health, Public Health Wales/Strategic Lead for NERS

<sup>(</sup>v) This review excluded evaluations of exercise referral because the primary care professional is not directly involved in delivery. It also excluded rehabilitation interventions, as it focused on MVPA and patients requiring rehabilitation may not be able to perform physical activity to this level.

#### 3.2.2. Financial benefits

As already noted, the cost of inaction on physical inactivity is very significant, but the evidence is growing for primary care interventions providing value for money and having returns on investment.

Physical activity interventions in primary care are part of WHO's menu of cost-effective policy options to tackle NCDs. (vi) The latest iteration of these evidence-based interventions (vii) includes 28 particularly cost-effective interventions, across four NCD risk factors (physical inactivity, unhealthy diet, tobacco and alcohol use) and three NCDs (cancer, cardiovascular diseases, and chronic respiratory diseases). This assessment is partly based on value for money (i.e. on GDP-based cost-effectiveness thresholds) and also on other criteria including affordability and feasibility. For Interventions to promote physical activity in PHC are identified as an 'effective intervention". (viii)

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"Provide physical activity assessment, counselling and behavioural change support as part of routine primary health care services through the use of a brief intervention." It also notes the critical non-economic consideration: this "Requires capacity, and staff with sufficient training in primary care."

The WHO's Toolkit on promoting physical activity in PHC (2021) suggests that "brief intervention by a healthcare professional to provide physical activity assessment and counselling can generate a cost-effectiveness ratio of INT\$1000–5000 per disability adjusted life year (DALY) averted in low- and lower-income countries, and INT\$500–1000 per DALY averted in upper-middle- and high-income countries".4

(vii) These are also known as the NCD 'best buys' (vii) Adopted at the 76th World Health Assembly, 2023 (viii) Defined as a CEA >I\$100 per DALY averted in low- and middle-income countries.

In **Wales**, a randomised controlled evaluation of the National Exercise Referral Scheme (NERS) programme in 2009 showed that NERS was cost effective and, for those that completed the programme, was marginally cost saving to the NHS.<sup>57</sup>

In **Sweden**, the FaR® initiative is one of the country's longest-running programmes; it forms the basis of the EU Physical Activity on Prescription (EUPAP) programme. A wide range of "prescription" options are available, depending on the region, "compris[ing] anything from a simple, written suggestion of an activity to a comprehensive solution with a supportive structure from a prescriber, activity organiser or leader".58 However, this diversity means that cost-effectiveness studies have not been undertaken – but the government considers that cost-effectiveness studies from elsewhere on brief interventions (consultations) provide sufficient evidence of benefit and value for money.

Understanding return on investment is complicated by the challenge of comparing physical activity interventions, because these vary significantly in what they do, and how and what they measure, with different duration and follow-up periods. This makes comparison difficult and conclusions hard to draw. A 2016 systematic review of brief interventions found significant heterogeneity, but also that "When the longer-term costs and health benefits are considered, brief interventions<sup>59</sup> are costeffective compared with the NICE threshold of £20,000-30,000/QALY gained."60 The cost can, of course, be further reduced if patients make a contribution – but this can deter participation, particularly among disadvantaged populations that may be in most need of encouragement.39

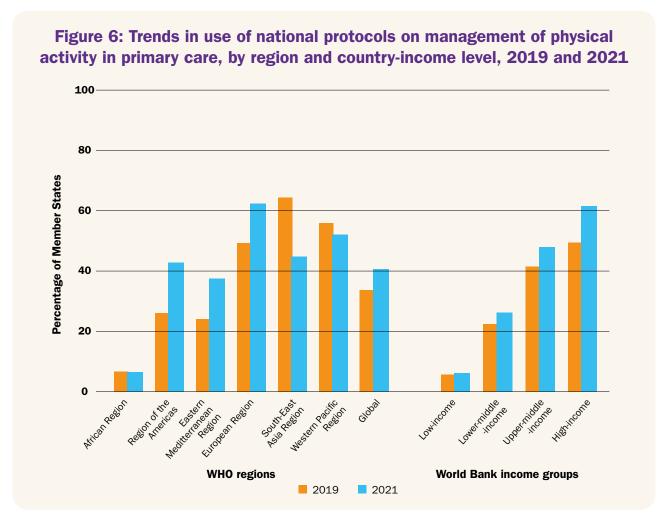
WHO is compiling evidence on the costeffectiveness of physical activity promotion in primary care, which is due to be published later in 2023.

#### 3.3 Where are we now?

According to the first WHO *Global Status Report* on *Physical Activity* 2022 (2022),<sup>35</sup> only 40% of the 78 countries that responded to WHO's survey have an evidence-based, government-approved national protocol or standard on managing physical inactivity through primary care. This is a slight rise from 34% in 2019 – but less than 60% of countries with a national protocol report that they are used in over half of their healthcare facilities. In addition, this does not show to what extent the policy is embedded or to whom it applies, so may mean different things in different countries.

As the Global Status Report notes, "Although this indicator shows a modest increase since 2019, the slow level of implementation of this 'best buy' policy is of particular concern, given the high number of people living with, or at risk of, NCDs."

Physical activity promotion in healthcare settings continues to be recommended across international policy guidelines and targets, and integration of national protocols on management of physical activity in primary care is increasing globally. We also know from evidence that physical activity promotion in primary care settings can be effective in increasing levels of physical activity. As the WHO Europe Physical Activity Strategy for the WHO European Region 2016-2025 puts it, "Member States should work towards making the promotion of physical activity by health professionals the norm." 41 As the integration of physical activity in PHC settings continues to be recommended as a cost-effective, public health best practice, it is crucial that effective policies are developed to support national programmes as they are established and/or continue to expand.



Source: WHO (2022) Global Status Report on Physical Activity 2022 https://www.who.int/publications/i/item/9789240059153

# 4. Establishing successful policies for physical activity promotion in PHC

# **4.1** Key issues and potential barriers to adoption

Currently many countries do not have policies on delivering physical activity interventions in primary care, despite the evidence for effectiveness and it being included in many international calls to action. In a world of competing priorities for financial resources and legislative attention, there may be apathy or resistance to adopting a policy on physical activity promotion in primary care.

Too often, policymakers are not operating in an environment that supports developing policy, for reasons that include:

- Insufficient nationally focused evidence that makes the case for action
- Causation in reduction of obesity/NCDs may be hard to show in a short time period that aligns with political cycles
- Lack of enthusiasm and understanding for the policy, particularly among senior politicians (ministers of health or heads of state and government), and failure by government departments beyond health to appreciate the co-benefits of increased physical activity
- Failure to take national context into account
- Lack of involvement of those who will be delivering physical activity promotion in PHC settings – and, consequently, little support to encourage the adoption of the policy

One size does not fit all in tackling these barriers, but a model by John Kingdon<sup>61</sup> suggests that change can happen when three conditions converge: the "problem stream" (an understanding that government action is required to address a public problem), the "policy stream" (identification of a solution that is feasible and acceptable) and the "politics stream" (which includes alignment with national

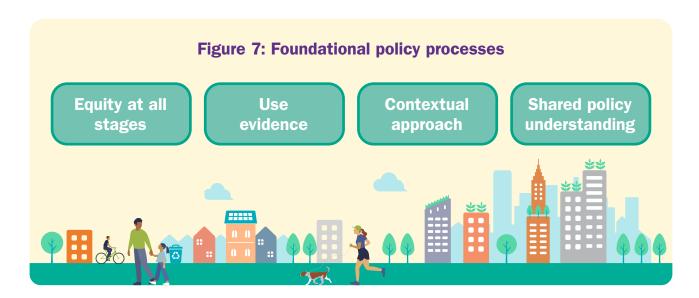
mood and norms, and changes in government). When these three streams intersect, a window opens to allow the introduction of a policy on physical activity promotion. Champions must be found, evidence gathered, capacity built, infrastructure provided, and convening and consultation undertaken with stakeholders across the spectrum, from government ministers through to the patients who receive the support. All of this must take account of national contexts and constraints.

The review of the global literature and stakeholder interviews identified:

- a) Foundational policy processes based on a clear set of principles, and
- b) Inclusion in the policy of components to address potential barriers to adoption on the ground

combine to ensure that government efforts to promote physical activity in PHC settings are effective. This requires ensuring capacity within PHC settings as well as the healthcare systems in which they reside to provide wholesystem support. From policy design to delivery, collaboration across the spectrum from the highest-level policymaker, right through to the individual who receives support to increase their physical activity, is essential.





#### 4.2 Foundational policy processes

If policy is to be fit for purpose – with demonstrable impacts on physical activity behaviours and, ultimately, health outcomes – policymakers must be supported in understanding the benefits of investing in the policy, tailoring it to be culturally appropriate, and designing it collaboratively, both with those who will be responsible for delivery and with those who will be beneficiaries.

#### 4.2.1 Use the evidence

Evidence is fundamental to good policy design: policymakers should use evidence to design and implement physical activity promotion policies in PHC settings, and ensure sustained take up. Evidence can also be used as an advocacy tool and to build support – highlighting both the myriad health benefits of physical activity across a wide range of physical and mental health conditions, at all ages, and also the cost-effectiveness of interventions in PHC.

There is clear evidence on the benefits of the inclusion of physical activity within PHC, and this can appeal to policymakers' heads, hearts and pockets. This evidence has been used by international organisations including WHO and the European Commission to make the case for action. It has made this type of policy intervention identifiable as a cost-effective



"A big thing in all of this is winning hearts and minds, and creating the will to do the right thing and for the right reasons."

Flora Jackson, Public Health Scotland

intervention for the prevention and control of NCDs<sup>62</sup> – and these recommendations can help to persuade policymakers of the need to act.

Making the financial case can help to bridge the policy implementation gap: presented with the national cost of failure to act, policymakers may be more likely to take action. WHO is currently working on the cost-effectiveness of action on physical activity for primary care, which will highlight the impact that it could make to the huge economic burden of physical inactivity. But the evidence already shows the implication for disease and the costs of a failure to make physical activity a policy priority, as sections 2.3 and 3.2.2 have highlighted. (ix) Having the metrics can help to inform the business case for addressing physical activity more broadly not just within health departments but across other government departments.

(ix) The costs have been broken down to national level by WHO – although this looks only at the cost of treatment in the first year and doesn't take into account either the wider societal costs (for example, to reductions in productivity) or costs beyond the first year. $^{36}$ 

And the people behind the numbers can themselves make a powerful case. Hearing from those with lived experience of benefiting from physical activity promotion in PHC can bolster the data, when they tell their own stories, told in their own voice.

The CO-CREATE Project ('Confronting obesity: co-creating policy with youth') has taken a systematic approach to analysing the complexity of overweight and obesity among adolescents - an age group that often fails to meet recommendations on physical activity.63 It has developed tools to help facilitate the inclusion of young people in obesity policy processes: these tools could be used to involve adolescents in the process of developing robust policies for promoting physical activity in PHC. This approach could also be adopted for use in other target groups, such as patients, groups of different ages, and groups with lower socioeconomic status.

"Having success testimonials from patients who were able to raise their physical activity levels is very important. In Portugal, we have videos from PHC with real-life, real-world patients, telling their story, about how physical activity changes their lives for the better."

Marlene Nunes Silva, NationalProgramme for Physical Activity Promotion, Portuguese Directorate-General of Health





### **4.2.2** Build shared policy understanding and objectives

Ensuring a whole-government understanding of the benefits of physical activity promotion in PHC fosters broad political support for policy across government departments, building a shared understanding that policy is feasible and beneficial. Policy champions also play a crucial role in building political will, consensus, and momentum with policy design and implementation.



"The ministers of health need to be talking to the ministers that are responsible for sport, because we need the sports sector to take care of patients... We need to have activity providers in there."

Marita Friberg, EUPAP

As standard practice, policymakers must set overall objectives at the outset for a specific policy. For example, there may be an objective associated with preventing cancer and other NCDs, which may be complemented by an objective to reduce expenditure on treatment (as cases of NCD are averted). Many of the health benefits of physical activity are longterm (such as reduction of risk of some cancers. This can be a disincentive for some policymakers, as the benefits will fall beyond the current political cycle. However, the benefits for mental health can be rapid, and this can be an important motivating factor for governments concerned about population mental health, such as during the COVID-19 pandemic or in a cost-of-living crisis.

As Figure 8 shows, support for the policy may be bolstered by drawing out the co-benefits with other agendas.

Figure 8: Cross-government co-benefits of physical activity

#### HEADS OF STATE AND GOVERNMENT

Every country in the world has committed to achieving the SDGs by 2030. Increasing physical activity has impacts on many of the SDGs, far beyond SDG3 on better health: this includes environmental protection, job creation, female empowerment and lower fossil fuel consumption.3



### MINISTRY OF FINANCE

Physical activity promotion in PHC is costeffective, offering healthcost savings in the long-term.



### MINISTRY OF LABOUR

Supporting older people or people with chronic NCDs through physical activity promotion may help to extend the time they can remain in the labour market.



### ENVIRONMENT MINISTRY

The carbon emissions of national health systems<sup>64</sup> may be reduced through health promotion efforts, including increasing physical activity, rather than the use of pharmaceuticals.

### TRANSPORT MINISTRIES

Physical activity policies can work alongside other policies to encourage people out of their cars.65 Research suggests that if the world adopted Dutch bicycle use, around 686m metric tons of carbon emissions would be averted globally, equivalent to 20% of 2015 carbon emissions from the global passenger car fleet.66



Policy champions are also crucial in building political will. They do this by combining their individual passion with a good understanding of the cultural context and system within which physical activity in PHC is being promoted. Stakeholders such as NGOs, or even individual champions such as high-level athletes, can play an important role in advocating for healthenhancing physical activity policies.

In Portugal, the secretary of health, himself a doctor and an enthusiast for physical activity, was instrumental in the passing of a presidential decree in 2017. This states both that the national health system should support physical activity through assessment/brief counselling and that models should be created to test physical activity on prescription. "[The secretary of state for health] was really keen on promoting physical activity ... and GAPPA was being prepared, so there was a conjunction of factors that created this wave that we were able to navigate." - Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

Sport on prescription in **France** was championed by the then Minister of Sport, herself a sports doctor: this led to a 2016 Government Decree.

Policy champions need not be politicians: in **Wales**, much of the impetus for NERS came from existing exercise referral schemes run by a number of localauthorities and their dedicated staff, who made the case for the establishment of a national scheme available to everyone in Wales.

Evidence shows that early engagement between health and other departments allows for priorities to be set and for cross-departmental coalitions to be established,<sup>78</sup> and for potential barriers to be identified and overcome.

Physical activity on prescription in **Sweden** has been used for many years,<sup>68</sup> but its use has depended on whether each region chooses to prioritise it and fund it locally: it has not been a national priority. However, in late 2022 the national government announced that physical activity on prescription reaches groups at high risk of illness linked to physical activity and that "The activity itself must be able to be subsidised in a similar way to some prescription drugs. In the long run, extended prescription of physical activity on prescription lead to a reduction in the prescription of drugs." For the first time, national-level budget has been proposed to develop FaR®: SEK 50 million (£3.9 million) in 2023, SEK 75 million [£5.9 million] in 2024 and SEK 100 million [£7.8 million] annually from 2025.69

And across seven **Caribbean** countries, it was found that the most successful policies targeting NCD prevention involved health promotion activities that leveraged multisectoral collaboration between government ministries. <sup>70</sup> This involved ministries such as Health, Education, and Agriculture collaborating to improve physical activity and nutrition programming within schools and in communities. Political support across sectors and regional collaboration were determined to be essential for accelerating action on development and implementation NCD prevention policies.

However, political will is not a one-way street: even if consensus seems to have been built and the policy implemented, there is no room for complacency. As Figure 6 shows, while there has been an overall rise in countries reporting that they have a nationally recognised protocol or standard on physical activity promotion in PHC, in some regions the number of countries with these protocols has declined.<sup>35</sup>

Policies must be continuously informed and maintained, to ensure policies remain effective and practical. Policy should be adapted iteratively in response to the data, as necessary.

Awareness-raising and collaboration across sectors is needed to build a shared understanding of policy – well beyond government departments. In particular, policy should be designed through engaging with the stakeholders who will be responsible for implementation, and continuing to engage before and during implementation to keep them on board and ensure policy is fit for purpose.

Cross-sectoral collaboration on policy design

"If you speak to people in health, they'll say it's everybody else's job to do it, but not theirs. And everybody else who's trying to do it is reliant on health to do their bit as well. So there's coresponsibility across different sectors."

– Flora Jackson, Public Health Scotland

Policy must be designed in full consultation with the relevant professionals, to ensure that interventions are fit for purpose. Success depends on all involved being enthusiastic, expert and effective deliverers of this policy. This includes the health professionals themselves, to ensure that the proposed interventions will fit into the wider interventions available (such as nutrition interventions).

Others who can and should be consulted include those responsible for training, the community partners and patient groups. Provision of infrastructure for a community of practice to share experiences may provide a platform for feedback. This could cover how to improve the policy in the future, how to improve the interventions and their delivery over time,<sup>39</sup> and future, improved iterations of the policy.

An evaluation of NERS in **Wales** concluded that key to success was 'early collaboration between government researchers, policy leads and independent evaluators to develop and facilitate the study', along with 'regular meetings between local coordinators, evaluators and national policymakers.'<sup>57</sup>

#### 4.2.3 Context matters

Approaches must be context-specific if policy is to be successfully introduced and implemented. There is no one-size-fits-all model of physical activity promotion in PHC: measures must be tailored to the healthcare system model (including social health insurance or private insurance), political context, and social and cultural realities. Consideration should also be given the time available to participate in physical activity, its short- and long-term impacts, its sustainability, and evaluation.

Previous Building Momentum Reports have made it clear that economic, political, social and cultural factors all shape the approach used to introduce and implement policies that shape healthier environments – and delivery of physical activity interventions in primary care follows this pattern.

In some cases, policy entrepreneurs have taken advantage of the opening up of policy windows to push physical activity up the government's agenda. These individuals have been both in and outside government – for example, in Wales, where local champions of physical activity promotion in PHC took the lead, but with support from both the Welsh Government and an individual minister of health:

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"The Welsh Government was the driver initially – and the Minister of Health wanted [a referral pathway for people with] respiratory disease because in Wales we have an awful lot of ex-miners with respiratory diseases such as severe asthma and COPD."

Jeannie Wyatt-Williams, National Exercise Referral Scheme, Wales (retired 2022)

Policy needs to set the framework for policy delivery:

- Which stakeholders are involved in the implementation of the policy – including those developing training for health professionals, the health professionals themselves, and other professionals involved in the physical activity delivery
- Who pays whether this is through private or social insurance
- How and where delivery will take place –
  which may be organised and delivered on
  a local or regional level

In some countries, national policy is delivered locally, so a policy that can be adapted to local contexts and that facilitates the sharing of experiences across different parts of the country can help to encourage take-up.



In **France**, *Maisons Sports Santé* [houses of sport and health] can be supported by regional health agencies and provide sports programmes for health<sup>71</sup> – both for people who are referred on prescription and for the general population, thereby covering both treatment/management of health conditions and broader NCD prevention.

In **England**, a 2021 report on success factors for the Moving Healthcare Professionals Programme (MHPP) includes a "system-level recommendation" to "develop a mentoring scheme so that leaders of services and activities that are more developed can support others in setting up a service (obtaining funding and buy-in; engaging stakeholder, navigating governance, negotiating barriers.<sup>72</sup>

#### **4.2.4 Equity**

Advancing equity should be a consideration at every stage of policymaking, from design through to implementation and evaluation. Well-designed policy on physical activity can help contribute to improving, and not widening, health inequities.

The constitution of the WHO states that "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social situation."73 Achieving health requires being able to access one's complete health potential; health equity means that every person has the fair, unobstructed opportunity to attain this potential. Policymakers must consider the upstream social determinants of health and their effects when designing policy to improve health equity<sup>74</sup> in tandem with the promotion of physical activity in PHC.

The majority of the adult population in many countries does not achieve the targets in guidelines on physical activity.

And although almost all of us find ourselves within the PHC system at some point, where resources are limited, further prescription and referral may be most appropriate for a smaller subset of the population – namely, those most at risk.

"How do we support those who are furthest away from physical activity – whether that is due to socio economic demographic or gender or health status or whether they have a disability or their cultural background? We are really looking at how we unlock the barriers to enable everyone to feel the benefits of physical activity."

Suzanne Gardner, Head of Health, Sport England

For some, there may be two levels of barrier to accessing this support:

- 1) Barriers preventing access to and engagement with PHC, which entirely eliminate the possibility of prescribing physical activity.
- 2) Barriers preventing the patient from acting on the prescription. Even where patient can access PHC, the environment within which they live must support physical activity (such as green spaces and appropriate infrastructure) (see also Section 4.3.5).

To overcome these two sets of barriers and advance health equity, it is essential that policymakers invite and engage with the expertise, insights and active participation of various policy stakeholders, particularly those representing vulnerable populations who may be disproportionately affected by existing policies.<sup>75</sup> Accessibility is a consideration of utmost importance when designing policies

and removing barriers that may be visible and invisible. Visible barriers include physical barriers that can prevent participation in physical activity, including equipment not appropriately adapted for people with chronic conditions, poor-quality pavement surfaces, or unsafe neighbourhoods:

Invisible barriers might include financial barriers, such as lack of insurance coverage, access to appropriate equipment or supportive technology (such as smartphones, or health or fitness app subscription fees), or costs associated with transport to PHC appointments or sport centres.

When developing policies to promote physical activity in PHC, it is important to not only acknowledge or measure existing health inequities, but to actively work towards advancing health equity. This will ensure everyone is able to access physical activity opportunities as a component of reaching their individual full health potential.

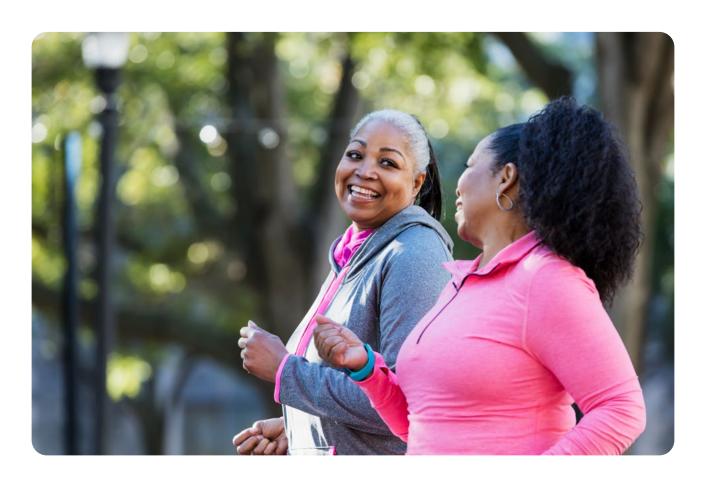


In France, sport on prescription is available to 10 million people with 30 specific chronic health conditions. The cost of sport on prescription is not covered by the national social security system: some 'mutuelles' [mutual health insurance funds] cover it, but what they cover, and how much, is variable. Some costs may be covered by local partnerships involving local councils and regional health agencies.<sup>76</sup> It has also recently been extended to offer prescription to a further 10 million people with chronic diseases such as hypertension or obesity, but this is not fully reimbursed.<sup>77</sup> In addition, the law was amended to enable a wider range of health professionals (beyond GPs) to prescribe, including oncologists, cardiologists and diabetologists.

"If we want it to work within healthcare, then we need to look beyond healthcare to what the wider system is... If [patients] don't have a safe environment in which to walk, then that's a pointless message. If there's a fear of crime in the community, if the streets are all uneven and in need of repair, if it's actually a greater risk of somebody falling rather than actually benefitting from going on that walk..."

Flora Jackson, Public Health Scotland





#### 4.3 Components for effective policies

Without the appropriate practical support and knowledge, PHC professionals will not be able consistently and effectively to deliver physical activity promotion in PHC. The policy environment must provide PHC professionals with the individual advice that they need, coupled with the practical capacity to include it in their everyday workload. This section sets out key components of policy that can overcome the barriers identified in WCRF International's research and in the interviews.

### **4.3.1 PHC** professional training, capacity and confidence

If PHC professionals are to provide effective advice on physical activity, government policy must ensure that all healthcare professionals understand the benefits of the physical activity appropriate for their patients, have a good knowledge about the physical activity programmes that are available, and, where appropriate, have the confidence to deliver (brief) behavioural advice.

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"Healthcare professionals need to understand how physical activity improves health. They want the science to help them see physical activity in the context of medicine. This gives it relevance and status."

William Bird, GP and Intelligent Health UK





"Active ownership [by medical professionals] is critical... If you overcome their attitudes or their doubts, then they will find solutions and include physical activity in the budget as with any other treatment."

Marita Friberg, EUPAP

"It takes time to have this kind of paradigm [shift]" (Marita Friberg – EUPAP): this reflects a cultural shift towards health professionals appreciating that the benefits of physical activity can far outweigh the risks. For example, in England a Consensus Statement led by the Faculty of Sport and Exercise Medicine strongly counters what had been the default position that anyone with a long-term condition needs medical clearance to undertake physical activity: "regular physical activity, in combination with standard medical care, has an important role in the management and prevention of many long-term conditions".



"The idea, [with sport on prescription in France] is clearly for those who have promoted this process to try to make the case that physical activity can be viewed as a medication, with dosage and with a prescription. This was the way they thought physical activity could be sold to physicians."

Jean-Michel Oppert, France



Training – beginning at medical school and continuing through readily available professional development training modules – needs to be made available, but it may be dependent on each individual university to decide the curriculum. The Training builds expertise and confidence among PHC professionals – including allied health professionals (e.g. pharmacists) – who may have had little, if any, prior training in behavioural interventions in physical activity.

Providing tools to assist with the promotion of physical activity can help to build trust among health professionals and among their patients – for example, new guides are being developed in the Netherlands to facilitate conversations based on specific NCDs.

"Another challenge, frankly, is medical education. In [US] medical schools, in fellowship and residency programmes, and in professional preparation programmes, there is hardly any information about exercise."

Robyn Stuhr, American College of Sports Medicine

"If you don't have healthcare professionals who are trained to talk about physical activity, the likelihood of them then referring into your local services lessens because there is that lack of confidence."

Suzanne Gardner, Head of Health, Sport England

Training is not just for those early in their career: it should be offered to health professionals as part of their continuing competency training and materials should be available to all. The BMJ, for example, has developed online training.<sup>80</sup>

In **England**, e-learning has been developed as part of the MHPP, which can be undertaken in bite-sized, 20-minute stints. The e-learning also gives the option of focusing on a particular specialism – such as physical activity and cancer – which provides the evidence base and builds understanding.

Well-trained, confident, enthusiastic professionals inspire trust among their patients – trust is also dependent on the maintenance of patient confidentiality. Any policy should ensure that both health professionals and patients understand that data is shared consensually (for example with a health connector in the local community or with a personal trainer) and shared only in so far as is strictly necessary for the exercise prescription to be safe and appropriate. This barrier should be anticipated and the system designed to be secure, consistent, fully consensual and to share only the data that is required.

In **England**, local authorities with exercise on referral schemes have established GDPR-compliant datasharing arrangements allowing the local authority to collect, store and use the patient information necessary for participation in the scheme with appropriate security and safeguards in place. The local authority remains the data controller and data can be shared with healthcare professionals, exercise instructors and the local authority public health team in order to enable implementation of the scheme.<sup>81</sup>







#### 4.3.2 Health systems capacity

Building awareness and expertise among PHC professionals is a crucial step, but it is not sufficient. Policy must ensure that the health system within which they operate provides the time, tools and incentives for physical activity promotion to take place and to enable monitoring and evaluation to assess the impact of the policy on levels of physical activity.

There may also be evidence-based training available to provide certified exercise professionals with the skills to help those with specific health needs who are referred to them through their PHC professional, safely and effectively.

Effective tools – including digital options – can help health professionals to deliver their interventions quickly, easily and accurately. For example, algorithms can help to stratify risk and materials can help to guide the professional through the brief intervention process.

> "Make it available, make it timeefficient and use science: don't reinvent the wheel. That's something that was really important for us. The evidence in behaviour change is well-established. Use it. Use the techniques that are well-validated, and then make this available in a time-efficient way."

Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

In **Sweden**, health professionals have a detailed tool to prescribe appropriately: FYSS (Fysisk aktivitet i Sjukdomsprevention och Sjukdomsbehandling). It sets out recommendations suitable physical activity and the potential risks for specific patient groups, such as people with high blood pressure. The FYSS handbook is used by all county councils across Sweden and now in Norway. It is an essential element of the FaR® approach and its success, allowing the health professional the freedom to work out the prescription with patients, using their professional judgement.

#### **Box 6: Awareness is not enough**

In **Luxembourg**, a public health campaign in 2018 on national TV and radio to promote physical activity for people with NCDs was complemented by flyers and a physical activity evaluation tool aimed at medical doctors, to encourage them to advise patients on physical activity. There was little or no impact on the proportion of GPs promoting physical activity – which was around a quarter before and after the campaign. The study concluded that "Barriers to physical activity promotion within primary healthcare should be addressed before implementing new awareness campaigns targeting healthcare professionals" and that these barriers include lack of time and knowledge.82



Additionally, digital tools can be provided to patients themselves, to work through in their own time, which cuts the time needed for the brief intervention itself.

A combination of brief counselling and provision of digital tools is used in **Portugal** to ensure that as many patients are reached as possible. 'We know that consultation time is short, and that medical doctors struggle to have time. Thus, in case of shortage of time the medical doctor can simply conduct the assessment of physical activity levels and issue via email or SMS a motivational guide, tailored to the patient's physical activity levels and readiness. This does not require extended training. The digital tools are developed to be self-explanatory to all.' – Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health).

"We have several digital tools for brief counselling. These digital tools are really simple and were developed based on the best evidence-based knowledge, informed by behavioural change techniques and psychological theory on behaviour change.... We provide the professionals with these tools, they are embedded in the system."

Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

The need for good digital infrastructure extends to IT and internet systems in healthcare settings, which must be fit for purpose: gathering data efficiently and providing accurate, streamlined advice to benefit patients. This includes: use of effective

"The primary care or GP practice team is so broad and so wide... The practice nurse and the other allied health professionals ... are probably better positioned in many ways to have the conversation about physical activity with patients, primarily because they tend to have more time."

Flora Jackson, Public Health Scotland

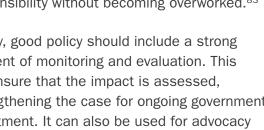
electronic medical records; a system that both enables and requires screening; an algorithm to assist with prescriptions; timely follow-up; and clear signposting of appropriate opportunities in the local community. This could also involve easy capture and accessibility of data for health professionals, and potentially a database of community-based initiatives to which patients can be referred.

Overwork is often cited as a barrier, but this can be addressed effectively by policy that permits task-sharing of physical activity promotion across multi-disciplinary teams, rather than it being solely the preserve of the physician.

PHC professionals need a work environment that is supportive of health promotion efforts, enabling them to take a strong role even when the health system is under stress. The COVID-19 crisis made it even more clear that those working in primary care need support and incentives if they are to introduce new areas of work and responsibility without becoming overworked.83

Finally, good policy should include a strong element of monitoring and evaluation. This will ensure that the impact is assessed, strengthening the case for ongoing government investment. It can also be used for advocacy in other countries, adding to the growing evidence base.





#### 4.3.3 Incentives

Incentivisation for PHC professionals to incorporate physical activity promotion into their practice will help to increase rates of delivery, and uptake among patients. A range of policy instruments can be implemented to encourage awareness and engagement (including professional body regulations, financial mechanisms) and support for voluntary actions by professionals.

The most obvious way in which policy can motivate health professionals to include physical activity in consultations in primary care is to require it – for example, making it mandatory to take basic screening. However, unlike weight status, screening for physical inactivity is often not compulsory.

In the **Netherlands**, "General practitioners, especially for patients who have certain diseases, have a short amount of time in their consult. They have to check a lot of medical indications, which leaves no time for promoting physical activity". – Maureen Ros, Knowledge Centre of Sports and Physical Activity

Attaching financial incentives could also be an important motivating factor for physical activity screening or prescription/referral to be offered routinely.

There may be doubts, however, as to whether this motivates effective intervention or whether it is merely a box-ticking exercise: in Sweden, where some regions paid per consultancy, "there was a lot of discussion about whether these were true consultancies... Nobody really knew the situation". — Iréne Nilsson Carlsson, National Board of Health and Welfare (Socialstyrelsen), Sweden.



"There are three aspects that helps a GP promote physical activity: strong evidence, clear simple messages and practical local actions such as referrals etc. But in my experience there also needs to be an emotional connection that is either personal or from a smiling patient returning to the clinician with large health gains due to becoming more active."

William Bird, GP and Intelligent Health UK

A study in Portugal found that doctors' motivation to engage in physical activity counselling was more influenced by attitudes (such as relevance attributed to physical activity counselling) as well as external factors (including time and patients' motivation), over previous training or lack of technical knowledge. 84 There is also evidence from Sweden that building capacity through simplifying the processes increases promotion of physical activity in PHC more than economic incentives alone. 98



#### 4.3.4 Communication and collaboration

Communication and collaborative approaches are needed to ensure that policies are applicable and relevant to PHC practitioners, their practice, and the patients for whom they are providing care. Consideration must be taken of how, to whom and when to communicate and collaborate: making every contact count.



"In terms of lessons learned: communicate, communicate, communicate to your stakeholders, communicate to your scientific partners, and communicate to the public."

Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

Where everyone – from policymaker to patient – is aware of the benefits of physical activity for health outcomes, this can act as a powerful incentive to collaborate to make the policy as successful as possible. And to be successful, policy must ensure that there is a pathway that ensures smooth collaboration on delivery of the intervention in practice, with clear lines of responsibility. Coordination within and beyond the health sector can help to prevent duplication of services and wasted resources.



"The education world, the health world, the community world, the transportation world, and physical activity – all these sectors, they need to collaborate. They need to work together because otherwise [brief intervention] is just an isolated initiative and it's a struggle. It's difficult."

Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health



"The aim [of the EUPAP initiative] was not to write the highest number of prescriptions; the aim was to find a way to integrate this into the work and get different professionals working together."

Marita Friberg, EUPAP

In addition, as COVID-19 has shown, crises can put enormous pressure on health workers and their ability to respond to communities' needs, with extra funding for health often ringfenced for the emergency response. Collaboration and buy-in will help to protect physical activity promotion from being dropped by staff in times of crisis.

Collaboration with the patient, maintained over time, is key to unlocking the potential impact of the policy on health and wellbeing. This collaboration must be facilitated at all points at which interventions may be delivered in the PHC setting: policy should consider multiple entry points for this initial conversation.

There are multiple touchpoints at which a policy on physical activity can be introduced in primary care. These can be places (such as GP surgeries), moments (such as antenatal care) and people (including GPs, practice nurses, occupational health, dieticians, physiotherapists, pharmacists and school nurses). Collaboration with existing certified exercise professionals from the community can be particularly effective in low resourced settings, as has been demonstrated in the Jamaica Moves programme<sup>86</sup>, and more recently the Caribbean Moves programme.87 Policy design and delivery should take into account local contexts, cultures and potential points of entry for persons to engage in physical activity.88

In **England**, the Making Every Contact Count (MECC) approach is "an approach to behaviour change that uses the millions of day-to-day interactions that organisations and people have with other people to support them in making positive changes to their physical and mental health and wellbeing". 89 It encourages all health professionals to talk with patients about their health and wellbeing during routine appointments – and physical activity can be a part of this conversation.

4.3.5 Supportive environment for patients

To fully enable a whole-systems approach to physical activity promotion, policies must effectively extend beyond PHC settings and be inclusive of the environments in which patients live, work, play and travel. This should include supportive built environments with considerations for safety, accessibility and health inequalities.

44

"It's not [only] about the inequalities in who accesses services, but also about intervening in the wider determinants of health, really challenging that and looking upstream to prevention."

Suzanne Gardner, Head of Health, Sport England



Knowledge, capacity and resourcing of specific physical activity promotion initiatives within primary care are all important, and any interventions that are offered should be accessible to all and take health inequalities into account. For example, exercise classes should be provided at minimal cost and close to home. Another example, use of digital materials (such as apps on smartphones or online activity classes, which can help to reach physical activity goals<sup>90</sup>) should take into account that not all patients will be able to access these tools. Some patients with particular health needs (such as patients with cardiovascular disease) may also need supervised physical activity.

In addition to referral to specific initiatives or engagement in more structured physical activity (including organised sports), for many people incidental physical activity (such as walking or cycling) during the course of everyday activities is what makes a difference in increasing overall physical activity levels. This is why it is so important for work and school environments to be supportive of physical activity. Policy to encourage physical activity through primary care will be most effective if backed up with national or local/municipal-level policy that fosters a working, societal and physical environment that supports being active: without this, individual patients will find it difficult, demotivating and perhaps impossible to follow the advice they have received in their everyday lives.<sup>2</sup>



"Primary care needs to think more like public health and help to change the neighbourhood and community to become more active. It may be helping a school create a new safe crossing or a pressuring the council to invest in an underused park. Primary care knows the local area better than any other part of healthcare system."

William Bird, GP and Intelligent Health UK This everyday activity relies on good infrastructure for active travel – including making spaces safe for active commuters (such as traffic calming methods, including slower speeds, safe crossing and separation infrastructure), or making permanent any temporary measures that were put in place during COVID-19: cities that have continued higher rates of cycling are the ones that put infrastructure in place. Parks, green/blue space, streets and play areas must all be (and be perceived to be) safe, with appropriate facilities (such as toilets and benches) to enable physical activity across the life course.

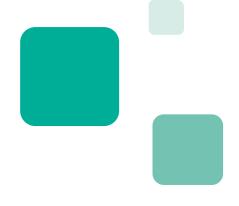
### Box 7: Physical activity and the great outdoors

A safe, connected, attractive and supportive physical environment is an important aspect of enabling people to access the health benefits of physical activity. There are links between access to nature and greater physical activity from childhood to older adulthood.91 Enabling social interactions and community bonding in open public spaces - which could be as simple as providing benches - can also address loneliness. which is an important driver of mental ill health. In addition, chronic stress is a risk factor for some NCDs and can be tackled by physical activity;92 access and exposure to nature also helps to reduce stress. Hence, policies that help to encourage time in green and blue space also indirectly tap into the preventative aspects of reducing stress.91

There are examples of promotion of physical activity through PHC – particularly social prescription<sup>93</sup> – that encourage time spent in nature, and evidence is building as to their effectiveness.<sup>94</sup>

In **England**, in 2020 the environment secretary announced a £4 million investment to support a two-year cross-government project to address mental ill health through green social prescribing – additional contributions (including those from Sport England) increased this to £5.77 million.<sup>95</sup>

In **New Zealand**, Green Prescription (GRx) was introduced in 1998, with a GRx Active Families programme being added in 2004 (to reach children and young people, along with their families). More recently a Maternal Green Prescription for pregnant women was also added. It was initiated by Sport and Recreation New Zealand (SPARC), with responsibility transferred in 2009 to the Ministry of Health.





Safety concerns also extend to ensuring that activities are available in COVID-safe environments, particularly for vulnerable groups, to help to overcome fears of exposure to the virus.

Other supportive activity by government may include campaigns to build public understanding and enthusiasm for physical activity, as well as awareness specifically of the availability of the offerings on physical activity through primary care.

in **England** the We are Undefeatable campaign was developed by 15 leading health and social care charities and backed by expertise, insight and National Lottery Funding from Sport England. It is aimed at people with health conditions<sup>96</sup> and is "about changing the narrative around long-term conditions and physical activity" (Suzanne Gardner, Sport England).

In **Australia**, the This Girl Can campaign aims to celebrate, support and engage women and girls in physical activity, while also challenging gender stereotyping regarding women's participation in sport.<sup>97</sup> One of its particular aims is to address and overcome women and girls' fear of being judged when getting involved in sport, or of not being fit enough to start.

The Follow the Whistle campaign in **Portugal** highlighted highlighted that the physical activity opportunities are everywhere – walking to the shops, cycling to work, climbing the stairs, walking with our pets, or playing outside with family and friends... and that these opportunities call (or whistle) to us.



There are examples of fiscal incentives being used to encourage physical activity, such as:

- The Cycle to Work Scheme<sup>98</sup> in the **United Kingdom**: This is a tax-exemption initiative, introduced by the government in 1999. The employer buys a bike of the employee's choice, which the employee then repays in instalments taken tax efficiently from their salary, saving up to around 30% of the cost of the bicycle.
- The Physical Activity Tax Credit<sup>99</sup> in Newfoundland, Canada: every family can claim up to \$2,000 in personal tax returns to refund the cost of registration for eligible physical activity programmes or organisations.

Annex 1 provides more detail on how policy is – or is not – being implemented in five countries, illustrating in practice the barriers and solutions that have been identified thus far.



### 5. Conclusions

Physical activity can have profound benefits for health – both for individual health across a wide range of physical and mental health conditions, and for the health of economies in preventing premature illness and death. However, government resources for physical activity are not commensurate with its impact.

WHO has identified delivery of physical activity promotion within healthcare settings – particularly within primary care – as an effective tool in a systematic approach to increasing physical activity and improving health. However, it can be challenging to encourage PHC professionals to include this as part of their everyday interactions with patients. National policies, to date, have often not put enough focus on training and capacity-building, leaving many professionals with insufficient knowledge of how to promote physical activity and insufficient time to deliver it. Well-designed policy is therefore essential to overcome barriers of misunderstanding at policy level and lack of knowledge, confidence and resources at implementation level.

It is important to recognise that different approaches will work within different health systems and cultures. There is no one route to success – but there are some **foundational policy processes** that are necessary for successful policy development:

- **Use the evidence:** evidence is fundamental to good policy design. Policymakers should use evidence to design and implement physical activity promotion policies in PHC settings, and ensure sustained take-up. This includes collecting evidence from people with lived experience the perspectives of patients and population groups being targeted by the policies are particularly valuable.
- Build shared policy understanding and objectives: ensuring a cross-governmental understanding
  of the benefits of physical activity promotion in PHC will foster broad political support for policy
  across government departments and do not underestimate the role that policy champions can
  play in driving policy progress forward.
- **Context matters:** approaches must be context-specific if policy is to be successfully introduced and implemented; considerations should be given to healthcare system models, political contexts, and social and cultural realities. Considerations should also be given to the time needed to account for short- and long-term impacts, sustainability and evaluation.
- **Equity:** advancing equity should be a consideration at every stage of policymaking. If designed well, physical activity policy can also assist in overcoming health inequities.

Additionally, policies should **integrate the following components** if physical activity promotion in PHC is to be effectively and successfully developed and implemented:

- PHC professional training, capacity and confidence: to provide effective advice on physical
  activity, government policy must ensure that all healthcare professionals have adequate levels
  of training, awareness of appropriate programmes available in the local community, and have
  the confidence to deliver behavioural advice.
- **Health systems capacity:** any policy to promote physical activity within primary care must be fully resourced. Health systems should provide healthcare professionals with the time, tools and incentives to provide patients with preventative, rather than reactive, care. Monitoring capacity should also be built in, to demonstrate the impact on patients' physical activity levels and lives.

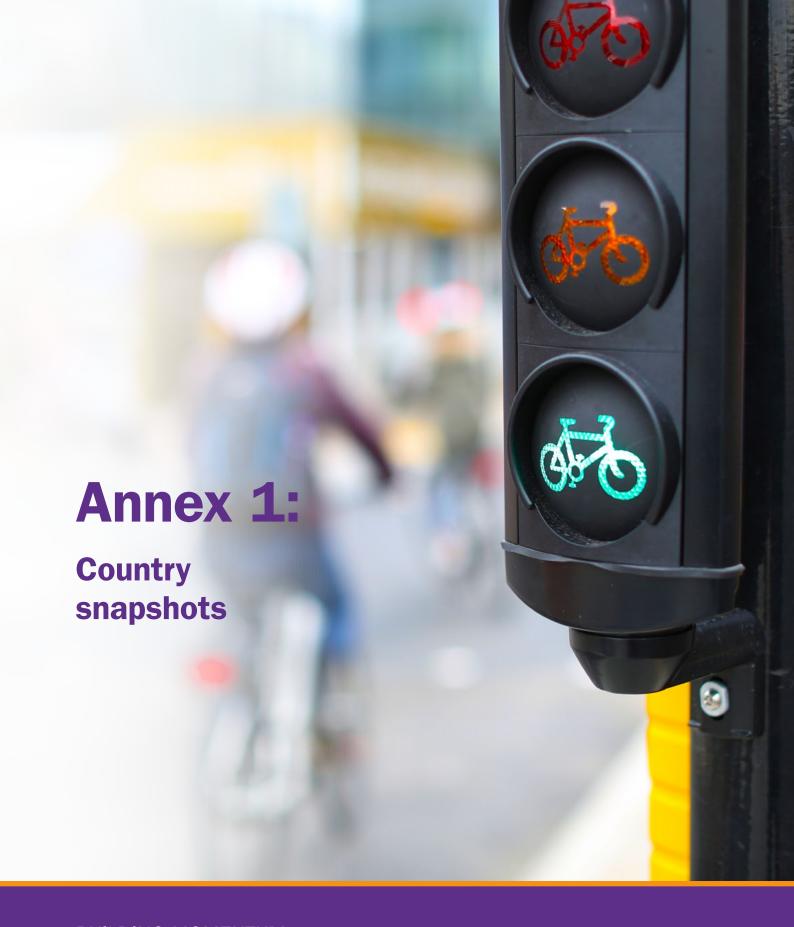
- **Incentives:** incentivisation for PHC professionals to incorporate physical activity promotion into their practice will help to increase rates of delivery and uptake among patients.
- **Communication and collaboration:** communication between key stakeholders and collaborative approaches in policy development, execution, and monitoring/evaluation are needed to ensure that policies are applicable and relevant to PHC practitioners, their practice, and the patients for whom they are providing care. Establishing a role for a coordinator to act as liaison between PHC practitioners and community physical activity services is especially beneficial.
- **Supportive environments for patients:** to fully enable a whole-systems approach to physical activity promotion, policies must effectively extend beyond PHC settings and be inclusive of the environments in which patients live, work and play. This should include supportive built environments with considerations for safety, accessibility and health inequalities.

Although the promotion of physical activity within primary care is not, on its own, a magic bullet that will raise physical activity to recommended levels, the evidence is growing as to its effectiveness. WHO is clear that this is an important tool that can make a difference as part of systemic change. This is an exciting area with encouraging results, and a key part of a wider systems approach to physical activity and health.

The promotion of physical activity in primary care should not be a luxury: it should be standard practice. There is the opportunity to make a difference to people living with, or at risk of, a range of health conditions, including cancer – and there is also a chance to join a growing number of countries taking the lead in producing evidence to show the benefits of physical activity promotion in PHC settings.







BUILDING MOMENTUM: ESTABLISHING ROBUST POLICIES TO PROMOTE PHYSICAL ACTIVITY IN PRIMARY HEALTH CARE

### **Annex 1: Country snapshots**

There are many examples of physical activity promotion in PHC around the world, demonstrating varying levels of policy maturity. In this Annex, we present a deeper dive into work by the five WCRF International network member countries to highlight progress made in each country so far.

Netherlands: Since 2012, the government's Sport and Exercise in the Neighbourhood
programme has supported "care sport connectors", who connect professionals in the sports
sector with health professionals, including facilitating physical activity among the patients
referred to them by health professionals. As of 2023, every municipality is required to employ
someone in this connecting role.

### United Kingdom:

- England currently has no national policy on the promotion of physical activity within PHC,
   and efforts are strongly place-based. However, since 2017 the MHPP has provided support
   for healthcare professionals in embedding physical activity into clinical care.
- Scotland does not currently have a national policy requiring PHC professionals to include physical activity in their care, but efforts are being made to introduce brief interventions into patient consultations, with support from Public Health Scotland.
- Wales's NERS began in 2007 and is now part of the care pathway for a range of conditions, including cancer, across all local authorities and Health Board areas. The Welsh Government funds NERS and Public Health Wales provides strategic and operational oversight.
- **United States:** There is no policy mandate, routine reimbursement or universal care standard on physical activity in primary care in the United States, and health insurance is largely provided privately but there are several initiatives to address it, including the widely used Exercise is Medicine®.

### **Netherlands**



According to the Global Status Report 2022:

**25**% of men and **29**% of women

**77**% of adolescent boys and **84**% of adolescent girls

39% of older men and 44% of older women

## ...fail to meet physical activity guideline targets

Estimated national direct healthcare costs attributable to NCDs and mental health associated with physical inactivity: US\$276 million per year.

Source: WHO, 'Physical activity Netherlands 2022 country profile' https://www.who.int/publications/m/item/physical-activity-nld-2022-country-profile

In the Netherlands, since 2012 the Sport and Exercise in the Neighbourhood programme has required every municipality to have at least one "neighbourhood sports coach", some of whom were "care-sport connectors" (known as "sport and prevention coordinators" since 2023), to whom PHC professionals can refer patients for assistance in becoming more physically active. As of 2023, every municipality is required to have at least one sport and prevention coordinator, as part of a new national and local policy focusing on a healthy and active life for all. Tools are also available to support health professionals who wish to deliver brief advice. and there are interventions such as Bewegen op Recept [Exercise on Prescription] that can be implemented by municipalities.

The quotes in this country snapshot are from interviews with Maureen Ros (MR), Human Movement Scientist at the Knowledge Centre of Sports and Physical Activity, and Dorine Collard (DC), Senior Researcher, Sport, Physical Activity and Health at the Mulier Institute (August 2022 and January 2023).

### What physical activity promotion is offered in PHC?

There are several interventions in the Netherlands, such as *Bewegen op Recept* (BoR) that enable (but do not require) PHC professionals to:

- a) Identify patients who do not reach physical activity guidelines
- b) Have an initial conversation about becoming more active
- c) Refer inactive patients to care-sport connectors (CSCs see below), who guide the patient to local and suitable sport and physical activities in the neighbourhood.

Tools from the Knowledge Centre of Sports and Physical Activity support health professionals in these efforts: an algorithm designed to identify those who do not reach national physical activity guidelines, and the *Bewust Bewegen* [Conscious Movement] tool to support the advice.

Once the health professional and patient have had an initial conversation, the patient may then be referred either directly to a physical activity opportunity or to a CSC with good local knowledge, who can guide patients towards appropriate physical activity opportunities and facilities, as described below.

### **Policy development and current status**

The Sport and Exercise in the Neighbourhood programme was developed in 2012 by the Ministry of Health, Welfare and Sports, with administrative partners the VNG (the association of Dutch local authorities) and Dutch Olympic Committee/Dutch Sports Federation. It is supported by the Association of Sport and Municipalities and the

Netherlands Institute for Sport and Exercise. The programme requires municipalities to establish neighbourhood sports coaches to act as brokers with different sectors to encourage people to be more active – working across education, the workplace, in local communities, and the health sector. There are around 3,000 neighbourhood sports coaches, of whom over half (56%) reported in 2021 that they collaborate with professionals in PHC.

The neighbourhood sports coaches have included some CSCs, – whose specific role is to connect the primary care sector (including GPs, physiotherapists and dieticians) with the physical activity sector (including neighbourhood sports clubs, fitness centres and walking groups), guiding patients towards their local facilities. Every municipality was required to have a neighbourhood sports coach, but this did not have to be a CSC.

"The neighbourhood sports coaches try to get people to [take part in] regular sports or physical activity, but they also try to organise activities that are actually adapted for certain levels – like walking groups for people with COPD or maybe cancer" (MR)

Recently, however, the importance of connecting physical activity with the health sector has become more of a government priority, along with an increased focus on prevention as part of a new national and local policy addressing a healthy and active life for all. From January 2023, CSCs were renamed "sport and prevention coordinators" (SPCs); every municipality is now required to have an SPC as a condition of receiving government funding for physical activity.

"I really think that now there is more attention and focus for prevention in healthcare settings. The national government will give guidelines but leave it to the local governments how to implement that" (DC) The BoR intervention is theoretically available across the country. However, municipalities are not obliged to implement BoR locally, so its use is patchy and depends on the enthusiasm of individual health

or sports professionals. There is also no blueprint for how each locality should implement the requirement to have an SPC: the policy recognises that local demand requires local solutions.

Insurance companies in the Netherlands fund five different combined lifestyle interventions (available only to adults who are living with overweight/obesity) given by health professionals, but insurers do not fund the referrals to sport professionals to encourage patients to get more active. The cost of the CSCs<sup>(i)</sup> is split between national government (primarily the Ministry of Health, Welfare and Sports) and the municipality/local organisations.<sup>(ii)</sup>

In January 2023, it was announced that total funding for "local prevention activities, health promotion, social welfare and sport and exercise" during the current government's term "will increase to approximately €300 million per year". Prior to 2023, municipalities could only request budget for activities in sports, health promotion and social welfare separately; now, however, funding can be requested for activities that cross-cut these three different domains, which encourages collaboration.

## Impact of the policy on physical activity, health and wellbeing?

There are no national studies on the impact of BoR and the CSCs on behaviour change, health outcomes or cost-effectiveness in the Netherlands, and there are no data on how many patients receive interventions such as BoR or how many people have been seen by CSCs each year. However, the government has a more healthy and active life for citizens as a priority, and funding clearly indicates that the government considers that the international evidence base is sufficient to continue supporting the CSCs in their new SPC role

and stimulating implementation of sport and physical activities through the health sector.

#### What's next?

Many health professionals are not aware of initiatives such as BoR and the opportunity to refer patients to CSCs, or do not have the confidence to use these opportunities. The government is keen to increase links between physical activity and the health sector, so awareness needs to be raised and confidence built. For example, new guides to facilitate conversations based on specific NCDs are being developed, which will help PHC professionals give more tailored brief advice, for example as part of BoR.

"The system around health professionals is not stimulating [them to prescribe physical activity]. I feel that implementing sport and physical activities in the healthcare setting will be difficult if the system around health professionals does not change." (DC)

Other issues that may need to be addressed include establishing better links between patient records and CSCs, to enable CSCs to make appropriate recommendations without breaching patient confidentiality.

"It's quite difficult in the Netherlands because the healthcare insurers and the way the sport coaches are paid is very different. So for privacy reasons, it's difficult to refer from the healthcare professional to the sports coach and vice versa." (MR)

<sup>(</sup>i) CSC is used here because it is a well-known term, although the care sports connectors have been renamed as sport and prevention coordinator.

<sup>(</sup>ii) The insurance companies do fund some broader lifestyle interventions, including on tobacco and nutrition – but referrals to CSCs, and any activities that they recommend, are not included.

An evaluation of the impact of the longstanding CSC initiative in the Netherlands could help both to build awareness of the benefits of interventions such as BoR nationally (potentially helping to increase physical activity, particularly among older people, who are less active) and contribute to the international evidence on the benefit of referral from within PHC to a community-based specialist.

#### **Sources for Netherlands country snapshot**

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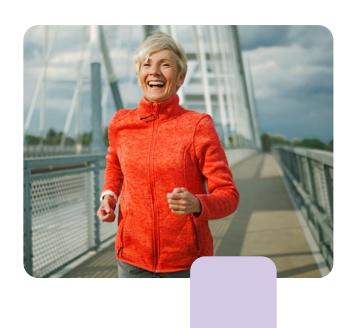
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### United Kingdom



According to the Global Status Report 2022:

**32**% of men and **40**% of women

75% of adolescent boys and 85% of adolescent girls

**47%** of older men and **56%** of older women

### ...fail to meet physical activity guideline targets

Estimated direct healthcare costs attributable to NCDs and mental health associated with physical inactivity: US\$1.827 billion

Source: WHO, 'Physical activity United Kingdom of Great Britain and Northern Ireland 2022 country profile' https://www.who.int/publications/m/item/ physical-activity-gbr-2022-country-profile



#### **Overview**

Physical activity policy in PHC is devolved in the UK, with the home nations developing their own approaches alongside some UK-wide voluntary initiatives. Common features include: integrating physical activity into care pathways; exercise on referral; opportunities for healthcare professional training; and developing links between GP practices, local authorities and physical activity providers.

Undergraduate medical education is regulated on a UK-wide basis; physical activity does not feature heavily in most medical school curricula. Healthcare professional bodies, for example the Royal College of GPs (RCGP), provide

opportunities for training that include continuing professional development on physical activity. UK-wide voluntary initiatives include parkrun UK: 1,350 GP practices have signed up to parkrun's GP practice scheme to encourage their staff and patients to walk or run their local parkrun, a weekly, volunteer-led 5km event. The Royal College of GPs has an Active Practice Charter (2019), signed by 200 GP practices across the UK. Active Practices seek to improve patient and staff physical activity, decrease sedentary behaviour, and make connections with local physical activity providers.

The Faculty of Sport and Exercise Medicine "Moving Medicine" has partnered with government bodies in England and Scotland to develop resources to help healthcare professionals integrate physical activity conversations into routine clinical care. Moving Medicine was originally developed as part of the MHPP and continues to be developed through that programme.

The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) is the UK professional body for the sport and physical activity sector. It develops industry standards, including working with people with long-term conditions. This provides evidence-based training for fitness and sports professionals to give them the skills needed to safely and effectively help those with specific health needs referred from healthcare settings.

There are also key differences: only Wales has national policies on physical activity promotion in PHC, in particular the National Exercise Referral Scheme (NERS). England and Scotland have no national policies, but both countries have physical activity commitments embedded in other strategies as well as a number of voluntary initiatives.

On a UK-wide basis, requiring a greater focus on physical activity within undergraduate medical education could help further embed physical activity in PHC.

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### England



PHE (now OHID(iii) and Sport England have led the MHPP since 2017. The aim is to increase the knowledge and skills of healthcare professionals to incorporate physical activity into routine care, to aid quality improvement and better patient outcomes. There is no national policy on physical activity promotion in PHC, but commitments are embedded in other government strategies. These include the 2015 Cross-Government **Sporting Future Strategy on integrating sport** and physical activity into care pathways, the NHS Long Term Plan on social prescribing in primary care, and the 2019 Green Paper on prevention. Physical activity care pathways and exercise referral are established and build on place-based approaches to meet local needs.

The guotes in this country snapshot are from an interview with Suzanne Gardner, National Partnership Lead (Health & Wellbeing), Sport England (July 2022).

### What physical activity promotion is offered in PHC?

A National Quality Assurance Framework for exercise referral has existed in England since as long ago as 2001. However, research

with over 800 GPs in 2021 suggested that while almost 99% believe physical activity is important, only 36% felt "somewhat familiar" with national physical activity guidance. The research found almost three-quarters of GPs felt confident raising physical activity with patients. This is a significant increase on similar research from 2016, when almost three quarters were reluctant to advise patients on the benefits of physical activity because of lack of skills, knowledge and/or confidence.

A wide range of physical activity-focussed training assets, activities and tools are available to enable healthcare professionals and allied health professionals(iv) to advise patients on the benefits of physical activity, signpost to local opportunities, and use digital health behaviour change approaches. Some of these tools were developed with the support of Public Health England (now OHID(v)) and the sport and physical activity sector, particularly the arm's-length body Sport England, which includes health as one of five big issues for collaboration in its Uniting the Movement strategy 2021-2031.

<sup>(</sup>iii) Physical activity policy was previously led by Public Health England (PHE), but this responsibility moved to the Office for Health Improvement and Disparities (OHID) in October 2021.

<sup>(</sup>iv) AHP = Allied Health Professional. There are 14 recognised AHPs in the UK including physiotherapists, dieticians, osteopaths and occupational therapists.

<sup>(</sup>v) Public Health England was disbanded in 2021 and its responsibilities in relation to physical activity promotion were transferred to the newly established Office for Health Improvement and Disparities (OHID).

The Making Every Contact Count (MECC) approach to behaviour change, which encourages healthcare professionals to talk about health and wellbeing with patients during routine appointments, can be a route to raising and addressing physical activity.<sup>100</sup>

There is NICE<sup>(vi)</sup> guidance addressing physical activity, which provides recommendations for healthcare professionals and the wider health system to support people to lead more active lives. The most relevant to physical activity in primary care are: Physical activity for adults – Physical activity exercise referrals schemes (PH54); Physical activity brief advice for adults in primary care (PH44); and Falls in older people: assessing risk and prevention (CG161). Guidance on weight management and obesity(vii) and NCDs contain recommendations on physical activity, although not exclusively in PHC settings. Relevant NCD guidance includes: Cardiovascular Disease Prevention (PH25); Type Two Diabetes Prevention in People at High Risk (PH38); Cardiovascular risk assessment and lipid modification (QS100); Early and locally advanced breast cancer: diagnosis and management (NG101); ype 2 diabetes in adults: management (NG28); and Colorectal cancer (NG151).

This wide range of policies, while not mandated, are implemented through a combination of national collaboration with a strong place-based approach to meet local priorities.

"When I started at Sport England, we were looking to 'Find the things that work for health and sport, and scale it'. Now we understand the importance of local context. This has seen an increasing focus on spreading good practice, rather than scaling identical approaches." SG

Since 2017, the MHPP has supported primary and secondary care healthcare professionals to promote physical activity and integrate it into clinical practice. The MHPP grew out of the "Everybody Active Every Day" initiative which identified the significant role healthcare professionals play in encouraging individuals to take up activity, but found gaps in their knowledge, confidence and skills. There are free practical tools, peer-led education and e-learning modules delivered via BMJ Learning and Health Education England, an NHS Trust community of practice, and support for medical schools to integrate physical activity into undergraduate education. Fifty physical activity clinical champions deliver training to their peers alongside e-learning modules.

Brief advice can refer or signpost to local physical activity opportunities, including via social prescribing, which is a major focus in England. By 2023/24 NHS England aims to have over 1,000 social prescribing link workers who signpost to local activities and provide behavioural support to enable over 900,000 individual referrals. Social prescribing links to cross-government agendas including £4 million for green social prescribing to prevent and tackle mental ill health across seven pilot sites, and £12.7 million to prescribe active travel in 11 local authority areas.

Data-sharing challenges have been cited as a barrier to referring patients, but some local authorities have found GDPR-compliant solutions. For example, Elmbridge Borough Council have GDPR-compliant data sharing arrangements enabling leisure-centre staff to receive GP referrals containing basic biometric information for each patient, which they can then update or supplement.

<sup>(</sup>vi) NICE is the National Institute for Health & Care Excellence, a health technology assessment (HTA) agency, which is responsible for developing guidance, advice and quality standards on healthcare, public health and social care. The guidance is for use in England and Wales, and often adopted in Scotland and Northern Ireland.

<sup>(</sup>vii) These include: Obesity Prevention (CG43), Preventing excess weight gain (CG97), Weight management – Lifestyle services for overweight or obese adults (PH54), Weight management: lifestyle services for overweight or obese children and young people (PH47), Obesity in adults: prevention and lifestyle weight management programmes (QS111).

#### **Policy development and current status**

Healthcare services, including physical activity interventions, are commissioned locally, through public health/wider local authority teams or Integrated Care Systems. Contractual arrangements like the Quality and Outcomes Framework (QOF), which incentivises GPs to screen patients for risk factors, have previously allocated QOF points(viii) for physical activity questions, but this was not well used and points were minimal (see Annex 3 on screening, including Physical Activity Vital Signs). In some areas Active Partnerships work with local partners to explore the role of the Commissioning for Quality and Innovation (CQUIN) framework in incentivising physical activity in PHC. Integrating physical activity into routine consultations is also an important aim of the MHPP.

Examining the impact of COVID-19 has led to a renewed focus on health inequalities by government (OHID) and the sport and physical activity sector, including concerns about barriers to physical activity, and a desire to address them in policy development. The forthcoming major conditions strategy, which will address health disparities and mental health, and a new sports strategy expected in 2023, both provide opportunities to promote physical activity in PHC.

Each NHS England Integrated Care System (ICS) has an Integrated Care Board (ICB) responsible for developing a local care plan in collaboration with partners such as NHS trusts. Local plans are required to consider the Joint Strategic Needs Assessment (JSNA) and the Joint Health and Wellbeing Strategy (JHWS) when considering how to meet the health needs of the local population. If physical inactivity is identified as a need, then this should be considered. Including physical activity measures in ICS performance metrics may be helpful in this respect.

Existing local initiatives can be further built on. This includes the 123 exercise referral schemes identified in a PHE 2021 evidence review on physical activity promotion in healthcare settings:

"We're trying to blend bottom-up and top-down approaches to driving change, determining what is needed from a national [policy and funding] level to support place, whilst recognising change and innovation that is driven by and in places – and autonomy across the system." SG



# Impact of the policy on physical activity, health and wellbeing

While no national review on the impact of physical activity promotion in PHC in England has been undertaken, research from 2022 notes some progress in incorporating physical activity into routine care and pockets of good practice<sup>112</sup>. By the end of 2022, the MHPP had reached over 157,000 professionals through training and tools, around a quarter of relevant health professionals. Evidence shows that participation in such training programmes improves health professionals' knowledge, skills and confidence.

Local studies have shown the benefit of a place-based approach, such as social prescribing link worker referrals to local physical activity opportunities. There is also learning from the system-change approaches of local Sport England pilots in 'People and Places: The Story of Doing It Differently'.

(viii) The objective of QOF is to improve quality-of-care by rewarding practices (assigning QOF points which translate into funding) for quality of care based on indicators across key areas of clinical care and public health.

#### What's next?

Building on the work of the MHPP, OHID, Sport England and NHS Horizons<sup>(ix)</sup> are currently co-developing a plan to raise visibility and embed physical activity through a whole-system approach across the NHS and Integrated Care Systems. Whole-system approaches are increasingly recognised as important for addressing complex public health challenges; in 2019 WHO called for this approach for physical activity. Research published in 2022 noted the need to engage health system leaders in whole-system approaches to physical activity.

This whole-systems approach aims to make physical activity for the prevention and management of long-term conditions the norm, not the exception. This approach, while not a policy framework, can take draw on policy opportunities including review of the NHS Long-term Plan and OHID's physical activity framework for action, "Everybody Active Every Day".

"A key part of our work focuses on influencing and advocating for physical activity within policies... Obviously there is a very strong evidence base for physical activity and mental health and wellbeing, both prevention and treatment – so [a colleague has] been doing a lot of work to pull together the evidence base and associated policy asks for physical activity for a forthcoming government strategy." SG

The Faculty of Sport and Exercise is working on improving risk perception after it found 51% of health professionals and 37% of their patients were concerned about physical activity exacerbating or worsening common conditions. This is despite the Faculty's consensus statement on risk, which affirms that most people with common long-term conditions can exercise safely. The statement supports healthcare professionals to advise patients on risk, and move from a medical clearance to medical guidance approach for physical activity with long term conditions. The We are Undefeatable campaign (led by 15 health charities with Sport England funding) seeks to increase patient and professional understanding and encourages those with longterm conditions to exercise.

The co-designed plan being developed on how best to embed physical activity into NHS settings could be an important opportunity to develop a culture of integrating physical activity into the health professionals toolbox, and to influence national policy in England. The focus on health inequalities could help drive efforts to teach those who could benefit most from physical activity, including those with longterm conditions, who are the focus for the We are Undefeatable campaign. Mandating physical activity training in the undergraduate medical curriculum and increasing opportunities for continuing professional development, as identified in the evaluation of the MHPP, could help increase focus on physical activity in PHC settings. The inclusion of physical activity metrics within **Integrated Care System performance** metrics could help achieve a whole systems approach.

(ix) NHS Horizons is a specialist support team within the Transformation Directorate of NHS England.

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# Scotland X

In Scotland, there is no national policy requiring PHC practitioners to include physical activity in their care, but there are efforts to introduce brief interventions into PHC consultations, with support from Public Health Scotland.

The quotes in this country snapshot are from an interview with Flora Jackson, Health Improvement Manager (Physical Activity), Public Health Scotland (June 2022).

### What physical activity promotion is offered in PHC?

Health professionals in Scotland do not routinely raise physical activity with patients; it occurs on a more ad hoc basis, dependent on individual practitioner knowledge and experience. This means patient referrals to local physical activity services are inconsistent and referral services are variable.

NHS Scotland faces the challenge of integrating physical activity into existing NHS infrastructure to enable referral, follow-up, data, and reporting at scale. There is good practice in integrating physical activity by some NHS Boards, for example NHS Greater Glasgow and Clyde (NHS GGC) has worked with all six local authority leisure trusts to integrate physical activity into their IT systems, to enable electronic referral and follow up by NHS and leisure providers. NHS GGC has worked closely with general practices and AHPs to upskill health and leisure staff to provide a trusted local service. Other health boards are exploring and developing similar approaches, including NHS Dumfries and Galloway, NHS Borders, NHS Tayside and NHS Ayrshire and Arran.

Public Health Scotland published *Physical*Activity Referral Standards for Scotland in
2022 which aims to drive improvement,
reduce variability, and build trust for service
commissioners and referring healthcare
professionals.



### **Policy development and current status**

The lead up to the 2012 London Olympics and the 2014 Commonwealth Games in Glasgow presented an opportunity to create a legacy. The NHS Physical Activity Pathway was proposed as a way NHS Scotland could contribute to this legacy and integrate physical activity into routine care.

"We used the legacy backdrop of the 2012 Olympics and the 2014 Commonwealth Games as a means of testing the feasibility of an NHS Physical Activity Pathway in primary care." FJ

In 2013/14 a feasibility study across 16 primary care sites tested physical activity brief advice and/or brief interventions in general practice. The study demonstrated feasibility with further work required to embed at scale.

The feasibility study fed into guidance from the Chief Medical Officer (CMO) in a 2015 Letter to NHS Boards on creating a health-promoting health service, with physical activity as a core component for staff, patients and visitors. The NHS Physical Activity Pathway provided the structure through which clinical specialities could, in theory, embed physical activity within primary and secondary care clinical pathways. Guidance and measures to this effect and reporting requirements for NHS Boards accompanied the CMO Letter. Reporting showed positive uptake of physical activity brief interventions within multiple specialities, but not at scale across all NHS Boards.

The 2016 Scottish Government 'A Health and Social Care Delivery Plan', stated that the physical activity pathway be integrated into all appropriate clinical settings by 2018. Unfortunately, no additional resources were provided, so uptake remains broad, but not at scale.

Access to quality physical activity opportunities that match individual needs and preferences are essential to successfully engage, motivate and enable people to be more active. The 2022 Physical Activity Referral Standards provide guidance on services, including health and referral provider partnerships, local delivery models, a skilled and knowledgeable workforce, data systems, monitoring and evaluation, and exchange of learning. The standards have a tiered approach to physical activity interventions, matched to individual needs and interests, and the skills and knowledge required for service delivery. This model provides opportunities to enable healthcare professionals to signpost patients including via social prescribing to long-term physical activity when they do not require intensive referral services.

While there are no requirements for healthcare professionals to integrate physical activity into routine care, there are policies where it is inferred. This results in physical activity brief advice and referral services being dependent on practitioner judgement, patient preference and local context.

There is scope to deliver physical activity brief interventions within Scottish Government and NHS Scotland policies such as the Health and Social Care Delivery Plan, the Mental Health Strategy 2017–2027, and the Active Scotland Delivery Plan.

### Impact of the policy on physical activity, health and wellbeing

NHS Boards had to report on the 2015 CMO letter *Health Promoting Health Service to all NHS Boards* by April 2018. Reporting demonstrated a significant increase in physical activity referrals across NHS Scotland. Due to lack of a formal national exercise referral pathway,

no national evaluations exist. The evaluation, including data collection, of the *Physical Activity Referral Standards* presents an opportunity for country-wide insight.

#### What's next?

Discussions are ongoing to integrate the NHS Physical Activity Pathway and associated referral and/or signposting into healthcare in Scotland. Future policy should make it as straightforward as possible to integrate physical activity into routine care; a consideration that should be taken by Scottish Government policymakers, senior clinicians, directors of public health, healthcare professionals, and those delivering community interventions.

"We need to eliminate all the barriers the health sector could have, to make raising the issue of physical activity part of the routine like asking about smoking or alcohol... we need to make it as easy as possible for this to happen" FJ

Public Health Scotland (PHS) advocates for integration of physical activity into healthcare in Scotland, by building on the NHS Physical Activity Pathway and the *Physical Activity Referral Standards*. More recently, PHS concluded work on: A systems-based approach to physical activity in Scotland: a framework for action at a national and local level (2022). This strategic, evidence-based approach translates the evidence of what works to increase population levels of physical activity into a Scottish context, drawing heavily on the WHO Global Action Plan for Physical Activity and the ISPAH *Eight Investments that Work for Physical Activity* (see Annex 3 for more details).

Evaluating existing initiatives could help to build the case for a national policy of physical activity promotion in Scotland. This could empower those with chronic conditions to improve their physical and mental health and to contribute to chronic disease prevention in at risk people, spreading best practice across Scotland.



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# Wales Wales

The Welsh National Exercise Referral Scheme (NERS) began in 2007 and is an integral part of care pathways for a range of conditions, including cancer, with consistent government support and funding.

The quotes in this country snapshot are from Mary-Ann McKibben (MM), Public Health Consultant, Public Health Wales (Strategic Lead for NERS), and Jeannie Wyatt-Williams (JWW), former operational manager for Wales, NERS (retired 2022).

### What physical activity promotion is offered in PHC?

NERS is aimed at over-16s who are inactive and have, or are at high risk of developing, a chronic health condition. The scheme has specific pathways for cancer, stroke, lower back pain, heart and respiratory disease, and mental health issues. It is also used for fall prevention and weight management.

Individual patients are referred by health professionals (GPs, practice nurses or condition-specific physiotherapists or nurses) to a local NERS coordinator. After an initial hour-long assessment, which includes function and fitness tests, patients are generally offered a tailored, subsidised and supervised exercise programme for 16 weeks, but this can vary depending on referral needs. Exercise includes mainly indoor gym sessions, studio circuit training or tai-chi sessions with a trained exercise referral professional, or outdoor activities such as organised walks, also with a qualified instructor.

"While our main focus is on using physical activity to prevent and manage chronic diseases, participants often tell us how valuable NERS is from a social and connecting point of view, which means it also impacts positively on mental wellbeing." MM

The initial assessment and follow-up appointments (at four weeks and 16 weeks

when function and fitness are retested) are free of charge, and each physical activity session incurs a small fee of around £2.50.

After the formal exercise programme is concluded, there is a follow-up consultation. Patients are usually offered a concessionary price to continue using their local leisure centre as well as some online physical activity sessions. They are also encouraged to remain physically active by taking up other local opportunities signposted by the exercise coordinator.

"NERS is very fortunate to have such a dedicated and skilled workforce who are able to support individuals not only to develop and embed important physical activity habits but also to learn to enjoy taking part." MM

#### **Policy development and current status**

NERS is the only national exercise referral programme in the UK. It forms part of care pathways across all local authorities and Health Board areas in Wales, although not all areas offer all pathways.

NERS has been operating as a national scheme since 2007, when the Welsh Government began a phased national rollout of programmes that were already running in a number of local areas. Originally there was only a generic pathway, but care pathways for specific diseases and conditions have been established over time – for example, the cancer pathway, the last to be established, was developed in 2011/12.

"The key lesson [in establishing the policy] was ensuring that all of the people had all of the information they needed, and that everybody was in agreement about what was the ultimate goal: to give someone the skill and confidence to become and remain independently physically active for the longer term." JWW

NERS is funded by the Welsh Government; Public Health Wales (PHW) provides strategic and operational oversight. It is delivered in each of the 22 local authority areas through a grant from PHW. NERS was originally established as a joint venture between the NHS and local authorities to make good use of extra capacity within public leisure services, with some funding (including towards the co-ordinator's salary) and contributions in kind (such as administration services, use of venues and equipment) provided by local authorities. The leisure services benefit from the proportion of NERS clients who subsequently take out a membership. Local delivery partners now include local authorities, leisure trusts (notfor-profit charitable organisations) and one Health Board.



"NERS is delivered using a partnership approach. While we lead at a national level, the contribution of our 22 local delivery partners and their commitment to the programme is essential to making it work." MM

During the COVID-19 pandemic, NERS shifted to virtual delivery where it could, although many staff were seconded by local authorities into the pandemic response. A large number of classes were delivered virtually. An evaluation comparing in-person to virtual delivery found that engagement was lower for virtual delivery. In addition, virtual delivery was found to be more costly to deliver than face-to-face delivery, partly because the fee per session was waived and partly because virtual delivery required smaller groups with two instructors present for safety reasons.

"Thanks for all the hard work and dedication, in keeping us all active and amused during this awful scary year [2020]." – NERS participant

### Impact of the policy on physical activity, health and wellbeing

A 2010 independent evaluation of NERS was carried out across the first 12 local authorities to implement it. This showed that 44% of those enrolled completed the scheme. Cost effectiveness was assessed using qualityadjusted life years, encompassing mobility, self-care, usual activity, pain, anxiety and depression. The largest dropout occurred between scheme entry and four weeks, with higher adherence for older patients. At 12 months, the intervention group had higher physical activity levels than the control group but this finding was only statistically significant for those with CHD risk factors. It also showed a decrease in anxiety/depression for those referred for mental health and CHD risk factors. Cost-effectiveness analysis suggests that without charges for physical activity classes, the cost per QALY is £12,111. At £2 per class, this was under £10,000 - well below the NICE threshold of £20,000-30,000 (more information in Section 3.2.2).

"Evaluation of impact is intrinsic to NERS to demonstrate its impact and make the case for continued, and even enhanced, funding." MM

A later study to understand factors influencing NERS uptake in "real world" implementation versus randomised controlled trial conditions estimated 3.3% of the 'at risk' population were referred during the ten-year period analysed (2008 to 2017). A downward trend over time was found in referrals for the most deprived groups, alongside a decline in uptake. In contrast to the randomised controlled trial, those referred with mental health conditions were less likely to take up referral compared to other groups.

A more recent PH Wales internal analysis was undertaken using eight-years' worth of NERS data from 2012–20 to inform a NERS review; this provided further insights. There have been

235,000 referrals in the eight-year period, ranging from 24,000 to 33,000 per year. Most referrals were to the generic pathway (58%), with the remainder spread across other pathways. 63% of clients were female and 37% were male, which was relatively consistent over the years. 41% of referrals came from GPs and 31% from physiotherapists.

41% of those referred did not take up their referral. 52% of those who took up referral completed the programme, which is in line with behaviour change programmes in general. Looking at outcomes, 75% of clients increased fitness to some extent, while 65% increased function to some extent, although further work is needed to fully understand the specific contribution of NERS.

NERS is a victim of its own success in that the number of referrals generally outpaces capacity, resulting in long waiting times in some areas or for some pathways, which could contribute to drop out rates. Unfortunately, this is inevitable when funding is not able to match demand.

"Given the inevitable limits on the resources and capacity available within a publicly funded programme such as NERS, it is important to ensure it is focused on those groups who would benefit the most." MM

### What's next?

Having been in place for a number of years and facing rising demand, NERS is now undergoing review and quality improvement to ensure it is fit for purpose and can continue to grow. This includes developing a new patient administration system to allow more accurate data collection and measure outcomes more effectively. There is also a renewed focus on



behavioural change elements, and on ensuring support for the workforce to develop and maintain the competencies and skills required to deliver a quality service, as well as a review of existing pathways to consider a refocus onto types of exercise, which can be common across a range of conditions.

A key element of the review is to address access issues highlighted through evaluation. Given the demand for NERS and inevitable limited capacity, it is important to ensure NERS can be focused on those population groups who could benefit the most, thus contributing to reducing health inequalities.

Ongoing Welsh Government support for NERS is essential to enable the scheme to continue to reap health and wellbeing benefits for people with or at risk of chronic conditions.

#### **Sources for Wales country snapshot**

With thanks to Mary-Ann McKibben, Consultant in Public Health/Strategic Lead for NERS, Public Health Wales and Jeannie Wyatt-Williams, former operational manager for NERS, Welsh Local Government Association.

National Institute of Health Research (NIHR)
Adaptation of the Welsh National Exercise Referral
Scheme (NERS) to virtual delivery: Evaluation
of impact and opportunities September 2022
https://phirst.nihr.ac.uk/evaluations/adaptationof-the-welsh-national-exercise-referral-schemeners-to-virtual-delivery-evaluation-of-impact-andopportunities-wales/

Murphy, S. et al *The evaluation of the National Exercise Referral Scheme in Wales* (2010) https://www.gov.wales/evaluation-national-exercise-referral-scheme-wales-0

WLGA All Wales National Exercise Referral Scheme infographic (2020–2021) https://www.wlga.wales/SharedFiles/Download.aspx?pageid=62&mid=665&fileid=3464

Public Health Wales *National Exercise Referral Scheme* (undated) https://phw.nhs.wales/services-and-teams/wales-national-exercise-referral-scheme

# United States



There is no policy mandate, routine reimbursement or universal care standard on physical activity in primary care in the **United States, and health insurance is largely** provided privately. There are, however, several initiatives to address it. Exercise is Medicine® is a widely used approach with accompanying tools for implementation, which is set out in this country snapshot. The National Physical **Activity Plan and the US Centers for Disease Control & Prevention initiative Active People, Healthy Nation both contain sections on** physical activity in health care sectors. The Physical Activity Alliance, a consortium of national stakeholder groups, is currently engaged in work to integrate physical activity into provider coding and standardised electronic health record physical activity assessment.

According to the Global Status Report 2022:

32% of men and 48% of women

**64**% of adolescent boys and **81**% of adolescent girls

47% of older men and 65% of older women

### ...fail to meet physical activity guideline targets.

Estimated direct healthcare costs attributable to NCDs and mental health associated with physical inactivity: US\$51.537 billion

Source: WHO, Physical activity United States 2022 country profile (2022) https://www.who.int/publications/m/item/physical-activity-usa-2022-country-profile

The quotes in this country snapshot are from an interview with Robyn Stuhr, Vice President, Exercise is Medicine®, American College of Sports Medicine (July 2022).

### What physical activity promotion is offered in PHC??

The US healthcare system is qualitatively different from the systems in the other country snapshots in that medical insurance is largely privately provided. The Centers for Medicare and Medicaid Services does support two physicalactivity-related programmes: Silver Sneakers (for older adults) and the Diabetes Prevention Program (which promotes lifestyle changes, including physical activity). As there is currently no broad government-led programme of physical activity promotion in PHC, this country snapshot is structured differently from the other examples in this Annex. Rather than detailing policy, it sets out the Exercise is Medicine® (EIM) approach, which was developed in the United States in 2007. This framework is now being used in 37 countries worldwide. EIM was initially founded by the American College of Sports Medicine (ACSM) with the American Medical Association. Shortly afterward, ACSM took over management of the initiative. Coca-Cola was an early sponsor of EIM, but that relationship ended in 2015. Technogym, an international exercise equipment and technology company, has provided support since 2010.

"Policy progress has been slow because of the patchwork of providers, insurers, health care systems and educational systems in the US. ACSM (home to EIM) is a science-based membership association, so our member expertise does not lie in policy but rather in scientific research, education and sports medicine care." RS

EIM, like other examples throughout this report, relies on referral by healthcare professionals to certified exercise professionals (such as clinical exercise physiologists, exercise physiologists and personal trainers) who can provide counselling and oversee the patient's exercise programme. There are searchable databases (such as the US Registry of Exercise Professionals) that can be used to identify local exercise professionals and verify their

credentials. Unfortunately, reimbursement for exercise prescription and guidance is inconsistent. Efforts are under way to obtain qualified healthcare professional status for clinical exercise physiologists so they can truly become part of the healthcare continuum. EIM has produced materials to facilitate and empower healthcare professionals to integrate physical activity promotion into everyday working practice:

- a) The EIM Healthcare Providers' Action Guide is a tool that encourages healthcare professionals to take six steps:
  - 1) Assess physical activity at every visit to the health clinic, using the Physical Activity Vital Sign (PAVS) tool (see Annex 3 of this report)
  - 2) Determine the patient's readiness to change
  - 3) Provide brief advice or a basic prescription, using the EIM Prescription Form
  - 4) Refer patients to local certified exercise professionals, programmes, fitness facilities or self-directed resources
  - 5) Promote physical activity within the clinic to members of the health care team
  - 6) Become a champion in the health system

However, the federal legal system of the United States must be taken into account: the Action Guide also notes that "Due to potential variations in the law from one state to another, these documents should be reviewed and approved by legal counsel before they are used by you/your organization."

b) EIM has also developed a 15-hour interactive online course for exercise professionals, which they can take as part of professional development, to link them more effectively with the healthcare sector. The course introduces behavioural coaching for patients with 10 common chronic health conditions, taking into account: the benefits of physical activity for each person (considering their health conditions and/ or status); evidence-informed exercise guidelines, precautions or modifications; and when to refer back to their physician or healthcare provider.

#### **Policy development and current status**

The implementation of EIM is relatively ad hoc, because there are no government policies to mandate physical activity promotion in PHC. It is not included within Medicaid or Medicare, which would provide legal pathways for patients to access physical activity promotion. There are some insurance companies that are focused on value-based care (which prioritises prevention) rather than volume-based care (where volume of treatment is incentivised): these are beginning to adopt approaches such as EIM.

EIM often relies on individual clinical champions to encourage its rollout, either at the level of individual healthcare centres or within the health system. For example, it is as a result of pressure from clinical champions that the EIM informatics team have integrated the PAVS into the electronic health record for ease of use by health professionals. One of the largest software companies was persuaded to include the PAVS into the Social Determinants of Health Section of their standard electronic medical record software.

"Once you get the physical activity vital sign into your electronic health record, it is a prompt for the provider to begin a conversation and measure progress over time. But the provider also must have an easy mechanism and place to refer patients. You have to develop a network of resources in your local community. That can't really be done on a national level." RS

# Impact of the policy on physical activity, health and wellbeing

No national-level impact assessment has been undertaken, as EIM is not offered consistently through national health systems. However, studies show that use of the EIM framework and tools can be effective; these are highlighted in the Reference List of EIM-related Research, updated every six months. There are examples of successful rollout locally, such as Exercise is Medicine Greenville and Holy Cross Health.

#### What is next?

"We have institutional champions, in various health systems around the country, and then individual physician champions. But we can't simply rely on champions, we have to bake it into the system: it has to be a systematic approach." RS

Work to extend the reach of EIM is ongoing. The ACSM has developed a taskforce that is working to ensure that more providers (such as certified exercise physiologists) can be included as appropriate healthcare professionals so they can get reimbursed for involvement in EIM. The Physical Activity Alliance is also working on ways to better integrate PAVS within health care, including improving how electronic health information is recorded and shared regarding physical activity.

Were federal or state government in the United States to consider "putting teeth" into policy on physical activity promotion within PHC (for example through its inclusion in Medicare), the EIM approach is well established and could be rolled out more widely, as has already been shown through partnerships with healthcare departments in other countries (such as Poland). This could also encourage private insurance companies to offer physical activity promotion in primary care, moving prevention further up the agenda. More research showing the impact of specific physical activity interventions on health outcomes and cost containment will be essential in encouraging government and business decision-makers to take action.

# Behavioural counselling for patients with CVD or diabetes risk

The US Preventative Services Taskforce
– an independent panel of experts in
prevention and evidence-based medicine
– provides recommendations for care
categorised from A to D. Provision of
access to behavioural counselling on
physical activity and nutrition for patients
at risk of CVD by healthcare professionals
is rated as a B, meaning that
(theoretically) commercial insurers must
provide this without an additional charge.
This can be an important incentive, but
does not seem to be universally available.

In addition, the 2021 Centers for Medicare and Medicaid Services-supported Diabetes Prevention Program adopted a quality standard around physical activity participation as part of the programme. This will help to increase the reach of physical activity promotion in PHC to those on Medicare and Medicaid (which funds the DPP).



### **Sources for US country snapshot**

With thanks to Robyn Stuhr, Vice President, Exercise is Medicine®, American College of Sports Medicine and Cindy Lin Clinical Associate Professor of Sports & Spine Medicine, University of Washington Medical Center

Exercise is Medicine® (website) https://www.exerciseismedicine.org/

EIM New Diabetes Prevention Programs Standards re: Physical Activity (2022) https://www.exerciseismedicine.org/new-diabetes-prevention-programs-standards-re-physical-activity/

EIM Exercise is Medicine® (EIM) Online Course (undated) https://members.acsm.org/ItemDetail?iPr oductCode=EIM0522&Category=EIM&WebsiteKey=e 6756b65-2c71-47cb-b31b-cb7858e166e3

EIM Healthcare Providers' Action Guide (undated) https://www.exerciseismedicine.org/eim-in-action/health-care/health-care-providers/provider-actionguide/

EIM Reference List of Exercise is Medicine®-related Published Research (updated July 2022) https://www.exerciseismedicine.org/wp-content/uploads/2021/04/EIM-Research-Articles-Reference-List.pdf

EIM About the US National Physical Activity Plan (2016) https://www.exerciseismedicine.org/assets/page\_documents/CU campus programming doc\_FINAL.pdf

Exercise is Medicine Greenville (website) https://eimgreenville.org/

Healthy Ireland *National Physical Activity Plan* (updated 2022) https://www.gov.ie/en/policy-information/b60202-national-physical-activity

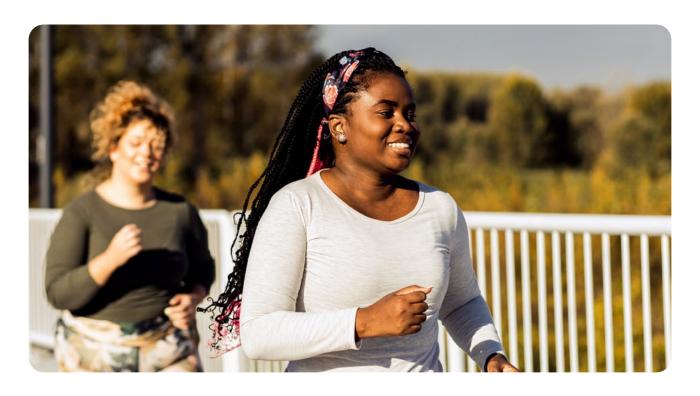
Holy Cross Health *Exercise is Medicine* (undated) https://www.holy-cross.com/health-and-wellness/wellness-pavilion/fitness-programs/exercise-is-medicine

Physical Activity Alliance Move with us (website) https://paamovewithus.org

Thompson W.R. et al., Exercise is Medicine (2020) *American Journal of Lifestyle Medicine* 14(5): 511–23. https://journals.sagepub.com/doi/10.1177/1559827620912192

US Centers for Disease Control & Prevention, About Active People, Healthy Nation (reviewed July 2022) https://www.cdc.gov/physicalactivity/ activepeoplehealthynation/about-active-peoplehealthy-nation.html

US Preventative Services Taskforce, Final recommendation statement: healthy diet and physical activity for cardiovascular disease prevention in adults with cardiovascular risk factors: behavioral counseling interventions (2020) https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/healthy-diet-and-physical-activity-counseling-adults-with-high-risk-of-cvd





BUILDING MOMENTUM: ESTABLISHING ROBUST POLICIES TO PROMOTE PHYSICAL ACTIVITY IN PRIMARY HEALTH CARE

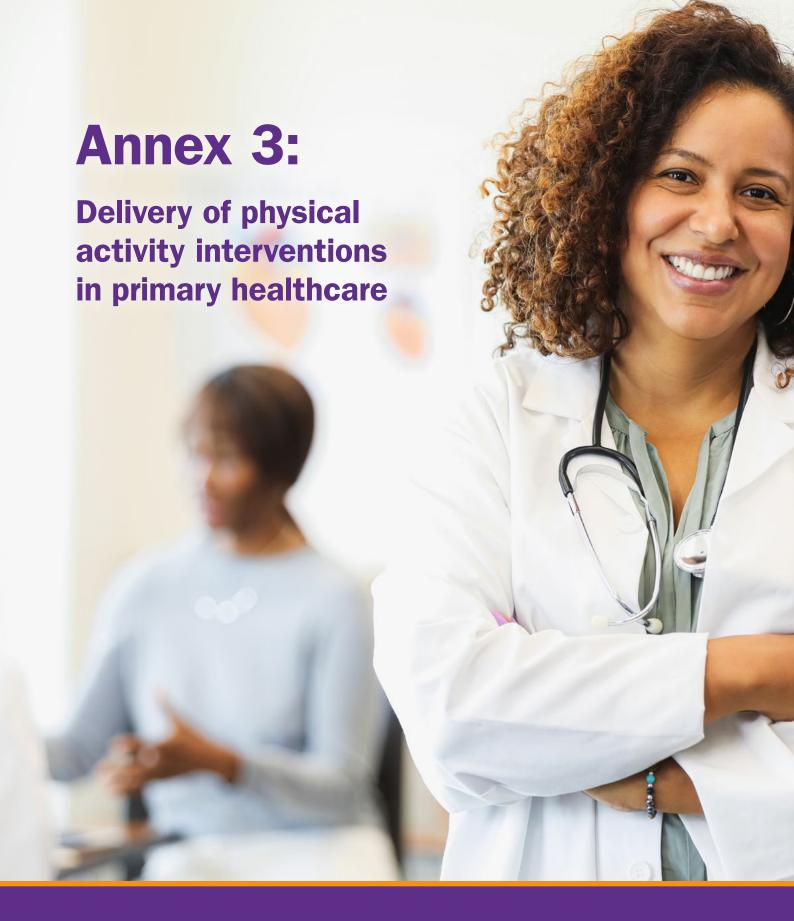
# **Annex 2: Physical activity promotion in PHC:** the international policy recommendations

YEAR	POLICY DOCUMENT	RECOMMENDATION	SOURCE
2023	WHO, Updated menu of policy options and cost-effective interventions for the prevention and control of noncommunicable diseases (updated "best buys")	"Provide physical activity assessment, counselling and behavioural change support as part of routine primary health care services through the use of a brief intervention."  Notes the "critical non-economic consideration" that this "Requires capacity, and staff with sufficient training in primary care".	https://apps.who.int/gb/ebwha/pdf_files/EB152/B152_6-en.pdf  https://www.who.int/news/item/26-05-2023-more-ways-to-save-more-lives-for-less-money-world-health-assembly-adopts-more-best-buys-to-tackle-noncommunicable-diseases
2022	WHO Global Status Report on Physical Activity	Report on the progress of countries in relation to implementing GAPPA recommendations	https://www.who. int/publications/i/ item/9789240059153
2020	WHO HEARTS: Technical Package for Cardiovascular Disease Management in Primary Health Care: Risk-based CVD Management	Table 3 – Management of total CVD risk: Counsel on diet, physical activity, smoking cessation and avoiding harmful use of alcohol and as follow-up "Ask about: new symptoms, adherence to advice on tobacco and alcohol use, physical activity, healthy diet, medications etc."	https://www.who. int/publications/i/ item/9789240001367
2020	WCRF International MOVING framework	Physical activity policy framework with 3 dimensions active societies, active environments and active people. Includes under active people:  •G = Give physical activity training, assessment and counselling in healthcare settings	https://www.wcrf.org/ moving-framework
2018	WHO. Global Action Plan on Physical Activity 2018–2030: More Active People for a Healthier World	Action 3.2: "Implement and strengthen systems of patient assessment and counselling on increasing physical activity and reducing sedentary behaviour, by appropriately trained health, community and social care providers, as appropriate, in primary and secondary health care and social services, as part of universal health care, ensuring community and patient involvement and coordinated links with community resources, where appropriate."	https://apps.who.int/ iris/bitstream/handle/ 10665/272722/97892 41514187-eng.pdf
2018	WHO ACTIVE – A technical package for increasing physical activity	ACTIVE identifies four key policy areas of active societies, active environments, active people and active systems. Within active systems:  • Action 3.2 - Health care: Implement systems of patient assessment and counselling on physical activity in primary and secondary health care and social services  • Toolkit on promoting physical in primary healthcare	https://apps.who.int/iris/bitstream/handle/10665/275415/97892415148 04-eng.pdf?ua=1

YEAR	POLICY DOCUMENT	RECOMMENDATION	SOURCE
2017	WHO. Tackling NCDs: 'Best Buys' and other Recommended Interventions for the Prevention and Control of Noncommunicable Diseases	Updated NCD Best Buys	https://apps.who.int/iris/ handle/10665/259232
2016	WHO Europe. Physical Activity Strategy for the WHO European Region 2016–2025	Objective 3.3 – Integrate physical activity into prevention, treatment and rehabilitation "Member States should work towards making the promotion of physical activity by health professionals the norm. Early identification, counselling and referral at the primary care level should be integrated into standard practice and should respond to the different needs of patients While the promotion of physical activity should be seen as a core competence for all primary health-care professionals, governments could also consider ways to continuously provide incentives for its full integration into daily practice	https://apps.who.int/iris/handle/10665/329407
2013	WHO. Tackling NCDs: 'Best Buys' and other Recommended Interventions for the Prevention and Control of Noncommunicable Diseases (Updated Best Buys) – Appendix 3 of the Global Plan for the prevention and control of noncommunicable diseases 2013- 2020	Objective 3 – Reducing modifiable risk factors for noncommunicable disease and underlying social determinants through creation of health-promoting environments:  Provide physical activity counselling and referral as part of routine primary health care services through the use of a brief intervention	https://www.who. int/southeastasia/ publications-de- tail/9789241506236#:~:- text=The%20WH0%20 Global%20NCD%20ac- tion,the%20challenge%20 of%20NCDs%20and
2013	Council of the European Union Council Recommendation of 26 November 2013 on promoting health-enhancing physical activity across sectors	Indicators: 10. Monitoring and surveillance of physical activity and sedentary behaviour? 11. Counselling on physical activity performed by health professionals? 12. Training on physical activity in curriculum for health professionals?	https://eur-lex.europa.eu/ LexUriServ/LexUriServ.do? uri=0J:C:2013:354:0001: 0005:EN:PDF
2011	ISPAH, Eight Investments that Work for Physical Activity	Healthcare:  "Health professionals should be competent to undertake assessment and provide brief advice and/or counselling on physical activity in routine practice. It is also important that health professionals are aware of appropriate opportunities so they can advise patients on how to increase their activity levels. Physical activity promotion in healthcare should focus on both primary and secondary prevention, given there is strong evidence on the benefits of physical activity for both prevention and disease management. Policies and systems need to be developed to support the integration of physical activity into routine care, including financing of clinical preventive services and dissemination of tools for assessing, advising and following-up patients."	https://ispah.org/resources/key-resources/8-investments

YEAR	POLICY DOCUMENT	RECOMMENDATION	SOURCE
2010	ISPAH, Toronto Charter for Physical Activity	3. Reorient services and funding to prioritize physical activity  "In health  • Screening of patients/clients for levels of physical activity at every primary care consultation, and provision of brief, structured counselling and referral to community programs for insufficiently active patients;  • For patients with diseases/conditions such as diabetes, cardiovascular disease, some cancers or arthritis, screening by health and exercise professionals for contraindications and advice on physical activity as part of treatment, management and review plans."	https://www.globalpa. org.uk/charter
2004	WHO Global Strategy on Diet, Physical Activity and Health	Paragraph 45:  "Prevention is a critical element of health services. Routine contacts with health-service staff should include practical advice to patients and families on the benefits of healthy diets and increased levels of physical activity, combined with support to help patients initiate and maintain healthy behaviours"  (1) Health and other services. Health-care providers, especially for primary health care, but also other services (such as social services) can play an important part in prevention. Routine enquiries as to key dietary habits and physical activity, combined with simple information and skill-building to change behaviour, taking a life-course approach, can reach a large part of the population and be a cost-effective intervention"	https://www.who. int/publications/i/ item/9241592222





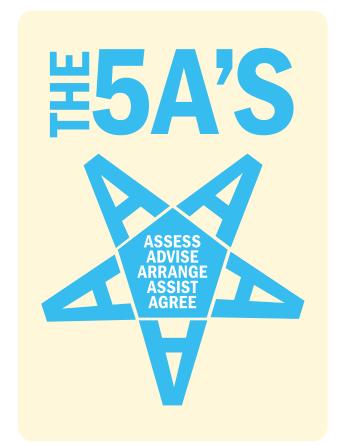
BUILDING MOMENTUM: ESTABLISHING ROBUST POLICIES TO PROMOTE PHYSICAL ACTIVITY IN PRIMARY HEALTH CARE

### **Annex 3: Delivery of physical activity interventions in PHC**

### **Key characteristics**

As far as possible, any promotion of physical activity in primary care should be based on an assessment of the individual's current physical activity. Recommendations should be specific to the individual in terms of dosage (intensity, duration and frequency) and the kind of activity, with consideration of the patient's health status, functional abilities, preferences and possible constraints (such as time, financial resources and access to equipment or recreational areas). Physical activity promotion requires a level of understanding of current levels and type of activity and will ideally assess the individual's readiness to change, alongside their capabilities, opportunities and motivation, which together foster behaviour change. 101

Figure 9: The 5As



Behaviour change can be well supported by the "5As" model: "a well-established, evidence-based approach used worldwide to organize the provision of preventive care in primary healthcare", 4 which also forms the basis of the WHO European Region's Physical Activity Brief Intervention Protocol (see box on "The WHO toolkit on promoting physical activity through primary healthcare" below). The 5As are a straightforward way for healthcare professionals to communicate with their patients, about diet, tobacco use, alcohol – or about being more active. There is a range of options that can be set out for patients, which have varying effects but which need to be tailored to the individual.

It is important to note that not all the five steps need to be carried out at the same time or by the same person – and patients many also need ongoing support. This is why a successful policy will need to establish a clear pathway for patients within and beyond the healthcare system, to ensure that they can follow through on their initial assessment by a healthcare professional.

Care also needs to be taken not to appear stigmatising of those with high BMI, who are inactive and/or have co-morbidities, as this can have a detrimental effect on patient motivation. 103



# The WHO toolkit on promoting physical activity through primary health care

GAPPA's policy action is now supported by the WHO toolkit *Promoting physical* activity through primary health care: a toolkit (2021),4 which sets out recommendations on how best to integrate the routine delivery of the Physical Activity Brief Intervention Protocol into PHC.(i) Countries are encouraged to develop and implement national standardised protocols on patient assessment and brief advice on physical activity in primary health and social care settings. They should be adapted to local cultures and contexts (even weather!) and taking constraints into account, and, where appropriate, include systems of referral to counselling and/or community-based opportunities for physical activity. Policy should ensure that the protocol is modified to suit the national context, that it is piloted, that the infrastructure is ready for scale-up and that the workforce is fully prepared, and then that implementation is integrated, monitored and evaluated.

### An integrated approach?

Physical activity promotion within primary care can be managed either as a standalone intervention or delivered in conjunction with other interventions, such as nutrition counselling, as part of a wider package – for example, within a weight management programme. Which intervention is most appropriate for a patient may depend on the aim: for example, evidence suggests that counselling for weight management is more effective if dietary advice and physical activity support are provided in combination rather

than separately.<sup>104</sup> Policy must ensure that interventions will be tailored to the needs of each individual patient. Depending on context, this could involve integrating nutrition care alongside provision of physical activity intervention to provide the patient with the care and support that they need. Combinatorial therapy approaches may also be beneficial: a survey in Sweden and the United States suggested that "more patients wanted to receive support on diet, weight and smoking than on PA", so patients may be more likely to be receptive to discussions on physical activity as part of a wider discussion.<sup>103</sup>

"We have four or five combined lifestyle interventions in the Netherlands, which you can participate in and which are paid by the healthcare insurance. It's only because a lot of scientific evidence has been provided that the combined interventions are actually helping to reduce weight" – Maureen Ros, Knowledge Centre of Sports and Physical Activity, Netherlands

### Types of physical activity promotion in PHC

A challenge for any report on physical activity within PHC is that there is **no set definition of terms**: it is clear from the literature and interviews that terms are used to refer to different things in different contexts, and may be interchangeable (see Figure 10).

"We need to have a common language, because we talk about "prescription" or "referral" and "promoting" or "prevention" – that has been a challenge within the EUPAP project because we don't have the same foundation."

- Marita Friberg, EUPAP

<sup>(</sup>i) The Protocol is designed to be modifiable, with steps to implementation being to adapt it for the national context, to pilot it, to ensure that the infrastructure is ready for scale-up and that the workforce is fully prepared, and then that the implementation is integrated, monitored and evaluated.

WCRF International's analysis has enabled us to create a broad categorisation (Figure 10) – although the lines between screening, brief interventions, prescription and referral are fluid:

'A brief intervention involves discussion, negotiation or encouragement, other support or follow-up, often taking no more than a few minutes for basic advice. It may also involve a referral for further interventions, directing people to other options, or more intensive support".<sup>39</sup>

"[A brief intervention is] a combination of **measurement and brief advice**" and "**referral** to local support or specialist consultation can be arranged according to the needs of the patient". 48

**Brief interventions:** WHO's BRIEF manual notes that "there is no single formal definition of a brief intervention" – but adds that as a minimum there must be both a measurement of exposure to a risk factor (such as physical activity) and a conversation between a

healthcare professional and a patient (which may include advice) about changing exposure to the risk factor.<sup>48</sup>

**Prescription:** "Prescription" can refer either to a referral following an initial brief discussion or to the provision of the more detailed physical activity plan itself.

In **Sweden**, the FaR® (physical activity on prescription) initiative is is delivered very differently in different regions of the country: "Prescription" in some parts of the country is where the healthcare professional discusses the type of physical activity, its intensity and duration etc. In other parts of the country, the "prescription" is the referral by the healthcare professional to a health connector outside the health service, who then works with the patient to develop a more detailed plan.

Figure 10: Physical activity promotion in PHC settings

### a) Screening

Simple information-gathering establishes an initial baseline on which to build  $\approx 1 \ minute$ 

### b) Brief intervention/verbal discussion

Health professional uses a tool such as the "5As" to provide the patient with basic information on increasing physical activity  $\approx 3-5$  minutes

### c) Prescription

More specific recommendation is provided, which can be prescribing an amount of exercise but is more often a formal referral Longer discussion and may include follow-up

d) Referral

Patient is referred to a professional either within or external to the health system for further discussion on motivation and options, and a decision on what activity is appropriate



#### What works?

The most effective interventions are personalised and strongly dependent on the environment within which each patient lives – such as their socioeconomic status. However, there are some elements of interventions that are typically beneficial in increasing physical activity, including goal setting and self-monitoring. <sup>105</sup> There is also modest evidence on the use of apps and smartphones in encouraging physical activity, suggesting that these tend to work best in conjunction with other interventions. <sup>106</sup>

"If nothing more happens, even in the absence of brief counselling, if you don't have time, at least ask the question 'What are you doing in terms of physical activity?'... because asking the question raises awareness." – Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

It is essential that the infrastructure is in place within electronic medical record systems for the data to be quickly and easily recorded in the patient's medical record, minimising the time burden and ensuring that the information readily accessible in future, and capable of monitoring changes over time.

#### a) Screening

Basic information on physical activity and sedentary behaviour can be gathered on all patients in primary care. This is the first step in assessing to what extent further physical activity promotion is appropriate. A simple screening or "measurement of exposure" activity and easily integrated into clinical practice – for example in the waiting room or while taking blood pressure – and this task can be carried out by, for example, a practice nurse or receptionist.

There are simple, standardised tools available to assess every patient's physical activity habits<sup>107</sup> – for example, the Physical Activity Vital Sign (PAVS) model uses just two questions:

- 1) How many days during the past week have you performed physical activity where your heart beats faster and your breathing is harder than normal for 30 minutes or more?
- 2) How many days in a typical week do you perform activity such as this?

In addition to providing baseline knowledge for the healthcare professional, screening can spark interest and awareness in itself among patients of the need to be more physically active: In the **United States**, the *Exercise is*Medicine Health Care Providers' Action
Guide<sup>128</sup> suggests that physical activity
levels of all patients are regularly
assessed and recorded at every visit
using the Physical Activity Vital Sign
questions.

In **Portugal,** a third question is included in the screening, asking how much time is spent sitting (including during transportation, at a desk etc.), to assess sedentary behaviour.<sup>109</sup>

In **Sri Lanka**, a Healthy Lifestyle Centre programme has been in place since 2011,<sup>110</sup> providing weekly, structured NCD screening services in over 800 PHC settings: screening of the target population rose from 2.5% in 2011 to 25% in 2016. Physical activity assessment is included among other NCD risk factors, and a training-of-trainers manual on physical activity guidelines has been developed, with post-training evaluation suggesting that this has been well received by health professionals and that there has been a significant increase in competency.<sup>131</sup>

### Informal passive signposting

Every opportunity should be taken to encourage people attending primary care settings to consider physical activity options. "Informal passive signposting" – such as videos, posters or handouts available in reception areas – can be an additional first step towards screening, laying the groundwork for further discussion.<sup>112</sup>

b) Brief intervention / verbal discussion

Brief interventions – in which a PHC worker provides brief advice to the patient – can be delivered quickly and simply by any trained professional. Ideally, this advice should take the form of a discussion with the patient, but there may not be time for this in a pressurised primary care system. Although lasting only a short time, brief advice is better than nothing, and patients welcome these interventions, with one in four people in the UK saying that they would be more active if advised by a healthcare professional. 113 In the general population, brief counselling on physical activity (that involves an approach to motivations, barriers, preferences, readiness, and patients' opportunities to perform physical activity),39 has been shown to be effective, and compatible with clinically notable increases of physical activity levels. 114

A systematic review in 2022<sup>125</sup> found that brief interventions are very heterogeneous, both in terms of definition and measurement, which makes comparison and analysis challenging. This is compounded by a lack of appropriate data on which to base the recommendation to give verbal advice. Policy to support brief interventions should address the barriers to brief interventions identified in the review, which include:

- For the healthcare professional: lack of resources and time during the appointment, and a lack of knowledge of, for example, appropriate recommendations for people with specific NCDs or of places to which to refer patients)
- For patients: no interest, the expectation of pharmacological treatment rather than physical activity guidance and a lack of confidence in their healthcare provider to have the appropriate knowledge.

In Portugal, screening and brief intervention is combined. The national electronic health system includes three basic questions about physical activity and sedentary behaviour. Once the questions are answered by the patient and entered into the system by the healthcare professional, an algorithm gives red, yellow or green feedback, and suggests one of a number of digital guides that can be provided to the patient. These tools can be discussed briefly in the consultation; all psychologists in PHC units have been trained to explain brief counselling to their doctor and nurse colleagues in their facilities. Alternatively, the tools can be emailed or sent by SMS to patients. The tools are intended to be self-explanatory. The appropriate guide is sent, based on readiness of the patient: a maintenance guide is for those already reaching recommended physical activity levels; a decisional guide is to help those who are more resistant to physical activity:

"If no time is available just ask the question, give the guides, let the person explore. In case of extra time the guides can be explored together and follow-up arranged." – Marlene Nunes Silva, National Programme for Physical Activity Promotion, Portuguese Directorate-General of Health

#### c) Prescription

What "prescription" means differs between contexts. However, a key characteristic is that prescription is personalised, so is likely to take more time to draw up than simple brief advice, and may use a modified prescription form that records baseline data.

In **Germany**, the Saxony regional government's exercise on prescription programme Rezept für Bewegung is a partnership with regional medical and sports associations. 115 The programme targets the physically inactive, in particular those with health problems such as hypertension, obesity, musculoskeletal problems, and stress. The programme has four strands: cardiovascular function, musculoskeletal strengthening, general health, and stress management and relaxation. Patients can find exercise offers on a dedicated website or via their local sports association. Doctors participate voluntarily and statutory health insurance funds do not cover costs automatically, although some may cover doctor consultations and exercise activities with providers achieving the "Sports Pro-Health" quality standard.

In some cases, the primary care professional may prescribe a specific amount of physical activity per week or has detailed knowledge of local physical activity opportunities (such as a local walking groups). However, this level of detail is more likely to be provided by another professional, with the prescription instead to be that the patient meet with a health connector: this is essentially a form of referral. For example, in **France**, although a 2017 Government Decree is on "sport on ordonnance" (sport on prescription), "actually it is not really prescribing physical activity, it is referring... Any type of doctor is able to prescribe - you have to examine the patient, you have a special form to fill in, and then you can suggest some activities. But then you will refer to a number of institutions or associations or clubs that are authorised to provide sport for a patient, and they will do a thorough examination and include the patient in a specific programme..." - Jean-Michel Oppert, Sorbonne University, Paris. France





Physical activity on prescription (FaR® fysisk aktivitet på recept) was developed over 15 years ago in **Sweden** was developed over 15 years ago by a network of healthcare professionals. It is now the model for the EU Physical Activity on Prescription initiative (EUPAP). Initially, the "prescription" was paper-based, using a form that looked very reminiscent of a standard pharmaceutical prescription. However, in many regions in Sweden this has been developed and extended to include more detailed information such as type of physical activity, frequency, duration and intensity.68 All licensed healthcare staff can prescribe physical activity. The prescription is developed through discussion with patients themselves and prescription can be from medical doctors or physiotherapists. In the first few years of FaR®, the use of the term "prescription" was challenged by some medical doctors who felt that it was not appropriate for non-pharmacological interventions - but it now seems to be an accepted term.

"One of the central parts of the method is that you are not telling the person what to do: it is person-centred or patient-centred, so you have a dialogue with the patient." – Marita Friberg, EUPAP



### **Accounting for risk**

Prescribing physical activity is a complement to – or may even be a replacement for – drug treatment. The risk of serious adverse consequences of physical activity is low, but patients themselves may be anxious about increasing their physical activity. Most PHC providers have been found to believe that physical activity promotion is important. However, they may also be reticent to promote or prescribe physical activity if they are concerned that:

- They lack adequate training to comfortably provide detailed advice about physical activity
- There are limited referral pathways (or lack knowledge of and/or trust in local referral options),<sup>117</sup>
- They will encounter practical constraints with implementation (such as lack of time or reimbursement).<sup>116</sup>

It has also been found that a limited number of healthcare professionals are initiating discussions about physical activity with cancer patients, with some providers reporting limited knowledge of physical activity guidelines for cancer patients.<sup>118</sup>

"[GPs] said they are afraid to prescribe physical activity because of the risk of cardiovascular events or attacks... We say to GPs that there are few risks to practising physical activity for patients with chronic disease: they do not need to do a complementary [physical] exam or stress test." – Martine Duclos, Department of Sport Medicine, University Hospital CHU G. Montpied, France

### **Accounting for risk (cont.)**

It is helpful when policies clearly specify the tasks and responsibilities of different parties to avoid any undue concern about risk or liability. In Sweden, regulations lay out the division of tasks and liabilities for prescribers of physical activity (usually healthcare professionals) and those tasked with delivering physical activity (the county council).58 Where healthcare professionals have concerns about risk to patients, being appropriately trained and having good knowledge of the patient can be useful to allay those concerns. Tailored tools for different health conditions can also be useful to address both the risk and lack of confidence.

"The vast majority of people... do not meet physical activity guidelines – so if it is just telling them to move more and don't sit around all day, that has minimum risk... There are guidelines on who needs cardiac screening for moderate to intense exercise, but for the vast majority it's just trying to get people to sit less and move more, which is safe." – Cindy Lin, University of Washington Medical Center. USA

In **Sweden**, the FYSS toolkit "combin[es] recommendations on suitable exercise activities with a description of the potential risks of physical activity for various patient groups".<sup>119</sup>

New guides are being developed in the **Netherlands** to new guides to facilitate conversations based on specific NCDs.

#### d) Referral

The prescription from a primary care professional can itself involve a referral to a third party, either within the healthcare system or from wider civil society. This third party is embedded within the local community and is well placed both to discuss patients' motivations for physical activity (perhaps using the 5As approach in more detail – see Figure 9) and to set out the accessible and appropriate options that are available to help patients achieve their goals. These local intermediaries need not necessarily be registered health professionals, but should ideally be certified or trained in an appropriate capacity. There is no standard terminology for this role:

Care-sports connector, community connector, community coordinator, exercise coach, health connector, health counsellor, link worker, physical activity counsellor...

It would be ideal to have a repository or database that can function as a resource to PHC professionals, so that they are aware of potential services available to patients within the community. Further, indication of certified or appropriately trained physical activity liaisons or providers would be helpful for PHC providers to more easily and confidently identify who could provide exercise referral services for their patients.

The evidence suggests that support from outside the primary care system is effective. A systematic review in 2021 suggests that "physical activity promotion interventions exclusively delivered... by primary care providers only [i.e. without any form of referral or other support] are unlikely to be sufficient and might need to be part of a comprehensive support system to successfully change behaviour". 120 Similarly, a 2022 systematic review found that "interventions delivered by primary care health professionals in combination with other interventionalists [such as a physical activity counsellor] significantly increased self-reported moderate-to-vigorous physical activity (MVPA), whereas interventions delivered by primary care health professionals

alone did not" (although this study looks only at MVPA, not light physical activity, which can also improve health outcomes).<sup>50</sup>

Increasing the number of contacts between healthcare professionals and patients also tends to produce a larger effect on physical activity than initial referral only. WHO has emphasised that interdisciplinary teamwork in PHC is of primary importance in the reform of health care. Globally, interdisciplinary care has been associated with improved quality and efficiency of healthcare delivery, having a positive impact on both patients and practitioners, and is cost-effective. 123

The success of the referral relies on the availability of activity options within the local community that are appropriate, at convenient hours and are very low cost (or free, in some cases under physical activity on prescription schemes). Simply providing access to (for example) a leisure centre or gym may not itself be enough to ensure the behaviour change that is required.

"Once you get the physical activity vital signs into your electronic health record, then the provider has to have a place to refer patients. That's when you have to develop a network of resources in your local community as this can't really be done on a national level." – Robyn Stuhr, American College of Sports Medicine

A pilot study, begun in 2019 but slowed by COVID-19, is under way in **Portugal** to test the feasibility and efficacy of physical activity consultation in around 15 PHC units. The consultations are carried out by both medical doctors and specialist exercise physiologists, paid for by a partnership with the local council. The model uses resources from the community, rather than overloading the healthcare system. Analysis is currently ongoing and results will be published soon.

In **Iceland**'s Hreyfiseðill (exercise card) system, referral is to a physiotherapist, who monitors and supervises the prescribed exercise period (of three to six months). At the end of this time, the original prescribing healthcare professional receives a report from the physiotherapist and the next time the patient sees their healthcare professional the result is evaluated.<sup>124</sup>

In the **Netherlands** (see case study), the Sport and Exercise in the Neighbourhood programme introduced care-sport connectors who are brokers between the health sector and local physical activity opportunities and who support patients in increasing their physical activity. Every municipality must have a care-sport connector.



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### BUILDING MOMENTUM: ESTABLISHING ROBUST POLICIES TO PROMOTE PHYSICAL ACTIVITY IN PRIMARY HEALTHCARE









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