## SUPPLEMENT ARTICLE



# Scan of physical activity policy actions in Europe: Lessons learned from populating the MOVING database

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#### Summary

Adequate levels of physical activity are important for population health. Policy databases can track, monitor, and compare the development and implementation of physical activity policy actions and are populated by different methods. The new MOVING database, developed through the Confronting Obesity: Co-creating Policy with Youth (CO-CREATE) project, collates governmental policy actions designed to increase physical activity and is populated by an in-depth scan of implemented national policy actions.

This paper presents lessons learned from conducting the policy scan across 27 European countries. Policy actions were identified using a structured search protocol from preselected sources, assessed against pre-specified inclusion criteria and verified by an in-country expert. 625 eligible national implemented policy actions were identified.

Challenges included policy actions falling out of scope, a lack of available information on policy actions, difficulty in identifying policy actions using specific search terms, and increased resource requirements for translation of policy actions into English. The scan indicated improvements, which informed protocol modifications.

Identifying the challenges and opportunities around conducting a policy scan is necessary to understand and assess the reliability, validity, and utility of a policy database. The policy scan will help to deliver a comprehensive picture of physical activity policy actions across Europe.

#### **KEYWORDS**

noncommunicable disease, obesity, physical activity, policy scan, public policy

# 1 | INTRODUCTION

Regular physical activity is an important factor in tackling noncommunicable diseases (NCDs), and helping to prevent overweight and obesity, which are also important risk factors for NCDs such as

cancer, diabetes, and cardiovascular disease.<sup>2</sup> Currently, the World Health Organization (WHO) reports that member states are off track to meet targets in the WHO Global NCD Action Plan 2013–2030<sup>3</sup> to achieve a 10% relative reduction in the prevalence of insufficient physical activity.

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Public policies—including health policies—which can be generally defined as "a system of laws, regulatory measures, courses of action, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives, 4" provide important tools for creating environments conducive to increasing levels of physical activity through mechanisms such as laws, regulations, and guidelines.

While the WHO Global Action Plan on noncommunicable diseases<sup>3</sup> highlighted the importance of legal strategies and arrangements for the prevention and control of NCD risk factors such as physical inactivity, progress in implementing laws has been limited.<sup>5</sup> The lack of progress is partly due to the difficulty in identifying relevant laws from the wide range of laws that could conceivably impact physical activity.<sup>6</sup> Therefore in this paper, physical activity policy is defined more broadly than just legal measures and includes agendas, structures, funding, and processes that affect the development, implementation, or adaptation of physical activity interventions,<sup>7</sup> which is a definition also used by other authors.<sup>8–11</sup>

Policy databases serve as repositories of information on relevant public health policies, which may include those to tackle obesity and increase levels of physical activity as the public health community often has the need to track and evaluate public policy actions across jurisdictions.<sup>12</sup>

Collating this information can support government action to modify existing policies, inform future work, track progress, identify gaps in specific policy areas, and reduce duplication of effort. Policy databases can also serve as tools to support analysis of policies between or within countries. Databases can have a number of functions, such as policy surveillance, which will seek to evaluate longitudinal changes in the adoption and scope of policies on a given topic, across jurisdictions and over time, for use in larger-scale policy impact and evaluation studies, whereas the goal of policy tracking is to monitor the policy status (e.g., introduced, amended, repealed, referred to committee, vetoed, or passed) of a given piece of legislation, regulation, or topic of interest. <sup>12</sup>

For example, the WHO Global database on the Implementation of Nutrition Action (GINA)<sup>13</sup> was conceived with the idea of consolidating country experiences and sharing success stories on a global platform so that best practices and benefits could be available for interested countries.<sup>14</sup> Systems that carefully monitor the presence and content of laws, policies, and research, in conjunction with monitoring population health outcomes, are an important way to examine the impact of a policy on communities, systems, environments, and individuals.<sup>15</sup> Several health policy databases (such as the Alcohol Policy Information System,<sup>16</sup> the Prescription Drug Abuse Policy System,<sup>17</sup> and Law Atlas<sup>18</sup>) collect and track legal and regulatory measures as policy surveillance.

Databases can be populated by a range of methodologies such as systematic searches through a policy scan, surveys, and solicitation emails to gather information. For example, the Global Observatory on Physical Activity (GOPA) country cards, <sup>19</sup> which provide a status overview of physical activity plans and activity levels, are developed from summarized physical activity data from the World Bank, as well as information about country-specific physical activity behaviors and physical activity national plans through surveys of online databases. <sup>20</sup> An understanding of methodologies used is important to better

understand and assess the reliability, validity, and utility of the information included in such databases and how they can be used to contribute to policy development processes.

Administering surveys is a common method used to collect data for policy databases. For example, the WHO NCD Repository<sup>21</sup> collects data through the NCD Capacity Country Survey,<sup>22</sup> and the Healthy Food Policy Project database of local laws and policies in the USA sends a solicitation email with an online survey through various listservs to universities, research centers, and local government.<sup>23</sup> The Canadian Policies Prevention Directory<sup>24</sup> uses a different approach, utilizing robot technology to capture publicly available policy information online from the Canadian Legal Information Institute<sup>25</sup> website and various Canadian municipal websites. The filtered information is then manually assessed against the Directory inclusion and exclusion criteria.

Another approach employed is searches of research databases as is the case for GOPA, which also conducts systematic searches of physical activity literature in PubMed using specific search terms. 19 A further technique is to solicit information from users by having an open-source function. For example, the NOURISHING nutrition policy database<sup>26</sup> and the WHO NCD Repository<sup>21</sup> also give users the ability to submit information. To ensure information is accurate and up to date, some repositories, such as the GOPA country cards<sup>19</sup> and the NOURISHING database,<sup>26</sup> use an in-country government expert or volunteer to verify submitted information.<sup>27,28</sup> Some databases use a combination of methods to gather data. For example, the WHO GINA database gathers data in three ways-WHO policy monitoring, including policy surveys and questionnaires; monitoring of partners such as the NOURISHING database; and data submitted by registered users. 13 For the Global Abortion Policy Database, a data extraction questionnaire was developed; an extensive search for source documents is conducted; and data are extracted, cross-checked, sent to countries for review, cross-checked again, and uploaded.<sup>29</sup>

The MOVING database of physical activity policy actions<sup>26</sup> (and its sibling, the NOURISHING database) uses a combination of methods and is populated by an in-depth systematic policy scan and in-country government expert verification.<sup>27,28</sup> It was developed by World Cancer Research Fund (WCRF) International as part of the 5year project Confronting Obesity: Co-creating Policy with Youth (known as the CO-CREATE project), 30 funded by the European Union's Horizon 2020 research and innovation program. CO-CREATE, which started in 2018, has an overarching aim to reduce child and adolescent obesity and its co-morbidities by working with adolescents to develop, inform, and disseminate evidence-based policies to tackle obesity in young people.<sup>30</sup> While several different policy databases exist in relation to a range of NCD risk factors, the project identified a gap of a repository that contained in depth information about physical activity policy actions that could be used by youth to empower them to take part in participatory policy processes. Consequently, a database and search protocol were developed.

The MOVING database is structured and organized around the MOVING physical activity policy framework (which was also developed as part of the CO-CREATE project),<sup>31</sup> which consists of six

**ACTIVE ACTIVE ACTIVE** SOCIETIES **ENVIRONMENTS PEOPLE POLICY AREA** Make opportunities and initiatives that promote physical activity ACTIVE SYSTEMS in schools, the community and sport and recreation Offer physical activity opportunities in the workplace and training Governance systems in physical activity promotion across multiple professions Leadership Physical activity Visualise and enact structures and surroundings which promote surveillance physical activity Interdisciplinary research funding Implement transport infrastructure and opportunities that Financing mechanisms support active societies Monitoring and evaluation of policy actions Normalise and increase physical activity through public Life course / communication that motivates and builds behaviour change skills Health in all policies approach Give physical activity training, assessment and counselling G in healthcare settings

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policy areas within which governments should take action to promote physical activity (Figure 1). The policy areas of the framework are comprised of sub-policy areas, which are groupings of policy actions with a specific focus. The MOVING database provides an overview of government policy actions implemented at a national level from around the world.

To meet our definition of a "physical activity" policy action, there must be a physical activity promotion goal or co-benefit, although the policy action may have had a primary objective focused on a policy area beyond physical activity promotion. Therefore, for the purposes of this paper, and in light of the lack of implementation of legal measures, the paper focuses on the collection of policy actions, defined as an individual measure and action to promote physical activity, which include laws and regulations, programmatic interventions, and public information campaigns.

This definition acknowledges the relationship between policy instruments (laws and regulations which set out standards and norms) and the actions taken to implement them. It encompasses the nonlegalistic aspects of physical activity policy, such as physical activity guidelines<sup>32</sup> and information campaigns,<sup>33</sup> which WHO<sup>34</sup> include in the policy and governance framework for physical activity. For example, the WHO Global Action Plan on Physical Activity<sup>6</sup> includes twenty evidence-based policy actions, including a national communication strategy, and policies and programs that support walking and cycling infrastructure as part of a comprehensive policy and governance response to promoting physical activity.

This paper describes the methods used to collect detailed, up-todate information of currently implemented policy actions promoting physical activity with the purpose of populating the MOVING

database to track the status of policy actions. The paper analyzes the results of a scan of 27 European countries, describes its findings, and ends with a discussion on the lessons learned from the scan process and how these lessons and findings can contribute to the international evidence base on physical activity policy actions. In particular, the number of eligible policy actions identified, quality assurance of data. and whether any modifications to the scan protocol were needed were examined.

# **METHODS**

## Development of the scan methods

A scan protocol was developed to conduct a comprehensive policy scan across the 27 European countries. The development process that comprised four phases-research and interviews; drafting; consultation; and testing and finalization-is outlined briefly below and covered in detail elsewhere.<sup>27,28</sup>

Firstly, the existing NOURISHING methods document was reviewed. Interviews were carried out with WCRF International staff in order to capture knowledge and experience on the practical application of the methods for populating the NOURISHING database<sup>27,28</sup> and to identify databases of policies targeting NCD risk factors. Twelve semi-structured interviews were conducted with keyinformants familiar with the development of these NCD risk factor databases. Based on the findings from these interviews, which included examples of how policies were identified through search strategies and automation, insights on different sources of

information and on the importance of quality assurance and processes, a draft protocol was developed. This was then reviewed within WCRF International, among members of its Policy Advisory Group, <sup>35</sup> and by a group of academics and practitioners whose expertise was solicited specifically for this project at a face-to-face expert group meeting. The search terms were tested on policy actions from four countries that provided geographical and socio-economic variation (Denmark, France, Ireland, and Malta). The protocol was then further refined and finalized based on the discussions of the expert group meeting.

# 2.2 | The scan protocol

The resulting scan protocol followed a two-step process to ensure that information was gathered in a consistent way across countries.

- Identification of policy actions relevant to physical activity promotion.
- 2. Assessment of the eligibility of the identified policy actions for inclusion in the database (including a verification process).

The 27 countries chosen for inclusion were informed by the wider aims and scope of the CO-CREATE project. Selected countries were either within the European Union and had data available in the Health Behavior in School-aged Children (HBSC) Survey 2013/24<sup>36</sup> for youth aged 15 (this age was selected due to the relevance to the overall project, and this survey was utilized as the 2018 survey results were yet to be published) or one of the five focus countries in the CO-CREATE project (Netherlands, Norway, Poland, Portugal, and the United Kingdom).

Step 1. Identification of policy actions relevant to physical activity promotion

As outlined in Figure 2, the scan protocol started with a search for a legislation database of the selected country. If one existed, the legislation database was searched using a detailed search terms list, which included all areas of the MOVING framework. For the full list of search terms, see Appendix S1.

In addition to searching legislation databases, relevant government websites were identified and searched using search terms relating to all domains of the MOVING framework (see Appendix S2). The search included government and ministry websites

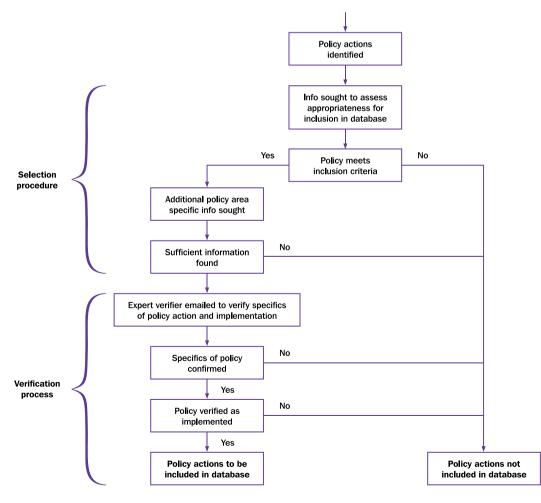


FIGURE 2 Process map of identifying policy actions

for health, public health, education, transport, communities, sport, finance, food, labor, trade, environment, agriculture, youth, and consumer affairs.

If either the government website or legislation database were not in English, the search terms were translated via Google translate and used. Policy actions generated by the search were then reviewed (and translated via Google translate if required).

Finally, the scan protocol concluded with a country-specific secondary source search on a range of platforms including Google search, the media (including online newspapers), English language news media, and sports agencies. This secondary source search was performed to assess whether further information about relevant policy actions could be identified.

Step 2. Assessment of the eligibility of the identified policy actions for inclusion in the database (including a verification process)

The results of the policy scan were reviewed against the following inclusion criteria:

- National level policy actions: Only national-level policy actions, which align with the focus of the MOVING framework and the scope of the CO-CREATE project to identify physical activity policies across Europe, were collected and included in the database.
- Government action: A policy action must be a government action, an action implemented in partnership with the government, supported, sponsored, or endorsed by the government. Programs or interventions run by nongovernmental actors were included only if they met at least one of the abovementioned criteria.
- 3. Implemented policy actions: Only policy actions that were fully implemented—meaning policy actions that are currently in effect or in force at the time of the scan—could be included in the database. Legal measures and regulations must have come into effect or be enforceable following official procedures such as assent, approval, or promulgation. Public awareness campaigns, which were no longer running, were included in the database only if they are national and had taken place in the past 5 years.
- 4. Related to the promotion of physical activity: For a policy action to be included in the database, it must have or had a physical activity promotion goal or co-benefit (e.g., increasing physical activity in school or promoting active travel) although it may have had a primary objective focused on a different policy domain (e.g., environmental sustainability and health). Policy actions promoting professional sport were not within the scope of the MOV-ING framework and were not included in the database.
- 5. Sufficient information available: The policy action needed to have sufficient information available such as the name of the policy action, implementation, and/or publication date and enough information to draft a policy description.
- 6. Related to one of the policy areas in the MOVING framework: For a policy action to be included in the database, it must have fit within the scope of one of the six policy areas and corresponding sub-policy area of the MOVING framework. Policies were

categorized under the relevant sub-policy area name (which were designed to be self-explanatory distinctive categories that subsequently informed the development of the key search terms). A policy that included several policy actions could therefore be categorized under several sub-policy areas if it covered a range of actions. Although the six policy areas are fixed, corresponding sub-policy areas could be added or edited to better reflect the policy actions taken by governments (the current sub-policy areas are listed in Appendix S3).

If the policy action met the inclusion criteria, a policy description was prepared using a pre-defined format (including the name, the date when it came into effect, and a short summary including the type of policy action). This was then sent to an in-country government expert for verification to confirm all the information was correct and the policy met the relevant database criteria, through a facilitated introduction by the WHO Regional Office for Europe (WHO EURO). Once verified, the policy action was added to the database.

The methodology, as outlined in Figures 2 and 3, was used to scan 27 countries.

The results of the scan were recorded in a data extraction sheet categorized by country and by MOVING policy and sub-policy area, with details about the policy action, such as name, description, including type of policy action and implementation date. The limitations and challenges outlined in the protocol document 27.28 were also assessed. The search and identification phase were conducted by a policy analyst at WCRF International between May 2019 and April 2022.

## 2.3 | Adjustments to the scan protocol

Following delays in the verification process, it was decided to contact the in-country government experts at the beginning of the scan, rather than after identifying policy actions, to minimize delays. The analyst also requested that in-country government experts notify them of changes to policy actions that needed to be reflected in the database. Additionally, it was found that while plans and strategies did not meet inclusion criteria, they were useful in identifying associated policy actions that did meet these criteria. As a result, using citation chaining from plans and strategies was added as a supplementary technique to bolster the search process.

## 3 | RESULTS

# 3.1 | Overall search and verification results

Twenty-seven countries were scanned. At the time of writing, 18 countries have full datasets verified (meaning that all policies related to a country identified in the scan have been checked by an in-country expert and confirmed as eligible for inclusion). More broadly, a total of 625 eligible physical activity policy actions were identified from across 26 countries (Table 1). On top of that,

FIGURE 3 Process map of the policy action selection procedure and verification process

90 policies still await verification across nine countries. All identified policies from Denmark are pending verification at this time due to delays in identifying the relevant in-government contact, and so, Denmark is not included in Table 1 at this time. Therefore, these results will change in the future as more verifications take place.

Across the 26 countries, eligible results were identified in all policy areas of the MOVING framework (Table 1).

# 3.2 | The verification process

The verification process provided a second step of refinement of the search results in each country as in-government experts confirmed the accuracy of the policy description, and that the policy was in effect at the time of the verification. For example, in the Netherlands, several policies were excluded following verification because they were local in scope.

The scan revealed that although the search and identification process was completed in 18 months, the verification process took longer, with some verifications taking over a year. The average verification length of one country's policy actions was 6 months.

## 3.3 | Sources of information

When conducting the scan, national legislation databases were often of mixed quality and could contain incomplete or out-of-date information. However, searching government and/or ministry websites using the basic search term list was particularly effective in identifying policy actions. Furthermore, many ministries and sources needed to be reviewed, as anticipated in the search protocol, because effective physical activity promotion is multi-sectoral in nature. Often databases, websites, and policy actions were in national languages that, as anticipated, required translation.

# 4 | DISCUSSION

The aim of this paper was to assess the ability of the MOVING data-base scan protocol to effectively identify eligible policy actions for the MOVING database. Results show that policy actions were identified in all the policy areas of the MOVING framework through the combination of the search phase and verification process. The large sample of 27 countries provided a good opportunity to test the ability of the scan protocol to identify and verify national physical activity policies in effect. The combination of methods of an in-depth systematic policy scan and in-country government expert verification provided an effective range of ways to identify eligible policies, given the known challenges of solely relying on a survey, or expert verification or a policy scan.

While some policies are still pending verification, the results and repeated experiences in conducting the policy scan provided a saturation of findings. The results demonstrated that using a systematic approach for the policy scan to obtain and analyze information about relevant policy actions within a defined scope can identify and create a knowledge base of policy actions that are

**TABLE 1** Results by policy area of the MOVING framework.

	M-make opportunities and initiatives that promote physical activity in schools, the community and sport and recreation	O-offer physical activity opportunities in the workplace and training in physical activity promotion across multiple professions	V—visualize and enact structures and surroundings which promote physical activity	I—implement transport infrastructure and opportunities that support active societies	N-normalize and increase physical activity through public communication that motivates and builds behavior change skills	G—give physical activity training, assessment, and counseling in healthcare settings	Total
Austria <sup>a</sup>	3	0	10	0	6	1	20
Belgium <sup>a</sup>	22	4	1	4	8	3	42
Bulgaria	2	0	1	1	3	1	8
Croatia	7	1	0	0	1	1	10
Czechia	3	1	0	0	0	0	4
Estonia	10	4	4	1	2	0	21
Finland	16	6	3	7	10	2	44
France	13	5	8	4	9	1	40
Germany	6	1	3	8	4	0	22
Greece <sup>a</sup>	4	3	2	0	8	2	19
Hungary <sup>a</sup>	8	4	1	3	4	0	20
Ireland <sup>a</sup>	19	5	5	7	12	3	51
Italy <sup>a</sup>	11	1	0	0	6	1	19
Latvia	6	2	1	0	2	0	11
Lithuania	10	4	5	2	7	3	31
Malta	9	0	0	0	2	0	11
Netherlands	7	3	1	2	1	2	16
Norway <sup>a</sup>	15	3	13	2	4	2	39
Portugal	11	1	3	4	8	3	30
Poland <sup>a</sup>	13	4	4	0	2	0	23
Romania	4	0	0	0	1	0	5
Slovakia	7	2	3	4	1	1	18
Slovenia	6	2	6	11	8	1	34
Spain	9	5	2	2	12	2	32
Sweden	2	0	3	2	1	1	9
UK <sup>b</sup>	13	1	8	9	7	8	46
Total	236	62	87	73	129	38	
Total results	625						

<sup>&</sup>lt;sup>a</sup>Awaiting verification.

currently in effect. More broadly, the results of the scan also highlighted the importance of the verification process in confirming the eligible results identified of the first part of the scan (identification of policies) and as a further source of data. These findings contribute to the research literature on identifying physical activity policy actions and populating a database of policy actions.

Beyond identifying eligible policies for inclusion in the MOVING database, there were several interesting findings during the scan. Additional sub-policy areas within the MOVING framework were needed to appropriately reflect the range of policy actions identified in the search, such as walking and cycling infrastructure, design guidelines for sport facilities, and policy actions related to active transport to and from work.

<sup>&</sup>lt;sup>b</sup>UK policy actions include those that apply across the whole UK and to England, Scotland, Wales, and Northern Ireland. It is important to note that one policy action may apply to more than one country (for example, it could apply to both England and Wales).

Furthermore, the scan identified local policy actions in the search process, some of which were both simultaneously national and local in scope. For example, there have been cases where a policy action is supported by the Government, in the form of national funds, but is run by the municipalities at local level, such as the Sustainable Travel Access Fund run by the Department for Transport in the UK.<sup>37</sup> The scan also revealed that some national policy actions were first rolled out at local level, as the search criteria often identified local results. The results show that these actions are usually related to programs promoting the use of bicycles for transport.

While local physical activity policy actions were identified at the search stage, they were then excluded by the eligibility criteria and/or verification process. However, the initial identification of local physical activity policies confirms that physical activity policymaking occurs at several administrative levels. In light of this, the exclusion of local policies will be kept under review and revisited when subsequent scans take place to ascertain if it would be worthwhile to include local policies in future versions of the protocol, given the value this could bring to the knowledge infrastructure about physical activity policy.

Employing the scan protocol also identified a series of challenges such as the lack of available information about policy actions and delays in the verification process, which led to adjustments to the scan protocol.

Out-of-scope results included expired policy actions, policy actions which were not endorsed by the government (such as policy actions developed and run by nongovernmental organizations and/or other institutions), local policy actions, policy actions that did not have a clear scope of increasing the physical activity of the population, and policies that did not fall within the definition of a policy action.

The scan generated opportunities to improve the protocol and generate learnings associated with conducting a targeted in-depth European policy scan for physical activity. The length of search time was exacerbated by the limited information available for policy actions promoting physical activity, which was already identified as a possible challenge within the protocol. The difficulty of identifying information for policies online was also highlighted by two papers describing the methodology of a policy scan of laws and policies related to the health of US immigrants<sup>38</sup> and of the methodology populating the Prevention Policies Directory in Canada using a web custom web crawler.<sup>39</sup> Both papers stated that the information on policies accessible online is not always up to date. However, the search process of our methodology relies on the review of several sources and the verification process, all of which can support the identification of further information and overall accuracy.

Furthermore, the scan demonstrated that the verification of policy actions is a time-consuming two-step process, which inevitably adds delays. WHO EURO facilitated introductions to in-country government experts, who were then approached to verify country results. The time taken to complete this task ranged from 1 week to over a year, with the average length taking around 6 months. This was exacerbated by the impact of the COVID-19 pandemic on the availability

and the workload of the verification experts, the majority of whom work for health ministries, which had started when the searching and identification step was completed and the verification process began. Furthermore, the multi-sectoral nature of physical activity policy added further complexity as many different relevant ministries and institutions needed to be contacted to verify policies. For example, approximately 25 different experts in Norway had to be contacted for 61 policy actions identified. It is anticipated that updating the database will require less time given that the quantity of policies needing verification will be fewer and a relationship will be established with the verification contact.

A similar challenge was identified by Politis et al.<sup>39</sup> in their paper testing the methodology populating the Prevention Policies Directory in Canada using a custom web crawler. In their paper, they highlighted the lengthy time required for quality assurance of the policies identified by the web crawler, as the validation of all the information by a policy analyst was still ongoing by the time the paper was published.

Another challenge was the language barrier. The need to translate search terms and policy documents could have introduced discrepancies in wording and meaning. Such discrepancies could be seen in existing documents, when policy actions that were only available in the national language were cited in English, and under various translations of their names. The translation also added extra time to the process. However, the in-country verification process was an opportunity to obtain language and translation clarification of the policy actions to determine eligibility. The issue of a language barrier is not unique. In the paper on the Prevention Policies Directory,<sup>39</sup> a web custom web crawler was used to scan for policies in Canada available in both English and French, and a bilingual policy analyst had to be employed in order to perform the quality assurance review. It was also noted that there was a perceived advantage to searching for policies in mother-tongue language-speaking countries.

During the scan, the protocol was improved due to these arising challenges. For example, the use of citation chaining from plans and strategies was integrated into the search process, given how successful the technique proved to be in enhancing the search process.

In addition, the protocol was updated to specify that in-country government experts should be contacted at the beginning of the search process and invited to provide essential policy documents and sources at the start of the scan. This change in approach helped build a relationship with in-country government experts and facilitated the sharing of information about new and updated policy actions.

It was also recognized that more policy actions might be implemented and/or expired during or after the scan, which means that it is likely that some policy actions will be either missing from the database or will no longer be eligible. In the UK for example, the UK Physical Activity Guidelines, 40 which were initially identified in the scan, were updated by the Department of Health and Social Care after the completion of the scan. However, as policymaking is an ongoing process, this is to be expected, and a cutoff point had to be applied to the scan

once the policy action was verified. To ensure the database remains up to date, in-country government verification contacts will be contacted to enquire about any new policies or changes needed to inform database housekeeping.

## 4.1 Strengths and weaknesses

In terms of the contribution of this paper, it describes a methodology used to successfully identify government-supported physical activity policy actions at national level across 27 European countries. The scan protocol was able to identify policies that can then be used for crosscountry comparison purposes, given that the policies were identified in a systematic and uniform way. To our knowledge, only a handful of similar papers 38,39,41,42 describe the methodology of performing policy scans for health policies, with several focusing on one country (US and Canada), including a search for state and national level policies, and one at a global level, focusing on the collation of COVID-19 pandemic policies. This paper understands that no paper specifically describes the collection of physical activity policy actions to the same scope or level of detail.

Additionally, while other physical activity tools exist, such as the GOPA country cards, <sup>19</sup> they only include information about physical activity guidelines and plans, and not policy actions. Furthermore, the country cards do not include a description of the policy.

Accordingly, this paper contributes information about what scan methodologies were used in populating the MOVING database and how physical activity policy action databases can successfully identify policies. It also provides a basis for more studies to compare findings across different database methodologies to provide further insights in future research.

A limitation of the paper relates to the definition of "physical activity policy action," which includes interventions. According to a political science perspective, interventions should not be included in the definition. However, it was decided that as the purpose of the MOVING database was to fill an information gap about the status of physical activity promotion by national governments, especially given the known gap of legal measures, that a wider range of measures should be included. Furthermore, the use of a broader definition of physical activity action would best serve research, policy tracking, and advocacy activities, as well as the broader activities and goals of the CO-CREATE project. It also contributes to a deeper understanding of how governments promote physical activity and the measures they use.

Additionally, an analysis was not prepared of the ineligible policies identified in the search phase of the scan to assess the full sensitivity of the search terms and inclusion criteria—however, this was obviated by the identification of relevant policies. Furthermore, it is important to note that this paper was prepared with the partial completion of the scan and that there may be more findings generated when it is completed. However, there was a high confidence rate of the current findings given the repeated experiences in conducting the scan.

Moreover, while the scan records the type of policy action, the database can only search by policy area/sub-policy area and country

and does not have functionality to search or filter by type of policy action. While information about the type of policy action is included in the policy description, future development work on the database should consider adding this specific search functionality to improve analysis capability on the types of policy actions deployed to promote physical activity.

While the paper describes efforts to conduct policy tracking across Europe, ad hoc updates will be performed on an annual basis to check if any policies have expired or changed. This will not be done however to undertake policy surveillance but to maintain accuracy of the datasets.

Consequently, this paper will be relevant to efforts of a range of stakeholders, including policy-makers, researchers, and civil society actors. This paper informs policy-makers by contributing to the knowledge base on government action to promote physical activity. It also informs researchers with knowledge about how similar databases can be developed and enhanced in the future. Furthermore, the paper describes how the database seeks to be a comprehensive and accessible resource to be used by youth in participatory policymaking processes.

In the addition, the paper also provides methodological information about how the MOVING database is populated and can support future efforts to assess policies identified to draw broader conclusions about national or European physical activity policy action and their impact on population health. Finally, the content of the database can inform advocacy for policy development by actors such as civil society through the identification of gaps in policy in specific settings.

Moving forward, this paper can support efforts to study the association of physical activity policy actions, prevalence of obesity, and NCDs, as it describes the approaches used to populate the MOVING database and the type and policy actions included.

# 5 | CONCLUSIONS

The MOVING database is an invaluable repository of a range of physical activity policy actions from across Europe, which may support policymaking, research, and advocacy activities. The lessons learned from conducting the policy scan to populate the MOVING database provide valuable insights on developing a methodology to populate a database of physical activity policy. While the protocol generated comprehensive results on policy actions promoting physical activity, it has identified several areas for modification. It has also highlighted the need for and benefit of conducting the scan with the support of partners such as in-country government experts and WHO EURO, who can provide translated search terms if required in the future and verified policy descriptions.

The results of the policy scan provide an opportunity to analyze different areas of policy to inform future action to tackle physical inactivity within the CO-CREATE project and beyond. The results of the comprehensive policy scans will provide insight into the physical activity policy environment and support further research on the links between policy environments and public health challenges such as



childhood obesity. Moving forward, the databases can support activities to study the implementation and impact of policies.

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#### **CONFLICT OF INTEREST**

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#### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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