Title: National policy response to the Sustainable Development Goals: a physical activity case study of Wales

Brief title: Physical activity policy in Wales

Key words: Collaboration; Legislation; Policy analysis; Public Services Boards; Well-being of Future

Authors:

Catherine A Sharp, Applied Sports, Technology, Exercise and Medicine Research Centre, Swansea

University, Swansea, SA2 8PP, UK. <u>Catherine.sharp@swansea.ac.uk</u>

Kelly A Mackintosh Applied Sports, Technology, Exercise and Medicine Research Centre, Swansea

University, Swansea, SA2 8PP, UK. <u>K.mackintosh@swansea.ac.uk</u>

Rhi Willmot[,] Applied Sports, Technology, Exercise and Medicine Research Centre, Swansea

University, Swansea, SA2 8PP, UK. R.a.willmot@swansea.ac.uk

Rachel Hughes, Dotiau Ltd & Faculty of Social and Life Sciences, Wrexham Glyndŵr University,

Wrexham, LL11 2AW, UK. rachel@dotiau.org

Melitta A McNarry Applied Sports, Technology, Exercise and Medicine Research Centre, Swansea

University, Swansea, SA2 8PP, UK. <u>m.mcnarry@swansea.ac.uk</u>

Karen Milton, Norwich Medical School, University of East Anglia, Norwich, NR4 7TJ, UK.

k.milton@uea.ac.uk

Corresponding author:

Dr Karen Milton <u>k.milton@uea.ac.uk</u>

Abstract

Background: Population level changes in physical activity (PA) may benefit from policy intervention. In response to the UN Sustainable Development Goals, Wales introduced legislation to holistically improve health and well-being, including Public Service Boards (PSBs) to improve the translation of national policy into practice.

Method: An audit of policies published by national and sub-national public bodies since 2015 was conducted. Content of the policies were extracted and synthesised to determine: (i) how many policies included a PA action; (ii) what the drivers of those policies were; (iii) the content of the PA actions; and (iv) how the PA actions aligned with the Well-being of Future Generations (Wales) Act 2015.

Results: 16 national-level documents with a PA action have been published by 4/13 public bodies.

The policies vary in terms of the clarity and specificity of the actions, the assignment of clear roles/responsibilities, and the setting of targets. Of the 19 sub-national PSBs well-being policies, 15 included PA actions.

Conclusion: This audit provides a valuable example of how connections between national and subnational policy can be achieved. The appointment of PSBs has supported the translation of policies into practice in Wales, and similar approaches could be utilised in other countries.

1. Introduction

The evidence of the benefits associated with physical activity are far-reaching and undeniable, and include both physical and mental health benefits across the life course^{1–3}. Despite these benefits, one in four adults and four in five adolescents globally are insufficiently active, and this has remained relatively stable over the past two decades^{4,5}. As such, increasing focus is being placed on the importance of national policy frameworks to increase population levels of physical activity.

International agencies and national governments have a crucial role in influencing population levels of physical activity and the research community has placed increasing focus on this topic in recent years^{6–8}. Increasingly a broad range of issues are being used to leverage the physical activity agenda including human rights and sustainable development. For example, two flagship policies from the United Nations (UN), the UN Convention on the Rights of the Child (UNCRC)⁹ and the Sustainable Development Goals (SDGs¹⁰), contain objectives linked to physical activity¹¹. The UNCRC contains six rights for children which relate to physical activity (e.g. Article 24 and 31), and physical activity has been linked to 15 of the SDGs¹². However guidance on how these policies should be operationalised at a national level is generally sparse. In 2015, the UN reported that 196 and 193 countries have officially adopted the UNCRC and SDGs, respectively, but how they have been translated into practice is unclear.

Wales is a unique setting as it is governed in part by the UK Government, but key areas such as health, education, environment, transport, and sport are devolved to Welsh Government. Wales' pro-active response to the SDGs was to devise new legislation called the 'Well-being of Future Generations (Wales) Act 2015' (WBFGA)¹³ and, within this, create a Well-being of Future Generations Commissioner. The Commissioner's role is to act as a guardian for the interests of future generations in Wales, and to support the public bodies listed in the Act to work towards achieving the well-being goals. The WBFGA aims to improve the social, economic, environmental

and cultural well-being of Wales and requires all public bodies in Wales to work collaboratively across stakeholders and the general public, with a focus on preventable problems and long-term solutions, applied across the life course. The Act is underpinned by a sustainable development principle which outlines how organisations can achieve their duty under the Act, and consists of seven well-being goals and five ways of working (see Box 1, visit

https://www.futuregenerations.wales/about-us/future-generations-act/ for full definitions of goals and ways of working). It is also pertinent to note that a new Well-being of Future Generations Bill 2020¹⁴ has been presented at the House of Commons for UK-wide application, though this has not been supported by the UK Government to date.

As part of the WBFGA (and therefore on behalf of Welsh Government), 19 Public Services Boards were established across 22 local authorities, whose roles are to set and deliver on well-being plans for their regional areas. With a remit of well-being, Public Service Boards are governed by the national government, and established to collaborate across appropriate partners who are in their primary function responsible to the government. They enable cross-organisation working. Four of the public bodies have statutory membership on each of the Public Services Boards¹⁵. While Sport Wales and Public Health Wales are not mandatory members, despite having a clear and direct role in physical activity promotion, each Public Services Board can choose to invite them to participate in discussions as a partner (see Box 1). The Public Services Boards demonstrate Wales' effort to not only work at a national level but to invest at a sub-national level. Figure 1 illustrates the policy structure from international to sub-national level.

Box 1. Well-being of Future Generations (Wales) Act 2015 and public bodies bound by the Act

Seven Goals	Five ways of	Public bodies	
	working		
- A prosperous Wales	- Long-term	- Welsh Ministers	- Natural Resources
- A resilient Wales	- Prevention	- Local Authorities*	Wales*
- A healthier Wales	- Integration	- Local Health Boards*	- Higher Education
- A more equal Wales	- Collaboration	- Public Health Wales	Funding Council for
- A Wales of cohesive	- Involvement	NHS Trust	Wales
communities		- Velindre NHS Trust	- Arts Council of
- A Wales of vibrant		- National Park	Wales
culture and thriving		Authorities	- Sport Wales
Welsh languages		- Welsh Fire and	- National Library
- A globally		Rescue Authority*	for Wales
responsible Wales			- National Museum
			Wales

^{*}Statutory members of the Public Services Boards

This paper presents a case study of national and sub-national policy created by Wales following the development of the WBFGA¹³. In this case study, we audit how public bodies have adopted the Welsh legislation to shape their action towards targeting all aspects of physical activity (e.g., meeting the guidelines, active travel, greenspace). Specifically, the aims were to explore, over the past six years: (i) how many national and sub-national policies included an explicit physical activity action and/or recommendation (referred to as action from hereon); (ii) what the explicit drivers of the included policies were; (iii) the content of the physical activity actions; and (iv) how the physical activity actions align with the WBFGA goals, including integrating the five ways of working.

2. Methods

We initially undertook a broad scoping exercise to identify policies relevant to physical activity and health in Wales. A literature and web-search was conducted to identify national policies with reference to actions which could be considered relevant to physical activity, and leading national policies published by Welsh Government which were driving health action in Wales. Due to the nature of the documents of interest being published in the grey literature, manual internet searches were utilised. We undertook direct searches on the websites of the public bodies (see Box 1) and snowballing of documents. Within identified documents, key words such as "physical activity", "exercise", "active", "active travel" and "healthy lifestyle" were manually searched for in order to determine the relevance of each document. Documents were also identified drawing on the knowledge of the authors. A total of 40 policies were identified, published between 2002-2019 (initial search completed February 2020).

Independently, a health promotion specialist with over 25 years experience working in the National Health Service and Public Health Wales compiled a list of physical activity-related Welsh polices which were cross-referenced with those obtained through the initial search (see acknowledgements). A further 13 documents were identified (published between 2006 and 2016), thus forming a total list of 53 documents. Next, 22 independent experts in physical activity in a Welsh context, covering a spectrum of areas from education, planning, public health and sport, were invited to review the list of documents as a 'critical friend' to verify its inclusiveness. The experts included a mixture of academics, practiciations and policy makers, who worked for and/or with relevant agencies within Wales (see acknowledgements for names and expertise). The experts were emailed by the lead author (CS), asked to respond by email on whether the list was comprehensive (yes/no) and, if 'no', to provide details of any documents that were missing. Eleven experts (50%) responded, and 10 (45%) completed the review. Only two out of 10 reported the list was complete, and an additional 29 suggestions were made, dating 1960-2019. On review of the suggestions, three

were documents about specific initiatives or programmes, four were on surveillance systems, and two were internationally published policies. This yielded a final list of 73 national policies. In addition, one expert reviewer suggested the group consider including the sub-national well-being plans produced by the Public Services Boards which were established in 2016.

Because this case study focused on national and sub-national policy created by Wales following the development of the WBFGA, , we were specifically interested in documents that met the following criteria:

- Published from 2015 onwards
- Published by a public body (as defined by the WBFGA, see Box 1)
- Specified an explicitaction in relation to physical activity

A total of 43 policies met the publication year inclusion criterion and were further screened independently by two researchers (CAS, RW) for the remaining criteria. Any disagreements were discussed, and if an agreement could not be reached, a third researcher (RH) was consulted. This produced a final list of 16 policies (see Figure 2 for diagram of the iterative process). A decision was made to retain the UK physical activity guidelines in the list as while they are not published by a public body, they are endorsed by the Chief Medical Officer for Wales who is bound by a public body. Due to the unique role that the Public Services Boards have in Wales at a sub-national level, it was decided to include all well-being plans in the analysis, regardless of whether they specifically targeted physical activity. For this reason, the sub-national polices have been discussed separately to the national policies.

In line with the process undertaken in similar reviews^{16,17}, a content analysis of the documents was undertaken. Two authors (CAS, RW) independently read a sub-sample of documents and identified relevant text, which was summarised under the following headings: (i) policy drivers; (ii) priority

areas; (iii) physical activity specific actions; (iv) WBFGA objectives; (v) five ways of working approaches undertaken; (vi) strategy development process; and (vii) whether the report was active, superseded or expired. The information was further synthesised to the following headings: (a) WBFGA; (b) five ways of working; and (c) physical activity action area. The extracted information was verified or edited by the alternate author, and discussions were undertaken on the edits until agreement of the final text. The main cause for discussion was whether the actions were 'explicit' physical activity actions; for example, "healthy lifestyle" was not deemed to specifically refer to physical activity and was therefore excluded. A third author (KAM) conducted a further verification of 10% of the documents. Any edits by KAM were reviewed and accepted by CS.

Due to table size, all extracted information is provided in Supplementary Table 1. The information was condensed to create summary Tables 1 and 2 for inclusion in the paper (populated by CS, verified by RW); the authors recommend that the tables are read in conjunction.

[INSERT TABLES 1 & 2]

3. Results

The results are presented in four sections, aligned to the four aims of the research.

3.1 How many national-level and sub-national level documents include an explicit physical activity action?

Since 2015 there have been 16 national-level documents with an explicit physical activity action, published by four of the 13 public bodies (Welsh Government, Public Health Wales, Sport Wales, Natural Resources Wales; Table 1 & Supplementary Table 1). The actions are housed within documents targeting population health, elite and disability sport, and environment and planning. At the sub-national-level, 15 of the 19 Public Services Boards well-being plans included an

explicitphysical activity action. Supplementary Table 1 provides a descriptive overview of the actions included in each policy and the course set at a national- and a sub-national-level.

3.2 What were the explicit drivers of the included documents?

Most of the national policies can be considered as reactive. Whilst some documents may have been developed as a necessary response to the WBFGA to abide by the legislation, only six of the national-level documents explicitly noted the legislation as a driver for their production^{18–23} (Supplementary Table 1). Other drivers included Sustaining a Living Wales policy (n=1;¹⁴), response to Brexit (n=1;²⁴), Active Travel (Wales) Act (n=1;²⁵), Environment Wales Act (n=2;²⁰), UN Global Goals (n=1;¹⁸), Public Health (Wales) Act (n=1;²⁶); updating previous policy (n=3;^{21,27,28}); and complementing (n=1;²⁹) existing policies. Moreover, two national-level documents included proactive policies in response to high levels of physical inactivity (n=1;³⁰) and a lack of physical activity promotion in schools (n=1;³¹). One policy did not provide any information on its drivers³², however, the document presented minimal information beyond the suggested actions.

3.3 What was the content of the physical activity actions?

Within the national-level documents, the priority areas were generally broad, focussing on specific target populations and social determinants of health (Supplementary Table 1). Moreover, while each individual physical activity action did not typically state which target population was the focus of the action, nine policies had a specific focus on children and young people^{22,24–27,29–32}. Some actions were phrased to broadly target physical activity promotion, whilst others were specifically phrased to target: access to facilities; infrastructure; schools; surveillance; evaluation; investment; workforce; and inclusivity. Nonetheless, how the actions were framed differed. For example, Welsh Government's 'Prosperity for All: The National Strategy' 19, which includes an action to facilitate "substantial increases in physical activity, adopting a collaborative approach from all agencies" (pg 13), encompasses a broad approach, in comparison to the Natural Resources Wales Corporate

Plan²⁰, which focusses on more specific actions, such as "collaborate with Public Health Wales and Sport Wales to develop joint actions that support joint objectives using the natural environment to improve health and wellbeing" (pg 24).

The most common theme of action across the national-level documents was the broad action of physical activity promotion, which was identified in nine of the 16 documents 19,20,23-26,28,31,32. However, the physical activity promotion actions were not always broken down in to tangible steps to facilitate adoption; a prime example of this would be the action outlined in the previous paragraph from the Prosperity for All strategy 19. Conversely, a positive example from Welsh Government, in which they have provided a tangible action step, included a direct call for planning authorities to develop policies to promote well-located, good quality sport, and recreational and leisure facilities 23. That action states who needs to take action (planning authorities) and what the action is (develop policies). The second most recurring theme was infrastructure, with a strong focus on active travel, which featured in seven documents 19,20,23,25,26,30,31. The actions included Welsh Government leading the delivery, and funding the promotion of, active trave 25 and creating an integrated public transport network that encourages the behaviour 19. While surveillance and intersectoral working were only considered in four 20,25,30,31 and three 20,29,30 of the 16 documents, respectively, they were included by all four public bodies (N.B. one of the policies is published by two of the public bodies).

The actions within the national-level documents were reflected in the Public Services Boards' well-being plans. Of the 15 plans with physical activity actions, a specific target group was mentioned in five plans. Children and/or adults were specifically mentioned in four plans (both^{33,34}; children³⁵; adults³⁶), and a further plan specified the need to target different population groups³⁷. Nine well-being plans included actions aimed at facilitating and/or enabling active travel^{34,35,37–43}. Other focuses included using green space, social prescribing and measuring physical activity levels.

3.4 How do the policies and physical activity actions align with the WBFGA goals, including integrating the five ways of working?

Within the national-level documents alignment to WBFGA goals was only explicitly detailed in six policies ^{19–21,23,26,30}. The following number of key documents were identified as including PA actioin that contribute to each goal of the goal (see Table 1): a Prosperous Wales (n= 13); a Resilient Wales (n= 3); a Healthier Wales (n=16); a More Equal Wales (n=15); Cohesive Communities (n=14); a Wales of Vibrant Culture and Welsh Language (n=16); and a Globally Responsible Wales (n=16). All Public Services Boards' plans were required to show how they align to the well-being goals; of the 15 with a physical activity action, 13 well-being plans stated the alignment explicitly ^{33–45}. In addition to aligning with the WBFGA goals, public bodies are required to comply with the five ways of working outlined within the legislation to deliver the plans.

Whilst the five ways of working was referred to in seven national-level policies, details on how they were applied were only included in two policies. On review of the information presented, the following number of national-level policies were considered to have adopted: prevention (n=15); long-term working (n=14); integration (n=13); collaboration (n=16); and involvement (n=12). All subnational-level policies detailed their alignment with the five ways of working.

4. Discussion

The current work presents a novel audit of recent physical activity policy in Wales, and sought to explore the prevalence and content of actions related to physical activity in national- and sub-national policies published by public service bodies bound by the WBFGA. While international policies such as the SDGs provide a framework for action, identifying how this is translated to national and local delivery is an important consideration. Further intentions were to investigate the drivers of such policies and assess how the physical activity actions align with the WBFGA goals, including how they

integrate the five ways of working. This investigation produced insight into the manner in which physical activity related policies were developed (i.e., whether the process was approached using the five ways of working), evaluated (i.e., how measurable indicators would be captured and by whom), and reported (i.e., how the policies, their development, actions and progress were reported within documents). The outcomes can inform future practices on each of these three areas.

4.1 The Well-being of Future Generations Act

The 2020 Future Generations Report reflected on progress made in Wales following the development of the WBFGA. This report states that all public bodies and boards must "play their part in enabling an active nation, increasing the benefits of physical activity for everyone" As such, it would expect at least some attention to be devoted to physical activity actions across all public policy. This policy audit indicated that under a quarter of policies produced by public bodies specifically present actions pertaining to physical activity. In contrast, physical activity actions were mentioned by almost all Public Services Boards. This suggests that there is a greater need for physical activity actions to feature in national policy documents as a means of achieving the objectives of the WBFGA. However, our findings also suggest that the national framework, which provides a structure for sub-national action to follow, has resulted in high visibility of physical activity in almost all sub-national policies. This is in contrast to many countries in which there is no clear system for linking national policy to sub-national or local policy, and therefore the relationship between the national framework and Public Services Boards in Wales provides a valuable example of how this can be achieved. Supporting sub-national areas to implement national frameworks relative to their area is paramount to their success.

Globally, little is known about the implementation of physical activity policy from the national to local level, largely due to a lack of formal systems or reporting procedures. Countries should be encouraged to publish information on this to support shared learning of practices. The unique context of Wales, with the introduction of Public Services Boards, affords novel introspection, and can provide examples

of good practice from Public Services Boards that have translated national policy into sub-national action particularly well. Indeed, as a consequence of the 2020 Future Generations Report⁴⁶, Public Services Boards are required to integrate the WBFGA or revise their well-being objectives to align with WBFGA. This is particularly important in the context of physical activity, given that the promotion of an active lifestyle requires a holistic, interdisciplinary and multi-sectoral approach^{3,46}. However, our findings indicate that there are still gaps between national and sub-national policy implementation. For example, a 'Healthy and Active Fund' was established between Welsh Government, Sport Wales and Public Health Wales to enable active lifestyles, however, as highlighted by the 2020 Future Generations Report⁴⁶, neither Sport Wales nor Public Health Wales are members of the Public Services Boards, making the connection between the fund and their work unclear. This highlights that whilst good practice has been established in Wales, further work is required.

4.2 Five Ways of Working

The WBFGA puts in place a 'sustainable development principle', which indicates how public bodies should go about meeting their duty under the Act by operating in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. The Act presents five ways of working which public bodies should abide by in order to successfully fulfil this objective when creating and delivering their goals (see Box 1). Here, the intention is to support public bodies in developing policies through a holistic lens, and to consider all public areas and population groups. Whilst all Public Services Boards' plans outlined how they adhere to the five ways of working, it was only explicitly stated in two national strategies. This highlights that public bodies need to outline how their policies align with the sustainable development principle, both in terms of implementing the policies and ensuring transparent reporting.

Of importance, within documents which reference the five ways of working, it is not always clear how these principles translate into policy and practice. For example, within the category of 'collaboration',

whilst recommendations and actions might outline 'working with key stakeholders', there is a lack of clarity as to who these stakeholders are. This has the potential to lead to either inaction and/or gaps in knowledge and skills, given the lack of representation and accountability of certain areas and individuals. All of the national policies made reference to being proactive in collaborating with others. However, there was substantial variation in the extent to which public bodies reported the process by which they consulted with other organisations and individuals to involve them in the development of policy and appropriately reflect their needs to demonstrate joined up working.

As a whole, it remains difficult to determine whether organisations have adopted the five ways of working at all, or have adopted these principles but not sufficiently reported them. In the former case, it is important that national policies utilise the advice provided by the five ways of working in order to best achieve the objectives stated in the WBFGA. In the latter case, there is a need for greater transparency in their reporting, particularly given this can help our understanding, build trust, and enable organisations to identify further opportunities for collaboration, integration and involvement. Organisations should consider presenting the information in supplementary online documents if space is an issue.

4.3 The Importance of Clear Actions

Physical activity action areas varied from broad statements on physical activity promotion to specific physical activity promotion target areas, such as schools, infrastructure, and healthy environments. Some policies systematically listed the physical activity actions as standalone items, with specified short-, medium- and long-term goals, and clear indicators of what success will look like (e.g., Newport Public Services Board⁴⁵). Conversely, some documents provided only vague statements on the broad direction of an action they desire (e.g., increase physical activity or decrease physical inactivity - Prosperity for All¹⁹, Natural Resources Policy²¹, Public Health Wales' Long-Term Strategy²⁸). To ensure actions are explicitly stated and in a way that supports evaluation and accountability, organisations

should consider reporting their desired actions in line with SMART goals (specific, measurable, achievable, realistic and timely).

4.4 Assignment of Roles and Responsibilities

Many of the actions listed by public bodies could not be achieved independently and there were shared actions across policies. While inter-sectoral working was only considered in three of the 16 documents, this was recognised by each of the four public bodies, and one document was jointly published by Public Health Wales and Sport Wales, thereby highlighting cross-organisation collaboration to achieve a common goal. Designating individuals or organisations with specific responsibilities aligned with physical activity actions supports collective efforts towards a desired goal and enhances accountability. Indeed, one policy noted a need to 'work with partners', whereby partners were not specified (i.e., An Active Travel Action Plan for Wales²⁵), whereas, conversely, another policy explicitly listed who they needed to collaborate with (i.e., Natural Resources Wales Corporate Plan to 2022²⁰). Whilst one public body cannot set the course of action for another, collaborative working would pool resources and efforts and lead to more effective working and partnerships. Recognition must be given to the complex nature of the behaviours being targeted and, in order to elicit meaningful change in complex behaviours, genuine sustained inter-disciplinary and cross-sector collaborations are required.

4.5 Setting Targets

Whilst public bodies may be hesitant to set definitive targets given the accountability and scrutiny this carries, providing such a metric helps to ensure policies and practices are implemented as stated. Although passive statements, such as simply stating a need to 'increase physical activity', is better than not mentioning physical activity, it provides no clear benchmark against which to measure success. Future policies should consider setting quantifiable targets which could align with existing targets, such as the Global Activity Plan on Physical Activity target of reducing physical inactivity by

15% by 2030³. Providing a definitive target against which progress can be measured, as well as a time-frame within which specific objectives should be met, supports the formulation of specific actions for how progress will be achieved. In this context, the Public Services Board well-being plans should be praised for typically outlining the short-, medium- and long-term targets to achieve their goals.

4.6 Limitations

Whilst the present work benefited from obtaining external expert review of the identified polices, this audit was limited by the extent to which physical activity policies could be searched for systematically, as the documents typically reside in the grey literature. A further challenge was the lack of transparency and use of vague terminology within documents. Some documents and actions were not included as they used broad phrases, such as "healthy lifestyle", and, whilst the public bodies may have been encompassing physical activity within this, the term was not explicitly detailed. Therefore, the present audit may under-represent the extent of focus the public bodies have placed on physical activity.

4.7 Implications/Recommendations

In light of recent guidance as to how to integrate the WBFGA⁴⁶, one would expect a better utilisation of the Act by public bodies in their policies than observed in our evaluation. However, it is important to note that the introduction of the WBFGA was in the last lustrum, and as such, organisations are continually refining their practices to meet specified recommendations. Over time, further guidance and examples of best practice will facilitate this process. Interestingly, the WBFGA¹³ was introduced in response to the UN SDGs¹⁰, which were not mentioned in the polices. Thus, the policies have not been visionary, or indeed considered how they could contribute, with regards to the international context.

Our work indicates several overarching principles of specific importance. First, it is beneficial if policy documents use specific language to describe the behaviours they refer to, or if a composite label is applied, a definition should be provided. Moreover, public bodies should seek to outline the specific actions and targets, including allocating responsibility to specific individuals and organisations to achieve these actions and targets. Additionally, we recommend greater collaboration between organisations as it will facilitate the attainment of physical activity targets more efficiently; this includes the Public Services Boards working together, rather than operating in isolation. Public bodies should be encouraged to set tangible goals with measurable indicators of progress. Given that the potential for public criticism disincentivises policy-makers from doing this, we recommend that public bodies should be commended for progress they make, rather than demonised for targets not met.

This research provides an overview on the current status of policy related to physical activity in Wales, which can be used in manifestos and frameworks to shape the subsequent action of public bodies. It is hoped that these recommendations will provide necessary insight to allow public bodies to better integrate the WBFGA and five ways of working into their policies, and, in turn, to operate more efficiently and effectively to achieve the WBFGA goals.

4.8 Conclusion

This paper aimed to audit how public bodies have adopted the Welsh WBFGA legislation to shape their action towards targeting all aspects of physical activity. Our analysis indicates that the WBFGA and five ways of working could be adopted to a greater extent by national policies, and establishing clear actions and targets, as well as assigning roles and responsibilities, should be advocated. Whilst it is important to have national policy, it is imperative to have sub-national architecture to deliver the implementation of the national framework. Future work should evaluate whether such approaches lead to greater success in the implementation of physical activity policy. The

establishment of Public Services Boards represents a valuable step in the translation of action from the national to the sub-national level, however, in order for them to operate optimally, they must be afforded sufficient scope to practically apply their own objectives. The practice of national policy translating into sub-national policy and action should be adopted in other countries seeking to improve the physical activity levels of its population.

Acknowledgements:

The team are grateful to Malcolm Ward (Policy expert) for granting access to a previously compiled list of Welsh policies. We would also like to thank the following experts (with their self-defined expertise) who gave their time freely to review the original policy document list. In alphabetical order: Kathryn Bevan (Education: curriculum, free play, early years play); John Bradley (Physical activity and public health); Mark Drane (Place based approaches to physical activity across a range of settings: urban design, education, transport); Huw Jones (Sport, its history and development); Richard Lewis (Role of active travel in the decarbonisation of the Welsh public sector); Marianne Mannello (Children's play); Andrea Tales (Ageing, Dementia); Gethin Mon Thomas (Education - Health wellbeing and physical education, Physical literacy informed practice); Steve Woodfine (Sports policy).

Authors contributions:

KM and KAM conceived the initial idea.CAS and RH led the collation of policies. CAS, RW and KAM undertook data extraction. CAS drafted the manuscript. All authors contributed substantial intellectual content and approved the final manuscript.

Funding statement

No direct funding was obtained for this work. RW was funded by the Welsh Institute of Physical Activity, Health and Sport (Swansea University), which is funded by Sport Wales.

References

- Bull FC, Al-Ansari SS, Biddle S, Borodulin K, Buman MP, Cardon G, et al. World Health
 Organization 2020 guidelines on physical activity and sedentary behaviour. Br J Sports Med.
 2020;54(24):1451–62.
- World Health Organization and others. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. World Health Organization. Geneva: World Health Organization; 2013. Available from:

 www.who.int%0Awww.who.int%0Awww.who.int/about/licensing/copyright_form/en/index
 .html
- 3. World Health Organization. Global action plan on physical activity 2018-2030: more active people for a healthier world. World Health Organization. Geneva; 2018. Available from: https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf
- 4. Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1·9 million participants. Lancet Glob Heal. 2018;6(10):1077–86. Doi: 10.1016/S2214-109X(18)30357-7
- 5. Guthold R, Stevens GA, Riley LM, Bull FC. Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1.6 million participants.

 Lancet Child Adolesc Health. 2020;4(1):23-35.
- Gelius P, Messing S, Goodwin L, Schow D, Abu-Omar K. What are effective policies for promoting physical activity? A systematic review of reviews. *Preventive Medicine Reports*. 2020;18. Doi:10.1016/j.pmedr.2020.101095.
- 7. Lakerveld J, Woods C, Hebestreit A, et al. Advancing the evidence base for public policies impacting on dietary behaviour, physical activity and sedentary behaviour in Europe: The Policy Evaluation Network promoting a multidisciplinary approach. *Food Policy*. 2020;96. Doi:10.1016/j.foodpol.2020.101873.

- 8. Klepac Pogrmilovic B, O'Sullivan G, Milton K, et al. A global systematic scoping review of studies analysing indicators, development, and content of national-level physical activity and sedentary behaviour policies. *International Journal of Behavioral Nutrition and Physical Activity*. 2018;15(1). Doi:10.1186/s12966-018-0742-9.
- 9. UNICEF UK. The United Nations Convention on the Rights of the Child. London; 2019.

 Available from: https://www.unicef.org.uk/what-we-do/un-convention-child-rights/
- 10. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development.2015. Available from: https://sdgs.un.org/2030agenda
- World Health Organization. ACTIVE: a technical package for increasing physical activity.
 Geneva; 2018.
- 12. Salvo D, Garcia L, Reis RS, et al. Physical activity promotion and the united nations sustainable development goals: Building synergies to maximize impact. *Journal of Physical Activity and Health*. 2021;18(10):1163-1180. Doi:10.1123/jpah.2021-0413.
- 13. Welsh Government. The Well-being of Future Generations (Wales) Act 2015. 2015. Available from: https://www.futuregenerations.wales/about-us/future-generations-act/
- 14. Bill HL. Wellbeing of Future Generations Bill. 2019. Available from:
 https://publications.parliament.uk/pa/bills/lbill/2019-2019/0015/20015.pdf
- 15. Welsh Government. Public Services Boards. Available from: https://gov.wales/public-services-boards
- 16. Chalkley A, Milton K. A critical review of national physical activity policies relating to children and young people in England. J Sport Heal Sci. 2020;1–8. Doi: 10.1016/j.jshs.2020.09.010
- 17. Milton K, Bauman A. A critical analysis of the cycles of physical activity policy in England. Int J

 Behav Nutr Phys Act. 2015;12(1):1–9. Doi: 10.1186/s12966-015-0169-5
- 18. Welsh Government. Natural Resources Policy. Cardiff; 2017. Available from:
 http://www.hwa.uk.com/site/wp-content/uploads/2018/11/POL_22-Welsh-Government-2017-Natural-Resources-Policy.pdf

- 19. Welsh Government. Prosperity for all: the national strategy. Cardiff; 2017. Available from: https://wcva.cymru/wp-content/uploads/2020/01/Prosperity-for-all.pdf
- 20. Natural Resources Wales. Managing today's natural resources for tomorrow's generations
 Our corporate plan to 2022. Cardiff; 2018. Available from:
 https://naturalresources.wales/media/684542/final-corporate-plan-english.pdf
- 21. Welsh Government. Natural Resources Policy Statement. Cardiff; 2015. Available from:

 https://gov.wales/sites/default/files/publications/2019-05/natural-resources-policy-statement.pdf
- 22. Welsh Government. Planning Policy Wales. Cardiff; 2018. Available from:
 https://gov.wales/sites/default/files/publications/2018-12/planning-policy-wales-edition-10.pdf
- 23. Sport Wales. A vision for Sport in Wales. Cardiff; 2018.
- 24. Welsh Government. Taking Wales Forward 2016-2020. Cardiff; 2016. Available from: https://gov.wales/sites/default/files/publications/2017-08/taking-wales-forward.pdf
- 25. Welsh Government. An Active Travel Action Plan for Wales. Cardiff; 2016. Available from: https://gov.wales/sites/default/files/publications/2017-09/active-travel-action-plan.pdf
- 26. Welsh Government. Healthy Weight: Healthy Wales Our long-term strategy to prevent and reduce obesity in Wales. Cardiff; 2019. Available from:
 https://gov.wales/sites/default/files/publications/2019-10/healthy-weight-healthy-wales-0.pdf
- 27. Department of Health and Social Care. UK Chief Medical Officers' Physical Activity
 Guidelines. Cardiff; 2019. Available from:
 https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report
- 28. Public Health Wales Long Term Strategy 2018-2030. Working to achieve a healthier future for Wales. Cardiff; 2018. Available from: https://phw.nhs.wales/about-us/our-

- <u>priorities/long-term-strategy-documents/public-health-wales-long-term-strategy-working-to-achieve-a-healthier-future-for-wales/</u>
- 29. Sport Wales. Enabling Sport in Wales to Thrive. Cardiff; 2019. Available from:
 https://futures.sport.wales/wp-content/uploads/2019/07/Sport-Wales-Enable-Sport-In-Wales-To-Thrive-F1.pdf
- 30. Public Health Wales & Sport Wales. Getting Wales Moving. Cardiff; 2017. Available from:

 http://www.wales.nhs.uk/sitesplus/documents/888/Getting%20Wales%20Moving%20V1.pd
 f
- 31. National Assembly for Wales. Physical Activity of Children and Young People. Cardiff; 2019.

 Available from: https://senedd.wales/laid%20documents/cr-ld12369/cr-ld12369-e.pdf
- 32. Disability Sport Wales. Disability Sport Wales Vision Statement. Cardiff; 2019. Available from: https://www.disabilitysportwales.com/uploads/About/Vision_Document_eng.pdf
- 33. Gwynedd & Anglesey Public Services Board. Gwynedd & Anglesey well-being plan. Gwynedd;
 2018. Available from: https://www.llesiantgwyneddamon.org/Uploads/Pages/Documents/3-5-3-94-1-Gwynedd-and-Anglesey-Well-being-plan.pdf
- 34. Neath Port Talbot Public Services Board. The Neath Port Talbot We Want (Well-being Plan 2018 2023). Neath Port Talbot; 2018. Available from:

 https://democracy.npt.gov.uk/documents/s36073/Local%20Well-being%20Plan%20Draft%20V10.pdf
- 35. Cardiff Public Services Board. Cardiff well-being plan. Cardiff; 2018. Available from:

 https://www.cardiffpartnership.co.uk/wp-content/uploads/2020/08/Well-being-Plan-2018-23-Eng.pdf
- 36. Powys Public Services Board. Towards 2040 The Powys well-being plan. Powys; 2018.

 Available from: https://en.powys.gov.uk/article/5789/Towards-2040---the-Powys-Well-being-Plan

- 37. Vale of Glamorgan Public Services Board. Our Vale Our Future well-being plan 2018-2023.
 Vale of Glamorgan; 2018. Available from:
 https://valeofglamorgan.gov.uk/Documents/Our%20Council/Achieving%20our%20vision/W
 ell-being-Plan-Consultation-Draft-ENGLISH.pdf
- 38. Blaeunau Gwent Public Services Board. The Blaenau Gwent we want well-being plan 20182023. Blaenau Gwent; 2018. Available from: https://www.blaenau-gwent.gov.uk/fileadmin/documents/Council/Partnerships/Well-beingPlan_Layout_-
 D8_xsmall_pdf
- 39. Bridgend Public Services Board. Well-being Plan. Bridgend; 2018. Available from:
 https://democratic.bridgend.gov.uk/documents/s14968/180328%203a%20Appendix%20A%
 20-%20Bridgend%20PSBs%20Wellbeing%20Plan.pdf
- 40. Cwm Taf Public Services Board. Our Cwm Taf, Cwm Taf well-being plan 2018-2023. Cwm Taf;

 2018. Available from:

 http://www.ourcwmtaf.wales/SharedFiles/Download.aspx?pageid=286&mid=613&fileid=21

 0
- 41. Monmouthshire Public Services Board. Monmouthshire Public Service Board Well-being

 Plan. Monmouthshire; 2018. Available from:

 https://www.monmouthshire.gov.uk/app/uploads/2018/05/Monmouthshire-PSB-Well-being-plan.pdf
- 42. Pembrokeshire Public Services Board. Well-being Plan for Pembrokeshire. Pembrokeshire;

 2018. Available from: https://www.pembrokeshire.gov.uk/public-services-board/well-being-plan
- 43. Torfaen Public Services Board. Well-being Plan for Torfaen 2018-2023 [Internet]. Torfaen; 2018. Available from: http://www.torfaenpublicservicesboard.co.uk/en/Documents/Well-being-Plan-for-Torfaen-2018-2023.pdf

- 44. Ceredigion Public Services Board. Ceredigion Local Well-being Plan 2018-2023. Ceredigion;
 2018. Available from: https://www.ceredigion.gov.uk/media/3956/local-well-being-plan-2018-2023.pdf
- 45. Newport Public Services Board. Newports Well-being Plan 2018-2023. Newport; 2018.

 Available from: https://www.newport.gov.uk/documents/One-Newport/Local-Well-being-Plan-2018-23-English-Final.pdf
- 46. Wrexham Public Services Board. Our Well-being Plan 2018-2023. Wrexham; 2018. Available from: https://www.wrexhampsb.org/wp-content/uploads/2018/05/Wrexham-PSB-Well-Being-plan-March-2018.pdf
- 47. Future Generations Commissioner for Wales. The Future Generations Report 2020 Let's create the future together. Cardiff; 2020. Available from:

 https://www.futuregenerations.wales/wp-content/uploads/2020/05/FGC-Report-English.pdf

Table 1. National policies containing actions explicity related to physical activity (listed chronologically)

Document title	WBFGA Goals	5 Ways of	Physical activity action areas
		Working	
Elite Sport	Prosperous Wales	Integration	Investment
Strategy (2015)	Resilient Wales	Involvement	Workforce
	Healthier Wales	Collaboration	Governance
	More equal Wales		Coaching
	Wales of vibrant culture		Elite performance
National	Haalthiau Walaa	Laws Tawas	Access to facilities
Natural	Healthier Wales	Long-Term	Access to facilities
Resources Policy	Cohesive communities	Integration	
Statement (2015)	Wales of vibrant culture	Involvement Collaboration	
		Prevention	
Taking Wales	Prosperous Wales	Long-Term	Promotion
Forward 2016-	Healthier Wales	Collaboration	Hosting sporting events
2021 (2016)	More equal Wales	Prevention	Schools
2021 (2010)	Cohesive communities	Frevention	3010013
	Wales of vibrant culture		
An Active Travel	Prosperous Wales	Long-Term	Leadership
Action Plan for	Healthier Wales	Integration	Legislation
Wales (2016)	More equal Wales	Involvement	Infrastructure
*************************************	Cohesive communities	Collaboration	Promotion
	Wales of vibrant culture	Prevention	Skills and training
			Surveillance
Prosperity for All:	Prosperous Wales	Long-Term	Promotion
The National	Healthier Wales	Integration	Infrastructure
Strategy (2017)	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant	Prevention	
	community		
Getting Wales	Prosperous Wales	Long-Term	Inter-sector working
Moving (2017)	Healthier Wales	Integration	Surveillance
	More equal Wales	Involvement	Evaluation
	Cohesive communities	Collaboration	Access to facilities
	Wales of vibrant culture	Prevention	Health care professionals
			Play
	2 111		Infrastructure
Natural	Resilient Wales	Long-Term	Infrastructure
Resources Wales	Prosperous Wales	Integration	Inter-sector working
- Managing	Healthier Wales	Involvement	Promotion
Today's Natural	More equal Wales	Collaboration	Surveillance
Resources for	Cohesive communities	Prevention	
Tomorrow's	Wales of vibrant		
Generations	communities		
Our Corporate			
Pla n to 2022 (2017)			
11 (0 2022 (2017)			
		l	

No. 1	B	1 T	The difference for the second
Natural	Prosperous Wales	Long-Term	Healthy environments
Resources Policy	Healthier Wales	Integration	Infrastructure
(2017)	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Planning Policy	Prosperous Wales	Long-Term	Infrastructure
Wales (2018)	Healthier Wales	Integration	Access to facilities
	More equal Wales	Involvement	Legislation
	Cohesive communities	Collaboration	Promotion
	Wales of vibrant culture	Prevention	Investment
Public Health	Healthier Wales	Long-Term	Promotion
Wales Long Term	More equal Wales	Integration	Community
Strategy 2018-	Cohesive communities	Involvement	
2030. Working to	Wales of vibrant culture	Collaboration	
achieve a		Prevention	
healthier future			
for Wales (2018)			
A Vision for Sport	Resilient Wales	Long-Term	Innovation
in Wales (2018)	Prosperous Wales	Integration	Skill
, ,	Healthier Wales	Involvement	Communities
	More equal Wales	Collaboration	Excellence
	Cohesive communities	Prevention	Workforce
	Wales of vibrant culture		
Physical activity	Prosperous Wales	Long-Term	Children and young people
of children and	Healthier Wales	Integration	Surveillance
young people	More equal Wales	Involvement	Evaluation
(2019)	Cohesive communities	Collaboration	Promotion
(====)	Wales of vibrant culture	Prevention	Schools
			Infrastructure
			Women in sport
			Inclusive sport
			Investment
			Inequalities
			mequanties
Healthy Weight -	Prosperous Wales	Long-Term	Promotion
Healthy Wales	Healthier Wales	Integration	Communities
Long term	More equal Wales	Involvement	Infrastructure
strategy to	Cohesive communities	Collaboration	Workplace
prevent and	Wales of vibrant culture	Prevention	Schools
reduce obesity in	wates of vibratit culture	FIEVEIIUUII	3010013
•			
Wales (2019)			
Enabling Sport in	Prosperous Wales	Long-Torm	Voung people
Enabling Sport in Wales to Thrive	Prosperous Wales Healthier Wales	Long-Term	Young people
		Integration Collaboration	Inclusive sport Evaluation
(2019)	More equal Wales		
	Cohesive communities	Prevention	Inter-sectoral working
III/ Chi-f NA - II - I	Wales of vibrant culture	Lawa Tarres	Cuidalinas faradiffa und
UK Chief Medical	Healthier Wales	Long-Term	Guidelines for different
Officers' Physical	More equal Wales	Collaboration	population groups

Activity	Wales of vibrant culture	Prevention	
Guidelines (2019)			
Disability Sport Wales Vision Statement (2019)	Prosperous Wales Healthier Wales More equal Wales Cohesive communities Wales of vibrant culture	Involvement Collaboration Prevention	Inclusive sport Promotion Access to facilities Elite sport Welfare

Table 2. Sub-national level documents – the Pubic Service Board well-being plans (published 2017-

2018; listed alphabetically)

Region	WBFGA Goals	5 Ways of Working	Physical activity action areas
Blaenau Gwent	Prosperous Wales	Long-Term	Promotion
	Healthier Wales	Integration	Active travel
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Bridgend	Prosperous Wales	Long-Term	Active travel
J	Healthier Wales	Integration	
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Caerphilly	-	Long-Term	-
, , , , , , , , , , , , , , , , , , ,		Integration	
		Involvement	
		Collaboration	
		Prevention	
Cardiff	Prosperous Wales	Long-Term	Active travel
Caram	Healthier Wales	Integration	Evaluation
	lieartifier wates	Involvement	Children
		Collaboration	Ciliaren
Carmarthenshire		Prevention	
Carmartnenshire	-	Long-Term	-
		Integration	
		Involvement	
		Collaboration	
		Prevention	
Ceredigion	Resilient Wales	Long-Term	Promotion
	Healthier Wales	Integration	Social prescribing
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Conwy and	-	Long-Term	-
Denbighshire		Integration	
		Involvement	
		Collaboration	
		Prevention	
Cwm Taf	Prosperous Wales	Long-Term	Promotion
	Resilient Wales	Integration	Outdoor activity
	Healthier Wales	Involvement	Active travel
	More equal Wales	Collaboration	
	Cohesive communities	Prevention	
	Wales of vibrant culture		
Flintshire	Resilient Wales	Long-Term	Promotion
	Healthier Wales	Integration	
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	

	Healthier Wales	Integration	Active travel
	More equal Wales	Involvement	Deprived areas
	Cohesive communities	Collaboration	Environmental
	Wales of vibrant culture	Prevention	Active travel
			Target different population
			groups
Gwynedd and	Prosperous Wales	Long-Term	Promotion
Anglesey	Healthier Wales	Integration	Children and adults
	More equal Wales	Involvement	Green space
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Monmouthshire	Prosperous Wales	Long-Term	Promotion
	Healthier Wales	Integration	Active travel
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Newport	Prosperous Wales	Long-Term	Environment
	Resilient Wales	Integration	Promotion
	Healthier Wales	Involvement	
	More equal Wales	Collaboration	
	Cohesive communities	Prevention	
	Wales of vibrant culture		
	Globally responsible		
Pembrokeshire	Prosperous Wales	Long-Term	Active travel
	Healthier Wales	Integration	Promotion
	More equal Wales	Involvement	
	Cohesive communities	Collaboration	
	Wales of vibrant culture	Prevention	
Port Talbot	Prosperous Wales	Long-Term	Measure
	Resilient Wales	Integration	Children and adults
	Healthier Wales	Involvement	Active travel
	More equal Wales	Collaboration	
	Cohesive communities	Prevention	
	Wales of vibrant culture		
Powys	Healthier Wales	Long-Term	Promotion
	More equal Wales	Integration	Measure
	Cohesive communities	Involvement	Adults
	Wales of vibrant culture	Collaboration	
		Prevention	
Swansea	-	Long-Term	-
		Integration	
		Involvement	
		Collaboration	
		Prevention	
Torfaen	Prosperous Wales	Long-Term	Active travel
	Resilient Wales	Integration	Promotion
	Healthier Wales	Involvement	Environment
	More equal Wales	Collaboration	
	Cohesive communities	Prevention	
	Wales of vibrant culture		
Wrexham	Healthier Wales	Long-Term	Promotion

More equal Wales	Integration	Environment
Cohesive communities	Involvement	
Wales of vibrant culture	Collaboration	
	Prevention	

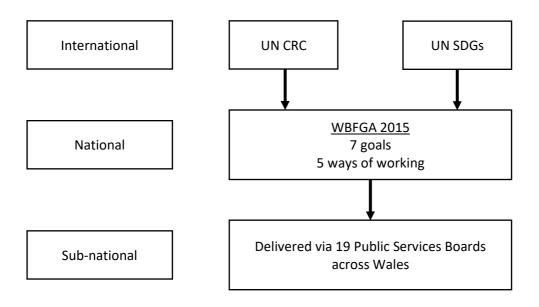


Figure 1. Conceptual model of the translation from international policy to local delivery in Wales

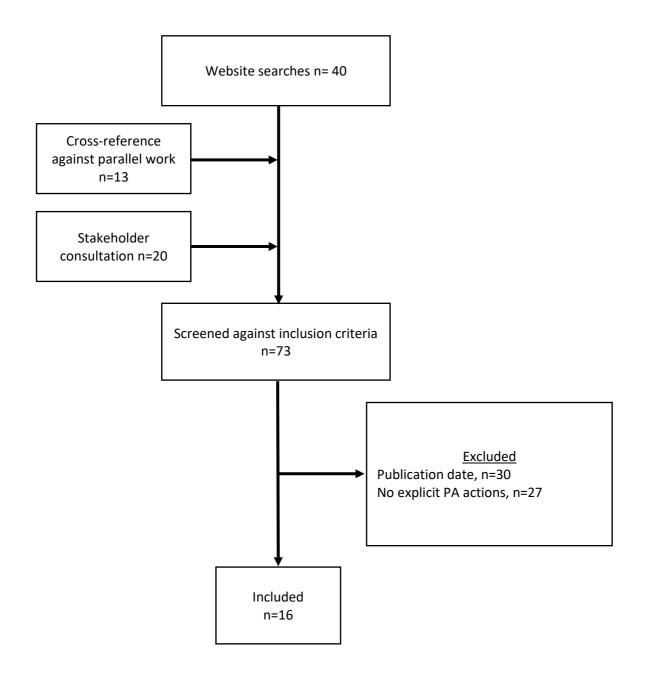


Figure 2 Process of conducting an audit of national physical activity policy for Wales