Promoting Physical Activity Among Children and Adolescents With Disabilities: The Translation of Policy to Practice Internationally

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Disability refers to any health condition (eg, problems with body structure/function or mental functioning) that influences an individual’s ability to perform a task or action (activity) and engage in a life situation (participation). Globally, more than one billion people live with disability, and approximately 240 million are children and adolescents. Disability is a global public health issue, and recent changes in the social determinants of health have seen substantial increases in the burden of disability from noncommunicable diseases among adolescents, with 27% of adolescent deaths due to noncommunicable diseases. Physical inactivity is associated with premature mortality from noncommunicable diseases, and physical inactivity-related deaths are responsible for 13.4 million disability-adjusted life years. Physical activity (PA) can lessen secondary or chronic conditions commonly experienced by those with disabilities. Despite this, few children and adolescents with disabilities (CAWD) participate in regular PA. Physical inactivity remains a global health challenge in this population and is associated with a higher risk of serious health problems. The World Health Organization’s (WHO) Global Disability Action Plan 2014–2021 indicates that the burden of disability can be lessened by reducing physical inactivity. The policy, normative, and human rights landscapes all call for concerted efforts in PA promotion among CAWD. The emergence in 2015 of the United Nations (UN) Sustainable Development Goals (SDGs) and their underpinning human rights focus reaffirmed the need to promote PA among CAWD. PA among CAWD is particularly relevant to SDG 3 on good health and well-being and SDG 10 on reduced inequalities. The SDGs have renewed attention across policy and practice on the UN Convention on the Rights of Persons with Disabilities and the Convention on the Rights of the Child.
In 2020, the WHO released the first global PA and sedentary behavior guidelines for people with disabilities (PWD), including children and adolescents aged 5–17 years.\textsuperscript{10} They recommended that children aged less than 18 years engage in a daily average of 60 minutes of moderate to vigorous PA across the week. For additional health benefits, they should reduce time, particularly recreational screen time, spent being sedentary. The new guidelines’ message of “every move counts” particularly resonates among individuals who experience barriers in access to PA, like CAWD. In 2021, the WHO released an advocacy brief\textsuperscript{11} underpinned by evidence and recommendations from the WHO Global Action Plan on Physical Activity 2018–2030.\textsuperscript{12} In it, the WHO\textsuperscript{11} called on all stakeholders to collaborate and build a robust and sustainable PA system that can promote regular PA participation for underserved populations, including those with disabilities of all ages.

A recent cross-country study\textsuperscript{13} indicated that 92% of the included countries had formal written policies for PA, and 63% had national PA guidelines. The PA policies were more developed in high-income compared with lower middle-income countries and in European and Western-Pacific regions compared with other areas. National PA guidelines for PWD were less well developed than for other population groups, despite the possibility that they have more to gain.\textsuperscript{1} However, little is known about whether the included countries have specific strategies for promoting PA among CAWD.

The Active Healthy Kids Global Alliance (AHKGA) is a registered nonprofit organization that aims to advance PA in children and adolescents worldwide.\textsuperscript{14–16} The AHKGA initiated the Global Matrix (GM) in 2014 to facilitate the development of report cards in countries or regions worldwide. Such an initiative allows for global comparison across countries, standardizing measurements, identification of research gaps, making recommendations, and sharing lessons learned from across the globe. Ten common indicators with a known impact on PA are evaluated in all report cards from countries and regions to form a Global Matrix (GM 1.0, 2014; GM 2.0, 2016; and GM 3.0, 2018). There are behavioral indicators (overall PA, organized sport and PA, active play, active transportation, and sedentary behaviour), an outcome indicator (eg, physical fitness), and sources of influence indicators (family and peers, school, community and environment, and government). The Netherlands\textsuperscript{17} Finland\textsuperscript{18} and Hong Kong\textsuperscript{19} included CAWD in their report cards, as either a separate chapter or report, based on the GM 3.0. Regardless of countries or regions, over 75% of CAWD did not meet the PA guidelines, and more than half of the indicators were not graded due to insufficient evidence. In 2022, the GM 4.0\textsuperscript{20} was launched, and 15 countries or regions in the GM 4.0 focused specifically on disability-related data to develop their Para Report Cards on PA of CAWD (herein Para Report Cards). The GM of Para Report Cards addresses a knowledge gap in PA behaviors and sources of influence among CAWD.\textsuperscript{21}

The government indicator in the Para Report Card is a crucial influencer of behavioral indicator among CAWD. According to GM 4.0, this indicator relates to “any governmental body with authority to influence PA opportunities or participation of children and adolescents through policy, legislation or regulation.” The benchmarks include “evidence of leadership and commitment in providing PA opportunities,” “allocated funds and resources for the implementation of PA promotion strategies and initiatives,” and “demonstrated progress through the key stages of public policy making (ie, policy agenda, policy formation, policy implementation, policy evaluation and decisions about the future).” As the government indicator does not have its benchmarks represented by a percentage, its grade is determined by the consensus of the

**Methods**

This paper examined global calls for action to promote PA that target CAWD as outlined in varied policy instruments, including action plans, guidelines, and human rights instruments. Many documents reviewed were used to create the landmark Human Rights Council’s report on PA and sport\textsuperscript{24} for PWD. National/ regional documents from the countries or regions involved in the Para Report Card project were used to identify government priorities in PA for CAWD. The HDI ranking of those countries measures their performance in human development across 3 dimensions, including long and healthy life, being knowledgeable, and having a decent standard of living. This ranking was compared with theirPara Report Card performance.

In parallel to the AHKGA GM 4.0,\textsuperscript{20} research working groups were invited to establish disability data subgroups. These subgroups examined data for the GM of Para Report Cards on PA of CAWD. The full results of the Para Report Cards with grades for the 10 indicators in the GM 4.0 are reported in another special issue with brief national or regional reports.\textsuperscript{21}

The participating Para Report Card teams adapted the harmonized GM development process to grade the common 10 indicators grouped into behavioral, outcome, and sources of influence indicators.\textsuperscript{21} Each team synthesized the best available data/evidence on each indicator, evaluated the aggregated evidence, and assigned letter grades to indicators according to the predefined benchmarks and the grading scheme (ranging from A+ = excellent to F = failing, or INC = incomplete data due to insufficient evidence). The report cards teams had the possibility to use the grading methodology developed by Ward et al.\textsuperscript{22} using the HEPA PAT V2 tool to grade the government indicator, but this was not mandatory as this methodology had yet to be tested and evaluated in multiple settings. Each team consulted on grades with stakeholders from higher education institutions, schools, professional organizations,
government agencies, and nongovernmental organizations in adapted PA and disability sports in their country or region. External experts involved in the GM reviewed submitted grades for auditing purposes. Grades were finalized following a written discussion between the team and the external auditors.

Finally, using the AHKGA GM 4.0 and the Para Report Cards framework, the average grades of the behavioral indicator and government indicator were included. Each participating team provided the rationale behind the government indicator grade.

For the purpose of quantitative analysis across countries or regions, each grade was converted to a numeric score (A+ = 15, B+ = 12, C+ = 9, D+ = 6, F = 2, with increments of 1 from 15 to 2), and incomplete grade (INC) was treated as a missing value. Descriptive statistics, such as mean, were calculated after converting the letter grade to a numeric score, resulting in 2 scores (ie, overall behavioral indicator and government indicator). Scores were rounded down (not to the nearest number) and converted to the letter grade. In addition, the score of the HEPA PAT was included if the countries or regions wanted to apply quantitative metrics to assess PA policies and strategies for CAWD. The HEPA PAT consisted of different criteria identified as successful elements for policy approaches to PA. These elements included number and breadth of relevant policies, identified supporting actions, identified accountable organization(s), identifiable reporting structures, identified funding, and monitoring and evaluation plan. Each element was assigned a weighting score, resulting in a total percentage score and corresponding grade.

Results

Table 1 summarizes the global calls for action for PA promotion in CAWD. Since 1989, the UN has recognized children’s rights to participate in sport and PA within its Article 31. The UN Convention on the Rights of Persons with Disabilities was the first legally binding international instrument to address the rights of persons with disabilities and participation in sport. In particular, Article 30.5 of the convention stipulated that persons with disabilities should enjoy equal access to “play, recreation and leisure, and sporting activities.” In 2015, the UN adopted the 2030 Agenda for Sustainable Development, and the goal was to achieve 17 SDGs with 169 targets, and 7 targets focused on PWD. The 2030 agenda called for global cooperation on development, declaring sport as an important enabler of sustainable development and recognizing PWD as active contributing members of society. The principle of No One Left Behind, starting with those furthest behind, provided impetus in subsequent policy instruments to prioritize those with disabilities and other marginalized communities. Since 2015, the WHO has recognized the importance of PA to support 13 of the 17 SDGs for all and advocated PA opportunities for all through creating active societies, active environments, active people, and active systems.

In 2021, the Office of the High Commissioner for Human Rights produced a landmark report based on participation in PA and sport of persons with disabilities. Eight key areas for implementation at the governmental level included governance, legislation and regulation, participation, awareness raising, gender mainstreaming, protection from violence, assistive technology, and data collection. The report called for action in the community, school, and sport settings. In response to this report, 24 countries provided submissions to detail the national policy landscape concerning PA and sport for PWD. In addition, submissions were received from 3 intergovernmental organizations and 11 nongovernmental and civil society organizations. Of the countries or regions that participated in the Para Report Card exercise, Chile, Finland, Ireland, Lithuania, and Spain submitted documents. A summary of the areas on CAWD from these countries is reported in Table 2.

Based on the Para Report Cards framework, Table 3 shows the average grade and score for the overall behavioral indicator (D+) and government indicator (C+) as well as corresponding rationale for grading the government indicator from multiple indicators split by geographical and HDI variables. Countries or regions were also grouped by the 5 regions of the International Federation of Adapted Physical Activity. The grade (and score) for the overall behavioral indicator ranged between C (8.25) and F (2) with Finland receiving the highest grade of C, followed by Canada, Israel, and Spain with D; Chile, Hong Kong, Poland, South Korea, and the United States with D–; and Brazil, France, Ireland, Lithuania, and the Philippines with F. Meanwhile, there was a wide range of scores for the government indicator, ranging from A+ (15) to D– (4), and one country (United States) reported INC (incomplete). Seven of the 14 countries or regions provided the HEPA PAT score, which was similar to the scoring guidelines of the GM 4.0, except that South Korea and Poland showed a relatively high HEPA PAT score (96 and 82, respectively) but grades of C– (7) and D– (4), respectively.

At the time of writing, specific national PA guidelines for CAWD did not exist in any Para Report Card countries or regions. Canada, Finland, and South Korea used country-wide reports with PA data from disability-specific surveys. In contrast, the other countries or regions relied on surveys from the general population with measures to disaggregate the data by disability status. There seemed to be some gaps between the overall behavioral and government indicators in some countries or regions. For example, South Korea obtained a grade D– for the overall behavioral indicator despite having a grade A+ for the government indicator. In terms of the 5 International Federation of Adapted Physical Activity regions, 3 regions (Asia, Europe, and North America) were assigned a grade D– for overall behavioral indicator, Middle East received a grade D, and South America received a grade of F for the same indicator, although it was assigned C– for the government indicator. In terms of HDI classifications, high HDI countries (the Philippines and Brazil) had a combined grade of F (2) and C (8) for the overall behavioral and government indicators, respectively. Other countries or regions classified as very high HDI had a combined grade of D– (4.7) and C+ (9.09) for the same 2 indicators, respectively.

Discussion

There has been a progressive increase in international policies, guidelines, and surveillance related to PA among CAWD over the decades, mainly supported by the Convention on the Rights of Persons with Disabilities, Convention on the Rights of the Child, and SDGs. Policy supports PA and sport participation as a fundamental right for PWD, enriching physical, social, and mental health. Although this varies by country or region, it demonstrates the progress in both disability rights and the promotion of PA among CAWD. Since the emergence of the SDGs, broad sectoral adoption of rights-based inclusive approaches is evident across many policy areas from sport, education, health, community development, and social care and protection.

There were noticeable differences in national PA policies for CAWD across the sample, ranging from fully segregated to fully integrated and everything in between. The countries or regions involved in the Para Report Cards have ratified the Convention on the Rights of Persons with Disabilities, some earlier than others, which could indicate their more significant policy commitment
Some countries or regions avoid including the term “disability” in their reports, outlining that the policies are for all children and adolescents (and, therefore, not excluding CAWD). This also minimizes the real and multiple barriers faced by CAWD in accessing PA. Funding otherwise ring fenced to overcome the obstacles faced by CAWD may, thus, be lost in the general budget with negative consequences for CAWD.

### Table 1 Summary of the Global Calls for Action for Promoting PA in CAWD

<table>
<thead>
<tr>
<th>Year</th>
<th>International organization</th>
<th>Treaty/policy/statement</th>
<th>Action for promoting PA for PWD/CAWD</th>
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<tr>
<td>1989</td>
<td>UN&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Convention on the Rights of the Child</td>
<td>• Support children’s rights to participate in sport and other types of PA</td>
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<td>2006</td>
<td>UN&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Convention on the Rights of Persons with Disabilities (Article 30)</td>
<td>• Promote PWD’s rights to have access to sport and recreational venues • Include CAWD in physical education and enjoy equal access to recreation and sporting activities</td>
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<td>2011</td>
<td>UN&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Panel Discussion on Sports for Inclusive Development: Sports, Disability and Development (UN Headquarters, New York)</td>
<td>• Utilize sport to promote the rights of PWD • Emphasize the role of sport in promoting inclusion and well-being of PWD</td>
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<td>2015</td>
<td>UN&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Transforming Our World: The 2030 Agenda for Sustainable Development</td>
<td>• Recognize sport as an important enabler of sustainable development and include PWD as active contributing members of society • Propose 17 SDGs with 169 targets, 7 of which focus on PWD • Address the role of sport and its potential in relation to the 17 SDGs • Continue to recognize sport as an enabler of sustainable development, contributing to the empowerment of individuals and communities</td>
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<tr>
<td>2015</td>
<td>WHO&lt;sup&gt;f&lt;/sup&gt;</td>
<td>Global Disability Action Plan 2014–2021: Better Health for All People with Disability</td>
<td>• Propose action plan to remove barriers and improve access to services and programs so as to enable PWD to achieve health and well-being</td>
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<td>2016</td>
<td>ISPAH&lt;sup&gt;g&lt;/sup&gt;</td>
<td>Bangkok Declaration on Physical Activity for Global Health and Sustainable Development</td>
<td>• Recognize the importance of PA to support 13 of 17 SDGs across the life course, including PWD</td>
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<td>2017</td>
<td>UNESCO&lt;sup&gt;h&lt;/sup&gt;</td>
<td>Kazan Action Plan (The 6th International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport [MINEPS VI])</td>
<td>• Highlight the importance of inclusive sport policy, including access to physical education, PA, and sport at the national and international levels • Reaffirm the role of physical education in promoting inclusive and lifelong participation in PA and sport • Advocate for PA opportunities for people of all abilities and ages through creating active societies, active environments, active people, and active systems</td>
</tr>
<tr>
<td>2018</td>
<td>WHO&lt;sup&gt;i&lt;/sup&gt;</td>
<td>Global Action Plan on Physical Activity 2018–2030: More Active People for a Healthier World</td>
<td>• Complete a minimum of 60 min of moderate to vigorous activity per week, on average • Incorporate vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, at least 3 d a week • Limit the amount of time spent being sedentary, particularly recreational screen time</td>
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<td>2020</td>
<td>WHO&lt;sup&gt;i&lt;/sup&gt;</td>
<td>WHO Guidelines on Physical Activity and Sedentary Behaviour (specific for CAWD aged 5–17 y)</td>
<td>• Propose 17 SDGs with 169 targets, 7 of which focus on PWD • Address the role of sport and its potential in relation to the 17 SDGs • Continue to recognize sport as an enabler of sustainable development, contributing to the empowerment of individuals and communities</td>
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<td>2021</td>
<td>UN&lt;sup&gt;k&lt;/sup&gt;</td>
<td>UN Human Rights Council Report on Physical Activity and Sport under Article 30 of the Convention on the Rights of Persons with Disabilities</td>
<td>• Guidance for the development of inclusive and disability-specific PA and sports • Encourage the implementation of obligations of UN states under international human rights law</td>
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<td>2021</td>
<td>WHO&lt;sup&gt;i&lt;/sup&gt;</td>
<td>Fair Play: Building a Strong Physical Activity System for More Active People</td>
<td>• Build a PA ecosystem that connects stakeholders at all levels to promote PA in PWD</td>
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</table>

Abbreviations: CAWD, children and adolescents with disabilities; ISPAH, International Society for Physical Activity and Health; PA, physical activity; PWD, people with disabilities; SDG, Sustainable Development Goals; UN, United Nations; UNESCO, United Nations Educational, Scientific and Cultural Organization; WHO, World Health Organization.

The WHO Global Action Plan on Physical Activity 2018–2030 outlines the need for a systems approach to promote PA; this would need to be cognizant of the specific needs of CAWD. A systems audit that directly considers the needs of marginalized populations would benefit policymakers and enable them to counter historically low levels of PA. A synergistic approach to bridge the policy–practice gap needs more evaluation, and toolkits are being developed for this in the general population, yet more needs to be targeted toward the additional needs of CAWD.

The Para Report Cards offer a comparable way in which policies related to PA and sport for CAWD can be assessed. Most government indicator grades in the Para Report Cards are derived from Ward et al’s methodology based on HEPA PAT 2, making grades comparable with government indicators to the general population. Some countries or regions (eg, Finland, France, Hong Kong, Israel, and Lithuania) used their own methodology to analyze this indicator, which makes generalizations across countries difficult, although comparable. This is not uncommon in disability policies as the interpretation of disability evolves from

### Table 2 Areas of the Article 30 Human Rights National Reports in Relation to CAWD

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<tr>
<th>Country</th>
<th>Key points directed to CAWD</th>
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| Chile   | • The National Sports Institute implements the “Grow in Movement Programme.” Exclusive workshops are delivered for CAWD to improve motor skills.  
• Public spaces, including swimming pools, are accessible to all PWD, in particular, a new law (21.089) outlines the need to have all recreational public spaces accessible to all children.  
• The Parapan American Games Santiago 2023 brings adaptations to buildings for performing and spectating as well as daily living for PWD.  
• The Ministry of Education has endorsed an inclusive curriculum since 2015, yet physical education class teachers’ curriculum adaptations are currently weak.  
• Chile has the national competitions where adapted competitions take place, including regional or national school sports games (13–16 y olds), games for nationals (14 y olds +) in 4 para sports, International South American Sports Games (13–16 y olds), and national leagues in a variety of para sports governed by the National Paralympic Committee. |
| Finland | • Education policy does not explicitly outline special provisions for CAWD; rather, there is emphasis on offering equal opportunities for all citizens. Physical educators hold master’s degrees and have completed studies in adapted physical education.  
• The national action for whole school PA program (Schools on the Move!) covers around 90% of comprehensive schools, of which, CAWD is also served in those schools.  
• Guidebooks on accessibility for the Land Use and Building Act are available for new and renovated buildings that could be used for PA.  
• Around 100 adapted PA instructors are employed by municipalities around the country, who may provide sport and PA opportunities for PWD, including children.  
• Equipment can be made available for rent from an online service (www.valineet.fi)  
• Outdoor activity app has information about the accessibility of nature routes; the PAPAI program matches CAWD with students to learn to be mentors as individuals find leisure activities to attend regularly. Another digital app is available for CAWD to find a sport club where there are services for CAWD.  
• The Finnish Paralympic Committee is the disability sports organization umbrella, including Special Olympics, Transport Sports, and national disability sport organizations. |
| Ireland | • Three disability policy actions relate to PA and sport, which would affect CAWD.  
• Likewise, the Sport in Ireland policy has 57 actions to promote PA, all of which address PWD.  
• The Disability Sport Inclusion Charter outlines 5 key areas (openness, people, activities, facilities, and promotion) for organizations to consider when including PWD in active and healthy lifestyles. The charter has over 250 organizations signed up to it since its launch in 2018.  
• Twenty-nine sports inclusion disability officers in the 29 local sports partnerships were employed based on funding from Sport Ireland. The amount of funding in 2020 was EUR$916,000. |
| Lithuania | • Two-year program for the social integration of PWD through physical education and sports was held between 2019 and 2020 as part of a EUR$585,000 grant from the state budget per year. Of the successful projects that got funding, 1282 CAWD were beneficiaries of the programs in 2019 and 1294 in 2020.  
• In 2019, the Lithuanian sign language training program included translation in the field of sport.  
• All physical education teachers must be qualified by a teaching degree, and their studies must include a course in special pedagogy and special psychology or carry these courses for in-service training.  
• There are 3–4 national events for CAWD that are sport competitions (games for deaf school children, championship for deaf school children “Brave, Strong, Agile,” and the Basketball and Football Championships of Special Schools).  
• Building regulations define the need for adaptations to meet the needs of PWD. |
| Spain | • There are 5 sport federations that manage sport for PWD.  
• Regulations on accessible spaces have been put into law since 1993, although the legislative framework for PWD is not binding.  
• The Inclusive Sports at Schools project aims to improve motor activities of all children. The “Include Me” project includes the provision for adapted sports.  
• Physical education includes education support for children with special educational needs, yet trained teachers do not always gain practice in working in adapted physical education, hence quality is uncertain.  
• Most sporting funding is targeted at performance para sports, and less is known about the allocation for CAWD. |

Abbreviations: CAWD, children and adolescents with disabilities; PA, physical activity; PAPAI, Personal Adapted Physical Activity Instructor; PWD, people with disabilities.

Adapted from United Nations Office of the High Commissioner for Human Rights.
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Grade (score) of overall behavioral indicator</th>
<th>Grade (score) of government indicator</th>
<th>PA policies and/or actions</th>
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<tr>
<td>Asia</td>
<td>D− (4.13) B (11.67)</td>
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<td><strong>The LCSD provides concession rates to PWD together with their carers. It also offers free recreational and sports programs for PWD, arranges coaches to provide outreach services at centers for people with PD, organizes sports events for PWD in Hong Kong Games and community recreation and sports programs with disability organizations, collaborates with the Hong Kong Joint Council for People with Disabilities to offer PWD and their carers use of swimming facilities free of charge on “Free Ride Day.”</strong></td>
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<td>Hong Kong</td>
<td>D− (4) C+ (9)</td>
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<td><strong>For the estimates of expenditure in 2020–2021 by LCSD, of the overall expenditure (ranging from HK$20.8 million to HK$35.2 million in 2015–2020) on sports development and activities, the proportion allocated specifically to PWD was 4.87% in 2015–2016, 4.93% in 2016–2017, 4.18% in 2017–2018, 5.39% in 2018–2019, and 6.04% in 2019–2020.</strong></td>
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<td>Philippines</td>
<td>F (2) B (11) HEPA PAT = 67</td>
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<td><strong>HAB provides a series of diversified sports training programs for about 430 PWD and about 110 tailor-made programs for some 5300 students from special schools.</strong></td>
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<td><strong>The EDB and HAB jointly have implemented the Opening up School Facilities for Promotion of Sports Development Scheme (including special schools) from 2017–2018.</strong></td>
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<td><strong>EDB updates the Physical Education Key Learning Area Curriculum Guide (Primary 1 to Secondary 6) to emphasize that equal educational opportunities should be provided to children and youth with SEN to participate in physical education. It also promotes the “Active Students, Active People” Campaign to help children in special schools to achieve the MVP A 60 guideline.</strong></td>
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<td><strong>The government made efforts in promoting a sporting culture in schools and increasing the provision of district facilities to promote sports for all. However, it was unclear whether these efforts were directed specifically to CAWD. Meanwhile, it was noted that LCSD, EDB, and Department of Health also included supports for PWD when mentioning the relevant policy and sporting programs for the nondisabled population; however, it was unclear whether they targeted CAWD.</strong></td>
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<td><strong>Ten policy instruments that promote active lifestyle among children and youth including CAWD. Seven are for promoting sports participation through organized sports events/programs (eg, National Games, Philippine Youth Games, and “Laro’t Saya sa Parke,” a park-based and family-oriented sports-for-all program), through sports training/education (ie, establishment of the National Academy of Sports system, creation of the academic Special Program in Sports, inclusion of adapted physical education in inclusive basic education for CAWD), through setting up national and community sports infrastructure, and through incentivizing excellent performance in sports events.</strong></td>
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<td><strong>Other policies refer to the creation of a main governing agency for promoting sports and fostering physical fitness (Philippine Sports Commission) and environmental requirements to allow active play and active transportation (eg, open recreational spaces, sidewalks, accessible public buildings and facilities).</strong></td>
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<td><strong>The legislation of the “Magna Carta for Disabled Persons” paves the way for providing education/training and programs on sports and physical fitness for PWD.</strong></td>
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<td><strong>Organizations accountable for the implementation of these policies/programs and funding sources for most of these are identified. Reporting, monitoring, and evaluation need improvement.</strong></td>
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<td>South Korea</td>
<td>D− (4.75) A+ (15) HEPA PAT = 96</td>
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<td><strong>Fourteen national policies identify strategies, action plans, legislation, and guidance geared toward promoting PA in CAWD, and 3 governmental domains, including Ministry of Culture, Sports and Tourism, Ministry of Education, and Ministry of Health and Welfare are identified.</strong></td>
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<td><strong>All 14 policies have identifiable actions related to PA and have identified accountable organizations to support and take responsibility for some PA policies and provisions.</strong></td>
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<td><strong>All 14 policies have identified monitoring and reporting on various policies and related actions.</strong></td>
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<td><strong>All 14 policies have identified funding to support identified actions. Specifically, 9 national programs are designed to increase PA opportunities for CAWD.</strong></td>
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<td><strong>All 14 policies articulated an evaluation and monitoring plan. The action plans are time bound and tied to specific measurable objectives or targets.</strong></td>
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<tr>
<td>Europe</td>
<td>D− (4.69) C+ (9)</td>
<td></td>
<td>(continued)</td>
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<tr>
<td>Country/region</td>
<td>Grade (score) of overall behavioral indicator</td>
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| Finlanda       | C (8.25)                                    | A– (13)                               | • National recommendations are issued for different age and population groups to increase PA.  
• Monitoring system of physical functional capacity (Move!) is implemented for students aged between 11 and 14 y old in an adapted manner.  
• Adapted PA and sports for PWD are implemented in separated and mainstream environments (so-called dual strategy) as part of the equality and nondiscrimination action plans.  
• Construction and renovation grants are allocated to municipalities that take accessibility into account.  
• The government resolution on promoting well-being, health, and safety 2030 outlines the actions to reduce inequalities in well-being and health by 2030. The resolution guarantees that children and adolescents have an equal opportunity to participate in hobbies.  
• “Handiguide des Sports” (ie, the guide for adapted sport) was launched in 2006 to facilitate opportunities for PWD.  
• The program “Sport, Santé, bien-être” (ie, Sport, Health, Wellness) was developed by the French Ministry of Sports in 2013 to promote PA opportunities for PWD attending special education and health institutions.  
• The National Strategy Sport and Disability was launched by the Ministry of Sports in 2020, covering 24 actions across 6 objectives around 4 main themes (promoting access to PA, developing adapted ways to meet different needs, improving the French performance at the 2024 Paris Paralympic Games, and management and evaluation). Several specific goals (to reach by 2024) targeting CAWD were identified in this national strategy.  
• The “Handiguide des Sports” was updated in 2019 to further facilitate and promote access to PA or sport opportunities for PWD.  
• The government committee was set up in 2021 to facilitate PA participation, including the implementation of the new “30 min of PA” in every school day in every elementary school.  
• National strategies are developed to reach specific PA goals (by 2024) targeting CAWD, such as allowing all students with special needs to practice PA and including adapted PA in physical education curriculum. |
| Francea        | F (2)                                       | C+ (9)                                | • Thirty policy instruments identified to demonstrate progress through public policy making (ie, policy agenda, policy formation, policy implementation, policy evaluation and decisions).  
• These policy documents emphasize the importance of PA for PWD. A recent review of policies for CAWD and PA was presented to the Northern Ireland assembly.  
• Policy documents in Northern Ireland stress the importance of accessible playgrounds as a fundamental right of PWD.  
• About €1 Million was paid out to local sports partnership to cover the costs of sport disability inclusion officers with the role of organizing PA opportunities for PWD in the community. Some of this work is to work with community sports for CAWD. |
| Irelanda       | F (3.75)                                    | B (11)                                | • Several legal acts (eg, Law on the Social Integration of the Disabled 2004-05-22, IX-2228) are in place to increase PA and support CAWD, including equal opportunities to participate in sports and PA and adaptation of buildings for PWD.  
• Different social programs, projects, and policies including disabilities sports are implemented.  
• The Lithuanian Ministry of Social Affairs and Labour has implemented a sport integration project, “Integration of the Disabled People through Physical Education and Sport,” to promote integration and inclusion since 2016.  
• An amount of EUR$580,584.38 was allocated in 2020 to implement projects for social integration through physical education and sports.  
• The government continues to provide funding for PA and sports for CAWD in separated environments (Para sport and Special Olympics activities). It implements a revised Law on Education (from 2024), including a requirement that CAWD must attend physical education classes and inclusive PA. |
| Lithuaniaa     | F (2)                                       | C (8)                                 | • Different types of funding have been allocated to support grassroots and competitive sports for PWD. For example, in 2013–2015, public funds at the disposal of the Minister of Sport and Tourism (in some part, together with Disabled Persons Rehabilitation Fund) in the total amount of PLN$143.4 million were allocated to cofinance grassroots and competitive sports of PWD.  
• The Supreme Chamber of Control of the Republic of Poland estimates that despite the allocation of PLN$143.4 million in the years 2013–2015, about 2% of PWD were covered with support. The expenditure of the minister on promotional activities amounted to PLN$1 million and accounted for 1% of the minister’s expenditure on general and competitive sports for PWD.  
• The Polish Ministry of Sport and Tourism has allocated more funding to support PWD to participate in competitive sports and recreational activities over the years.  
• The Disabled Persons Rehabilitation Fund (PFRON) provided support for more PWD via various tasks between 2018 and 2021.  
• The ministry responsible for physical culture launched the “Promoting sport of people with disabilities programme” for PWD in 2020.  
• However, none of the aforementioned programs is aimed specifically at CAWD, or the number is unavailable. |
| Polanda        | D– (4)                                      | D– (4)                                | HEPA PAT = 82 |

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| Spain         | D (5.5)                                   | C+ (9) HEPA PAT = 57           | • The government makes progress to promote inclusive sports for PWD. The new law was released to promote inclusive sports and equal opportunities to participate in international competitions.  
• The INCLUSIVE SPORT program is in place to facilitate social integration among PWD.  
• In the financial year 2019, the expenditure settled in sports by the General State Administration was EUR$178 million, but it was unknown how much was allocated to sports for PWD. |
| Middle East   | D (5.2)                                   | C (8)                          | • The vision of physical education is to develop PA and sport participation through students’ potential.  
• Physical education within special education frameworks and integration of children with “special needs” within the regular classes are mentioned (eg, the special education section of the physical education plan in 1996).  
• Introductory inclusion courses are offered to preservice and in-service physical education teachers, and teachers practice adaptations for inclusion in physical education. |
| Israel*       | D (5.2)                                   | C (8)                          | • Six of the 13 (46%) provinces and territories have accessible acts in place (British Columbia, Ontario, Manitoba, Newfoundland and Labrador, Québec, and Nova Scotia), and in 2019, the national Accessible Canada Act was passed.  
• The AODA has accessibility requirements (mainly focused on the built environment) for outdoor play spaces, such as playgrounds. Other provinces, such as Nova Scotia, are in the process of creating accessibility guidelines for indoor and outdoor spaces.  
• The Canadian Standards Association presents standards on accessible outdoor recreational environments, children’s play spaces, and equipment.  
• None of the provinces’/territories’ policies make explicit reference to funding to support actions toward PA for PWD.  
• The federal budget (2021–2026) pledged the following to support healthy and engaged lifestyles: CAN$80M to remove barriers to sport/kickstart local organized sports programs that are “accessible to all” and $400M to build new and expanded networks of pathways, bike lanes, trails, and pedestrian bridges (as part of the National Active Transportation Strategy).  
• No specific allocation of these funds is for PWD. The federal budget has also allocated CAN$503.3M to support a more equal Canada for PWD through the creation of a national autism strategy, a new disability benefits program to support full economic and social participation, and infrastructure to make communities and workplaces more accessible. There is no specific mention of PA within these federal funding commitments.  
• In the fall of 2017, Canadian Tire Jumpstart Charities pledged CAN$50M to support CAWD in PA and sport (2017–2022). In 2020/2021, Sport Canada provided ∼CAN$11M for adapted sports (ie, wheelchair basketball/rugby, boccia) and Special Olympics programming. Over 2020 and 2021, Jumpstart provided CAN$11.7M toward para sport funding and infrastructure for inclusive sport and play spaces (eg, playgrounds and multisport courts).  
• Commitments in the form of federal investments to help promote PA include support for 2 National Centers on Health Promotion for People with Disabilities (Special Olympics and National Center on Health, PA and Disability) as well as a Multi-Institution APA Mentorship Consortium to prepare leadership personnel in adapted PA.  
• Some policies, such as the National Youth Sport Strategy and Active People Healthy Nation, use broad language around “all children” and also make reference to population subgroups, such as CAWD (among others), within their overall recommendations.  
• Although encouraging, the outcomes of these initiatives are not well known, and the United States has not demonstrated progress through the key stages of public policy making. Within the field of adapted PA, we recognize that one size does not fit all, and we cannot be satisfied with general strategies and policies intended to reach “all children” if we are to be successful in increasing PA among CAWD.  
• Targeted, specific PA promotion strategies and initiatives by the government are necessary to effectively support PA opportunities for CAWD. |
| North America | D– (4.88)                                 | D– (4)                          | • The Canadian Standards Association presents standards on accessible outdoor recreational environments, children’s play spaces, and equipment.  
• None of the provinces’/territories’ policies make explicit reference to funding to support actions toward PA for PWD.  
• The federal budget (2021–2026) pledged the following to support healthy and engaged lifestyles: CAN$80M to remove barriers to sport/kickstart local organized sports programs that are “accessible to all” and $400M to build new and expanded networks of pathways, bike lanes, trails, and pedestrian bridges (as part of the National Active Transportation Strategy).  
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• Targeted, specific PA promotion strategies and initiatives by the government are necessary to effectively support PA opportunities for CAWD. |
| Canada*       | D (5)                                     | D– (4) HEPA PAT = 45           | • Six of the 13 (46%) provinces and territories have accessible acts in place (British Columbia, Ontario, Manitoba, Newfoundland and Labrador, Québec, and Nova Scotia), and in 2019, the national Accessible Canada Act was passed.  
• The AODA has accessibility requirements (mainly focused on the built environment) for outdoor play spaces, such as playgrounds. Other provinces, such as Nova Scotia, are in the process of creating accessibility guidelines for indoor and outdoor spaces.  
• The Canadian Standards Association presents standards on accessible outdoor recreational environments, children’s play spaces, and equipment.  
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• Targeted, specific PA promotion strategies and initiatives by the government are necessary to effectively support PA opportunities for CAWD. |
| United States*| D– (4.67)                                 | INC (no grade)                 | • Commitments in the form of federal investments to help promote PA include support for 2 National Centers on Health Promotion for People with Disabilities (Special Olympics and National Center on Health, PA and Disability) as well as a Multi-Institution APA Mentorship Consortium to prepare leadership personnel in adapted PA.  
• Some policies, such as the National Youth Sport Strategy and Active People Healthy Nation, use broad language around “all children” and also make reference to population subgroups, such as CAWD (among others), within their overall recommendations.  
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• Targeted, specific PA promotion strategies and initiatives by the government are necessary to effectively support PA opportunities for CAWD. |
<p>| South America | F (3.8)                                    | C– (7.5)                       | (continued) |</p>
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| Brazil<sup>b</sup> | F (2) | D (5) HEPA PAT = 32 | • Six programs/actions are linked to the areas of education, citizenship, leisure, and sport to promote PA for CAWD.  
• None of the programs/actions have the promotion of PA as their main objective, and none of them are planned as a public policy aimed at promoting PA in children and adolescents.  
• None of the programs/actions provide annual technical reports on the actions carried out, and none of the programs/actions provide annual strategic reports on the activities to be developed.  
• None of the programs/actions report on their websites/documents the budget invested in the activities.  
• None of the programs/actions present information about the monitoring system and the impact and effectiveness evaluation plan of the proposed activities. |
| Chile<sup>a</sup> | D– (4.25) | B– (10) | • Twenty-six (84%) policy instruments are in place to include supporting actions, accountable organizations, reporting structures, funding, and monitoring and evaluation plans.  
• The “Crecer en Movimiento” (Growing in Motion in English) program has been implemented in all vulnerable schools and incorporated a module that has addressed inclusive PA since 2019.  
• The “National Fund for the Promotion of Sports” (FONDEPORTE) is provided in 4 categories (training for sport, recreational sport, competitive sport, and sports science) for adapted and/or Paralympic sports and for work with PWD.  
• The Law 20.978 was released in 2016 to recognize adapted and Paralympic sport. It incorporates adapted sport within the plans and programs of the National Physical Activity and Sports Policy and ensures that all PWD have the right to participate in PA and access to facilities.  
• The “National Fund for Inclusive Projects” is funded by the National Disability Service (SENADIS) to promote inclusive sport and social inclusion of PWD. |

Abbreviations: APA, Adapted Physical Activity; AODA, Accessibility for Ontarians Disability Act; CAWD, children and adolescents with disabilities; EDB, The Education Bureau; HAB, Home Affairs Bureau; HEPA PAT, Health Enhancing Physical Activity Policy Audit Tool; HDI, Human Development Index; INC, incomplete data; LCSD, Leisure and Cultural Services Department; MVPA, moderate to vigorous physical activity; PA, physical activity; PD, physical disability; PFRON, Polish State Fund for rehabilitation of disabled people; PWD, people with disabilities; SEN, special educational needs; SENADIS, National Service for Persons with Disabilities; SIDO, Sport Disability Inclusion Officers.  
<sup>a</sup>Very high HDI = 0.8–1.0.  
<sup>b</sup>High HDI = 0.70–0.79.  
Adapted from United Nations Development Programme.
a phenomenon within the individual into a social or human rights matter. Without society contributing to causing disability, people would otherwise be able to function fully in society.35

There are examples of successful policies in some countries. For instance, in Brazil, the first PA guidelines for the Brazilian population were launched in 2020.36 A specific chapter provided recommendations and actions for promoting PA in PWD but not CAWD. It did, however, recommend that stakeholders take action to reduce barriers and facilitate accessibility for all, including CAWD. In France, in 2005, the law for “equity in rights and opportunities, participation and citizenship of people with disability” was passed. This law reinforced the right to inclusive education for all CAWD and dictated that every administration, business, school, transport, and roadway/street should comply with accessibility norms by 2015. Every sport facility welcoming the public had to comply with accessibility norms by 2015. All schools ensured compliance with accessibility norms for the sport equipment before February 2015.37 Yet, PA behavioral guidelines for CAWD are still lacking. Systematic and valid evaluation of past and future policies promoting PA in CAWD still needs to be implemented nationally and internationally to understand their potential impact better and inform further improvements.

This study reviewed policies related to PA and CAWD and is the first to examine these policies using the AHKGA GM 4.0 framework. Strengths include identifying relevant international and national policies for PA promotion, potential policy gaps, and the involvement of cross-country/region comparisons on PA policies. Limitations of the study include differences in operational definitions, such as “disability,” across participating countries or regions and a lack of uniformity in policy tools to quantify the policy outcomes. Furthermore, much of the behavioral data were from surveys comparable with the general population. Such measures may lack important details that are specific to CAWD. For example, many CAWD spend time with therapists, which may consist of time on movement behaviors, yet this is not captured. Nonetheless, this study reports on a most promising first step in pulling 14 countries or regions together to form the first Para Report Card team. Data were also missing from Africa and Oceania regions, and large parts of the other regions remain unrepresented. Furthermore, future research is needed to use a standardized tool to identify and assess the benchmark policies to directly or indirectly address physical inactivity among CAWD.34

Conclusion

International policy instruments are clear on the need to address PA for CAWD as a priority. Policies are a vital “upstream” component promoting PA that supports positive behavioral change in individuals.38 Across the world, different models of disability and cultural contexts result in varied practice in policies related to PA for CAWD. Accordingly, the concept of disability inclusion is embraced differently in PA policies. It can be comprehensively addressed in standalone policies with dedicated budgets, assumed in a general policy, or completely absent. A gap between policies and behavior is evident. Evaluation of the implementation of disability-specific policies is needed to understand this gap better. Our study provides an overview of PA policies for CAWD, with country-specific examples from 14 countries or regions. These insights highlight knowledge gaps and good practices that can help promote actions supporting CAWD to be more physically active. Continuation and expansion of the Para Report Card can help stakeholders understand and bridge the policy–practice gap that prevents CAWD from realizing their rights in and through PA.

Acknowledgment

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References