Evidence-Informed Recommendations for Community-Based Organizations Developing Physical Activity Information Targeting Families of Children and Youth With Disabilities

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Parents of children and youth with disabilities (CYD) have expressed unique physical activity (PA) information needs. Community-based organizations (CBOs) require assistance to meet these needs. Guided by the Appraisal of Guidelines, Research and Evaluation II, this project established evidence-informed recommendations for developing PA information targeting families of CYD. This process involved a systematic scoping review to inform draft recommendations (k = 23), which were revised via a consensus meeting with researchers, knowledge users from CBOs, and families of CYD. Broader consultation with CBO knowledge users informed the final recommendations (k = 5) that fit within the following categories: (a) language and definitions, (b) program information, (c) benefits of PA, (d) barriers to PA, and (e) PA ideas and self-regulation tools. CBOs are

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encouraged to consider these recommendations when developing PA information for families of CYD. Future research will focus on the development of knowledge products to disseminate the recommendations to CBOs and support implementation.

**Keywords**: health promotion, messaging, AGREE II, knowledge mobilization

Physical activity (PA; i.e., sport, exercise, and active play) is a powerful tool to foster the inclusion and well-being of children and youth with disabilities (CYD; McKinnon et al., 2022). Through regular PA engagement, CYD can experience enhanced physical, psychological, emotional, social, and intellectual development (Martin, 2013; Martin Ginis et al., 2016; Smith et al., 2022). Despite these benefits, few CYD meet PA guidelines (Arbour-Nicitopoulos et al., 2021; Statistics Canada, 2021), and PA participation rates are significantly lower among CYD than among children and youth without disabilities (Case et al., 2020; King et al., 2007; Martin Ginis et al., 2021; Rimmer & Rowland, 2008).

PA promotion for CYD is a critical area for research and practice (Murphy & Carbone, 2008). One strategy for promoting PA among CYD is through the development and dissemination of PA information (e.g., motivational statements, facts, statistics, other informational resources about PA; Latimer et al., 2010) targeting parents and caregivers of CYD (hereafter families of CYD; Bauman et al., 2006). Many community-based organizations (CBOs; e.g., recreation providers, PA promotion agencies, children and youth service providers) promote PA to children and youth through the dissemination of PA information targeting families. The strategic dissemination of PA information has been found to increase parent support for PA and facilitate PA participation among children and youth without disabilities (Gainforth et al., 2016; Jarvis et al., 2014; Price et al., 2008). However, PA information targeting families of children and youth without disabilities may not be suitable for families of CYD (Bassett-Gunter et al., 2017). Families of CYD face unique experiences that result in distinct concerns and decisions about PA participation (Bassett-Gunter et al., 2017; Handler et al., 2019; Natkunam et al., 2020). Relatedly, families of CYD have highlighted unique PA information needs, such as raised awareness regarding the positive outcomes of PA that are specific to CYD (Gorter et al., 2016; Jaarsma et al., 2019; Larocca et al., 2021) and improved access to information about PA programs and opportunities (Natkunam et al., 2020). Indeed, a lack of targeted PA information is a barrier to providing support for PA participation and a source of frustration among families of CYD (Antle et al., 2008; Bassett-Gunter et al., 2017; Handler et al., 2019; Jaarsma et al., 2019; Larocca et al., 2021; Natkunam et al., 2020; Peers et al., 2020; Smith & Wightman, 2021; Tristani et al., 2017). PA information must be targeted to meet the unique needs of families of CYD to facilitate support and, ultimately, increase PA participation among CYD (Bassett-Gunter et al., 2017; Larocca et al., 2021).

Researchers have begun to expand an understanding of strategies to inform the development of optimally effective PA information targeting families of CYD. For example, research has been conducted among parents of CYD to understand: (a) their PA information needs and preferences (Bassett-Gunter et al., 2017), (b) their efforts to promote health for their CYD (Antle et al., 2008), (c) their
perceptions of the Canadian 24-Hour Movement Guidelines (Handler et al., 2019),
(d) the effectiveness of various PA information strategies for motivating their
support for PA (Tanna et al., 2017), and (e) the content of existing targeted online
PA information (Tristani et al., 2017). Researchers have also evaluated optimiza-
tion of online PA information targeting families of CYD (Natkunam et al., 2020),
explored strategies for optimal PA information access (Jaarsma et al., 2019), and
identified key theoretical constructs to target in developing effective PA informa-
tion for families of CYD (Bassett-Gunter et al., 2020). This literature has been
summarized in a systematic scoping review (Larocca et al., 2021).

Although this increased research focus on effective strategies for developing
targeted PA information for families of CYD is encouraging, there is a need to
strategically mobilize this knowledge to CBOs that promote PA and have
opportunities to communicate with families of CYD. Filling this gap is critical
given that families of CYD search for PA information from credible and reliable
CBOs (Bassett-Gunter et al., 2017; Jaarsma et al., 2019; Larocca et al., 2021;
Natkunam et al., 2020; Smith & Wightman, 2021). Unfortunately, many CBOs
lack the knowledge, skills, and direction required to develop and disseminate PA
information that meets the needs of families of CYD (Bassett-Gunter et al., 2019;
Martin Ginis et al., 2016). In fact, some CBOs may unintentionally share ableist PA
information that perpetuates discrimination against people with disabilities (Smith
et al., 2021). Evidence-informed recommendations may be of great value in
providing CBOs with guidance for developing targeted PA information that is
inclusive and specifically meets the needs of families of CYD. Such recommenda-
tions can work to consolidate and disseminate research evidence that will inform
decision making and bridge the research to practice gap (Brouwers et al., 2010;
Latimer-Cheung, Martin Ginis, et al., 2013). No such evidence-informed recom-
mandations exist to guide CBOs in their efforts to promote PA among CYD. A
series of smaller projects has contributed to a larger project with the overarching
goal to establish evidence-informed recommendations for developing PA infor-
mation targeting families of CYD. This specific paper describes the process of
establishing the recommendations through “co-production” between the research-
ers and knowledge users (i.e., CBOs that promote PA for CYD and families of
CYD) such that the practical impact of the recommendations is paramount
throughout the development process to ensure implementation and acceptability
of the recommendations beyond the research realm (Jaarsma et al., 2019; Reed,
2016).

Method

A modified Appraisal of Guidelines, Research and Evaluation II (AGREE II)
Instrument (Brouwers et al., 2010) was used to guide the process of establishing the
recommendations. The AGREE II is the international gold standard for guideline
assessment, development, and reporting (Brouwers et al., 2010). Although the
AGREE II is traditionally used in establishing clinical practice guidelines, it has
been used to guide the process of constructing recommendations for developing
and disseminating information to supplement the Canadian Physical Activity
Guidelines (Latimer-Cheung, Rhodes, et al., 2013), the 24-Hour Movement


Guidelines for Children and Youth and Adults (Faught et al., 2020), and PA knowledge products for people with disabilities (Arbour-Nicitopoulos et al., 2013). Guided by previous research (Arbour-Nicitopoulos et al., 2013; Latimer-Cheung, Rhodes, et al., 2013), the 23-item AGREE II Instrument (Brouwers et al., 2010) was modified to fit PA promotion practice and provided an appropriate tool to guide the rigorous and transparent development of recommendations through consideration of the following six domains: (a) scope and purpose, (b) stakeholder involvement, (c) rigor of development, (d) clarity of presentation, (e) applicability, and (f) editorial independence. For a detailed description of the AGREE II items, see Supplementary Material S1 (available online). The modified AGREE II items were integrated into the recommendation development process, which took place via three phases described next. See Figure 1 for an overview.

**Phase 1**

The objectives, target audience, and end users of the recommendations, as well as the practical questions addressed by the recommendations, were drafted a priori by the research team. The research team then used systematic methods to identify evidence to inform the recommendations. Specifically, a systematic scoping review (Larocca et al., 2021) was conducted to identify research regarding the development of PA information targeting families, including families of CYD. Twenty-eight studies were identified regarding PA information targeting families in general, and six studies were identified regarding families of CYD. Of note, the purpose of the systematic scoping review was not explicitly to inform recommendations but, rather, to synthesize literature regarding PA information

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**Figure 1** — Overview of recommendation development process.
and messaging targeting families. As such, additional formative research was identified through a search of the broader messaging literature, which yielded an additional 18 relevant studies. Evidence was considered for this project if: (a) the focus of the evidence included PA information development strategies, PA information dissemination, or PA information needs and preferences; (b) families were the target population (including families of CYD); (c) the age of the children and youth was up to 24 (United Nations, n.d.); (d) the research was published after 2000; and (e) the research was available in English. Research regarding the development of PA messages targeting all families (i.e., not just families of CYD) was included given the generalizability of some aspects of messaging to families of children and youth with and without disabilities. The following themes emerged from the evidence and informed the development of the draft recommendations: (a) PA language and concept clarification, (b) PA program information and awareness, (c) benefits of PA, (d) barriers to PA, (e) behavioral regulation, and (f) PA information dissemination. Further details regarding the research evidence are described by Larocca and colleagues (2021). In line with the AGREE II process (Brouwers et al., 2010), the research team identified the strengths and limitations of the available evidence. Draft recommendations ($k = 23$) that fit within six topic areas were established based on the best available evidence regarding the development of PA information targeting families of CYD.

Phase 2

A 2-day consensus meeting was held with an expert panel of knowledge users from all relevant groups, including researchers, individuals from CBOs, and family members of CYD ($N = 31$). Supplementary Material S2 (available online) details the members of the research team and expert panel. The purpose of the meeting was to (a) gain consensus on the scope and purpose of the recommendations; (b) modify and refine draft recommendations; and (c) discuss barriers, facilitators, and resource implications for recommendation implementation. A multistep process used in previous PA recommendation work in adults with disabilities was applied (Arbour-Nicitopoulos et al., 2013). First, prior to the 2-day meeting, the panel participants reviewed the research evidence collated during Phase 1. Next, a summary of key points from the evidence base and draft recommendations were presented to the expert panel at the beginning of the 2-day meeting. Expert panel members then engaged in structured working groups to discuss the evidence while considering their own lived and professional experiences in working within the PA and disability communities. As a group, the expert panel members condensed and revised the original draft recommendations into a series of penultimate recommendations ($k = 7$). The expert panel then discussed additional considerations aligning with the AGREE II process, including practical and resource implications of the recommendations, strategies to disseminate and implement, and facilitators and barriers of implementation.

As required by the AGREE II process, the following steps were taken to ensure that editorial independence was intact and no conflicts of interest were present during the recommendation development process. First, representatives from the funding agencies did not participate in any phase of the development process. Second, all members of the research team and expert panel were asked to
declare any potential conflicts of interest. Four expert panel members noted their involvement in related research and that they had funding from the agency that supported the 2-day consensus meeting. However, the team concluded that none of these considerations interfered with the recommendation development process.

**Phase 3**

Additional knowledge users (i.e., outside the expert panel members) from PA and disability CBOs were engaged in Phase 3. Specifically, Canadian knowledge users ($N = 229$) were contacted to provide feedback on the refined recommendations developed through Phase 2.

Knowledge users from CBOs completed an online survey developed based on previous research measuring knowledge users’ evaluations of messaging to accompany PA guidelines (Faught et al., 2020). The questionnaire contained Likert-style and open response questions, which aligned with the AGREE II domains (Brouwers et al., 2010) around recommendation clarity, importance, and ease of implementation. The questionnaire also included open-ended text box questions to allow for knowledge users to provide feedback about each specific recommendation as well as the recommendations overall. The final sample ($N = 53$) included knowledge users from diverse sectors (e.g., recreation, disability, health promotion, academia, health care). Most knowledge users identified as female (72%) and worked in Ontario (71%). Knowledge user feedback was incorporated to establish the final recommendations ($k = 5$).

**Results**

**Recommendations**

Using the best available evidence and following the systematic approach outlined by the AGREE II Instrument (Brouwers et al., 2010), the following final recommendations were established.

It was recommended that CBOs provide families of CYD with

a. Clear and consistent definitions of terms such as PA, adapted, accessible, integrated, and inclusive;

b. Clear and detailed information about your PA programs, staff, and facilities;

c. Information about the specific benefits of supporting PA for CYD;

d. Information regarding strategies to help address barriers to PA participation among CYD; and

e. Ideas, tools, and resources to support PA participation, goal setting, planning, and progress tracking.

**Scope and Purpose of the Recommendations**

As determined through the AGREE II process, the overall objectives of the recommendations were to assist CBOs in developing evidence-based PA information targeting families of CYD. The practical questions covered by the recommendations included: (a) what PA information should CBOs target to
families of CYD? and (b) what motivational PA messages should CBOs target to families of CYD? The target users of the recommendations included any CBO that would be likely to deliver PA information and messages, including but not limited to CBOs that: (a) promote and support PA among CYD, (b) support PA in general but wish to be inclusive (or more inclusive) in providing information and motivational messages to families, and (c) support CYD and wish to promote PA.

Strengths and Limitations of Evidence Used to Inform Recommendations

Consistent with the AGREE II methodology, the research team and expert panel considered the strengths and limitations of the available evidence used to inform the recommendations. Key strengths included: (a) rigorous scoping review methodology to identify comprehensive evidence and (b) evidence drawn from a mix of qualitative and quantitative research studies. Key limitations included: (a) limited research specifically targeting families of CYD and (b) varying disability groups included in research without certainty that findings are generalizable to families of all CYD.

Benefits and Practical Concerns Regarding the Recommendations

Benefits and practical concerns regarding the recommendations were identified by the expert panel discussions (Phase 2) and knowledge user survey data (Phase 3). Benefits of the recommendations included: (a) the recommendations supported CBOs in providing targeted PA information to families of CYD, (b) targeted information was intended to aid families in supporting PA among CYD, (c) the recommendations would guide the development of tools and resources to allow for enhanced PA information sharing targeting families of CYD, and (d) the recommendations may bring increased awareness to the need for targeted PA information and support for families of CYD. Practical concerns regarding the recommendations included: (a) unmanageable demand may increase among community-based programs offering PA for CYD, (b) stand-alone recommendations (without tools to support implementation) may be of limited value to CBOs, (c) CBOs may require human or financial resources to support recommendation implementation, and (d) targeted PA information may be interpreted as an increased burden on families of CYD.

Clarity of Presentation

As highlighted in Table 1, knowledge users (N = 53) confirmed that recommendations were generally clear, well stated, concise, and important. Knowledge user qualitative feedback was coded to identify the following key themes regarding suggestions to improve the clarity of the recommendations: (a) simplifying the language used, (b) clarifying the target audience (i.e., the recommendations target CBOs rather than families of CYD directly), and (c) combining recommendations that contained redundant content. Knowledge user feedback was addressed to further refine and ultimately establish the final recommendations (k = 5).
Applicability, Implementation Barriers and Facilitators, and Resource Implications

Applicability, implementation barriers and facilitators, and resource implications were identified through expert panel discussion (Phase 2) and feedback from knowledge user survey data (Phase 3). The applicability of the seven penultimate recommendations was ranked highly by knowledge users (N = 53). Additional data regarding knowledge users’ perceptions of applicability, barriers, and facilitators are found in Table 2. Knowledge users provided favorable ratings with regard to the usefulness of the recommendations, the ease of use, and benefits and costs of implementing the recommendations. Modal data

Table 1  Knowledge User Feedback Regarding Clarity and Importance of Recommendations

<table>
<thead>
<tr>
<th>Item</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The recommendation is clearly stated.</td>
<td>4.60 (0.38)</td>
</tr>
<tr>
<td>I strongly (dis)agree with how the recommendation is stated.</td>
<td>4.50 (0.45)</td>
</tr>
<tr>
<td>The recommendation uses concise language.</td>
<td>4.57 (0.45)</td>
</tr>
<tr>
<td>How important is the recommendation to your organization?</td>
<td>4.42 (0.52)</td>
</tr>
</tbody>
</table>

Note. The scores reported are the mean for each item across all recommendations. At the time of the knowledge user feedback survey (Phase 3), there were seven recommendations. All items were rated on a scale from 1 to 5 with higher scores indicating more favorable responses.

Table 2  Knowledge User Feedback Regarding Applicability, Barriers and Facilitators of Dissemination and Implementation, and Resource Implications

<table>
<thead>
<tr>
<th>Item</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The recommendations are appropriate for implementation by organizations that work to promote, support, or deliver PA for CYD.</td>
<td>4.59 (0.70)</td>
</tr>
<tr>
<td>How often would your organization use these recommendations?</td>
<td>3.88 (0.74)</td>
</tr>
<tr>
<td>How easy or difficult would you find using these recommendations?</td>
<td>3.79 (0.85)</td>
</tr>
<tr>
<td>In comparison with other PA promotion recommendations, these</td>
<td>3.72 (0.73)</td>
</tr>
<tr>
<td>recommendations are much more useful.</td>
<td></td>
</tr>
<tr>
<td>The costs for you or your organization to implement these</td>
<td>4.30 (0.95)</td>
</tr>
<tr>
<td>recommendations are likely to be small or negligible.</td>
<td></td>
</tr>
<tr>
<td>The benefits of following these recommendations are likely to</td>
<td>4.48 (0.81)</td>
</tr>
<tr>
<td>outweigh the costs (e.g., time, financial, opportunity).</td>
<td></td>
</tr>
<tr>
<td>Following these recommendations is likely to benefit all families</td>
<td>3.81 (1.31)</td>
</tr>
<tr>
<td>of CYD equally (e.g., irrespective of type of disability, race,</td>
<td></td>
</tr>
<tr>
<td>ethnicity, age, socioeconomic status).</td>
<td></td>
</tr>
</tbody>
</table>

Note. All items were rated on a scale from 1 to 5 with higher scores indicating more favorable responses. CYD = children and youth with disabilities; PA = physical activity.
demonstrated that knowledge users most commonly ranked recommendations two (“provide clear and detailed information about your programs, staff, and facilities”; \( n = 10 \)), four (“provide information and messages regarding strategies to overcome barriers to PA participation among CYD”; \( n = 9 \)), and three (“provide information about the benefits of PA for CYD”; \( n = 8 \)) as most important. There was considerable variability in the ranking of the recommendations based on the sector from which the knowledge users self-identified. For example, sport, PA, and recreation providers (\( n = 8 \)) and knowledge users from the disability sector (\( n = 6 \)) most commonly ranked recommendation two as most important, whereas knowledge users from the PA and health promotion sector (\( n = 5 \)) and research realm (\( n = 3 \)) most commonly ranked this recommendation as least important. In addition, sport, PA, and recreation providers (\( n = 7 \)) and knowledge users from the health care (\( n = 4 \)) and disability (\( n = 4 \)) sectors most commonly ranked recommendation one (“provide clear and consistent definitions of terms that may be unclear to parents: PA, adapted, accessible, integrated, and inclusive”) as least important.

The following were identified as key barriers to recommendation implementation: (a) the challenges around CBO awareness, (b) the need for extra training to support implementation, (c) the need for tools and resources to support implementation, and (d) the lack of consistency around relevancy (i.e., not all recommendations are relevant to all CBOs). The following were identified as key facilitators for recommendation implementation: (a) the identification of champions within CBOs, (b) the use of multiple dissemination modalities, and (c) the creation of tools and resources to support implementation (e.g., social media packages, template messages, language guides). Regarding resource implications, it was identified that additional resources were needed to develop tools to support CBOs in implementation. However, knowledge users indicated that once appropriate implementation tools and resources were in place, minimal costs would be incurred at the CBO level. To support the implementation of the recommendations, a preamble was developed (Supplementary Material S3 [available online]) with instructions for recommendation usage. The development of additional tools to support implementation is underway.

**Discussion**

**Overview**

The purpose of the current study was to establish evidence-informed recommendations for developing PA information targeting families of CYD. This paper serves to describe the process of establishing the recommendations. Following an evidence-based, transparent, and rigorous development process using the AGREE II Instrument (Brouwers et al., 2010), five recommendations were put forward to guide CBOs in developing PA information targeting families of CYD. These recommendations will be useful in guiding CBOs that wish to promote and support PA for CYD but often lack the knowledge and expertise required for developing targeted PA information (Bassett-Gunter et al., 2019). The need for such guidance was identified not only through the research literature but also through the feedback of CBO knowledge users who participated in this process.
Improved PA information targeting families of CYD will mitigate an important barrier to PA participation among CYD (Jaarsma et al., 2019). In this section, the recommendations are discussed within the context of the existing literature, the strengths and limitations of the recommendation development process are highlighted, and next steps are considered within the context of these strengths and limitations.

The Recommendations

The first two recommendations align with key PA information concerns raised by family members of CYD. For example, a lack of clarity regarding the use of various terms related to PA (e.g., adapted, inclusive, accessible, moderate-to-vigorous intensity) is a source of frustration for families of CYD when seeking PA information (Bassett-Gunter et al., 2017; Natkunam et al., 2020). The inconsistent and vague use of these terms makes it difficult for families of CYD to understand the parameters of various PA communications from CBOs (e.g., PA guidelines and PA program descriptions; Faulkner et al., 2016). Recommendation 1 highlights the need for clarity and consistency of the language and definitions used within PA promotion materials. Additional research is necessary to gain consensus regarding optimally effective definitions and terms that meet parents’ needs. Another related source of frustration for families is insufficient details regarding PA programs (Natkunam et al., 2020; Rimmer & Rowland, 2008). Recommendation 2 highlights the need for CBOs to provide thorough and specific information regarding PA programs such that families of CYD can determine the suitability of any given program for meeting their child’s needs (Peers et al., 2020). In the case where a CBO does not provide targeted PA programming for CYD, it would be valuable to provide information regarding other organizations that run PA programs for CYD and details about how to get involved (Peers et al., 2020). The remaining recommendations align with the following key theoretical predictors of support for PA among families of CYD: (a) attitudes, (b) perceived behavioral control, and (c) behavioral regulation (Bassett-Gunter et al., 2020; Jeong et al., 2015). Families of CYD have identified a lack of targeted information that speaks directly to PA benefits and barriers specific to CYD (Bassett-Gunter et al., 2017). Recommendations 3 and 4 highlight the need to provide families of CYD with information about the specific benefits (targeting attitudes) and barriers (targeting perceived behavioral control) regarding PA for CYD and parent support for PA. Targeting salient, population-specific beliefs is key to evoking perceptions of relevancy and subsequent motivation to provide support for PA (Price et al., 2008). Finally, families of CYD have expressed a need for information and resources that support their behavioral regulation strategies, such as planning and goal setting (Bassett-Gunter et al., 2017), which has been found to be the strongest correlate of support for PA among parents of CYD (Bassett-Gunter et al., 2020; Tanna et al., 2017). Recommendation 5 addresses this need through encouraging CBOs to provide families of CYD with tools to facilitate behavioral regulation (e.g., planning, goal setting, monitoring) such that families can support their children’s PA. Additional research to inform optimally effective tools for parents of CYD is warranted.
Strengths and Limitations of the Recommendation Development

A strength of this overarching project is that the recommendations were developed based on the best existing evidence regarding effective PA messaging strategies and the PA information needs of families of CYD (Larocca et al., 2021). The evidence-based, rigorous, and transparent development process (i.e., AGREE II approach; Brouwers et al., 2010) ensures that when implemented, the recommendations should be optimally effective at meeting the PA information needs of families and, ultimately, enhance support for PA and facilitate PA among CYD. An additional strength was the cocreation of the recommendations via partnership between the researchers and knowledge users from CBOs as well as family members of CYD. This approach ensured that the recommendations were evidence based but also pragmatically meaningful (Greenhalgh et al., 2016) and positioned for optimal dissemination and implementation within relevant CBOs (Tomasone et al., 2020). This work and development process can provide a blueprint to inform other research regarding the systematic cocreation of guidelines and recommendations in the PA domain within the context of the AGREE II instrument (Brouwers et al., 2010).

Although the recommendation development process had many strengths, it is necessary to recognize the limitations. First, the quality of the evidence used to inform the recommendations was not systematically assessed. Second, although several team members had experience with the AGREE II process (see Supplementary Material S2 [available online]; Brouwers et al., 2010), an AGREE II methodologist did not score the protocol. Third, consistent with other PA messaging guidelines (i.e., Latimer-Cheung, Rhodes, et al., 2013), the recommendations do not have direct health impacts given that they target intermediaries (i.e., CBOs that promote PA for CYD). It is intended that effective implementation of the recommendations will lead to indirect health benefits via improved PA promotion and subsequent parent PA support and increased PA among CYD. However, concerns around the feasibility of implementing the recommendations were a key limitation noted by CBO knowledge users. Specifically, although knowledge users identified the recommendations as important within their organizations’ PA promotion practices, they also identified a critical need for tools and resources to support implementation. Indeed, practitioners from CBOs have struggled with uptake and application of previous PA messaging recommendations due to a lack of support around feasible and sustainable implementation strategies (Latimer-Cheung, Rhodes, et al., 2013). In particular, the varying capacity of CBOs could serve as a challenge in facilitating implementation. For example, large and well-supported CBOs may have capacity to implement the recommendations with relative ease, whereas small, grassroots CBOs may have poor capacity due to limited human and financial resources. Likewise, the heterogeneity of the needs of the CYD community could pose a challenge for implementing the recommendations. For example, the needs of families of children with physical disabilities may differ vastly from those of families of children with intellectual disabilities. As such, it is important that continued efforts are made for the coproduction of resources that facilitate dissemination and implementation in a way that is feasible and allows for tailoring to the needs of any given CBO.
Next Steps: Dissemination and Implementation of Recommendations

Existing processes for the dissemination and implementation of PA knowledge tools should guide this work (cf. Tomasone et al., 2020). For example, the following factors should be considered to enhance the likelihood that the recommendations are disseminated and implemented to impact practice: (a) tailoring the recommendations and resources to the needs of specific CBOs, (b) addressing barriers to recommendation implementation, and (c) identifying appropriate implementation intervention strategies (Tabak et al., 2012). As highlighted from CBOs in the current study and consistent with previous research (Glowacki et al., 2019), the identification of champions within CBOs may be valuable to facilitate recommendation implementation. These recommendations can serve as a research agenda for future work to evaluate strategies for targeting each of the recommendations as well as developing and evaluating resources to support recommendation implementation within CBOs. Existing tools to support the development of effective PA messages may be valuable in helping CBOs implement the recommendations. For example, the PA messaging framework (Williamson et al., 2021) may be helpful to support CBOs wishing to develop PA messages targeting Recommendation 3 (i.e., targeted information about the benefits of PA for CYD). The PA messaging framework could assist CBOs in determining the specific (a) intended audience (e.g., families of young children with developmental disabilities), (b) content and aim of the messages (e.g., the most relevant benefits of PA for young children with developmental disabilities), (c) strategies for constructing the messages (e.g., gain-framed messages with informal tone), and (d) optimal delivery format (e.g., infographics, social media posts with targeted images). Such existing tools, as well as forthcoming evidence-based resources, should be considered in partnership with CBOs to determine the most effective strategies to facilitate the implementation of the recommendations in such a manner that meets the capacity and tailoring needs of varying CBOs.

Conclusion

Through a systematic approach and partnership with knowledge users from CBOs and families of CYD, this overarching project led to the coproduction of evidence-based recommendations for the development of PA information targeting families of CYD. This paper describes in detail the process of developing the recommendations. The recommendations themselves highlight the need for CBOs to provide families of CYD with (a) clarity around PA language and definitions, (b) detailed program information, (c) information about the benefits of supporting PA for CYD, (d) strategies to address barriers to PA, and (e) ideas and tools to plan and support PA. This work addresses the call for more inclusive and targeted PA information for people with disabilities (Jaarsma et al., 2019; Smith et al., 2021) and provides practical direction for CBOs promoting and supporting PA for CYD. Next steps include research to (a) evaluate the impact of the recommendations within CBOs’ PA information sharing practices, (b) identify evidenced-based strategies for disseminating the recommendations to CBOs, and (c) inform and evaluate
implementation tools to facilitate uptake of the recommendations across broad and diverse CBOs.

**Note**

1. Although the AGREE II guide uses the term “stakeholder,” the authors have decided to use the term “knowledge users” throughout the paper in consideration of the colonial implications of the term “stakeholder.”

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**References**


