



REPORT OF THE STRATEGIC RESEARCH COMMITTEE 2020 CANADIAN PHYSIOTHERAPY ASSOCIATION

Respectfully Submitted to the President of the Canadian Physiotherapy Association

For the Committee,

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EXECUTIVE SUMMARY

Introduction:

In February 2020, the President of the CPA convened a meeting of academic physiotherapy researchers who had been members of the 2015 Strategic Research Committee. Unfortunately, due to a number of converging factors, there had been no follow-up to the first meeting of this committee. In 2020 the President wished to gauge their interest in working once again with the CPA to improve the integration of research in the CPA's vision, mission and values. The President obtained an enthusiastic positive response, and decided to create a Strategic Research Committee (SRC) 2020. Eighteen academic researchers, three clinicians and the CPA's Director of Policy and Research accepted the President's invitation to join the SRC 2020. The President asked Drs. Dina Brooks, Carol Richards and David Walton to be co-chairs and worked with them and others to outline a mandate for the SRC 2020. The mandate was ratified by the CPA's Board of Directors at their March 2020 meeting. *The main purpose of the SRC 2020 was to provide guidance to the President and the Board of Directors of CPA with regard to its research vision and implementation of that vision for research in Physiotherapy.* One of the first tasks was to examine how the CPA Congress, the Physiotherapy Foundation of Canada (PFC), the peer-reviewed scientific journal *Physiotherapy Canada*, and other existing research-focused resources could contribute to this strategic direction.

Process:

This final report is based on the sum of the information gathered from discussions in a virtual meeting with all SRC members, paragraphs submitted by each member on their interpretation of the mandate following this discussion, four subcommittee reports on different aspects of the mandate, and discussion among the co-chairs. There were several drafts of the report before it was submitted to all committee members for approval. The final draft was submitted to the President of the CPA prior to a discussion with the co-chairs on November 18th, 2020.

Main Findings and Recommendations:

1. The President and the Board of Directors of the CPA have the support of academic physiotherapy researchers

Perhaps the most important result of the work of the SRC 2020 is the interest and support manifested by the physiotherapy academic researchers. Researchers from 11 Canadian universities and a past President of the CPA, now affiliated with an Australian university, were willing to devote many hours to enable achievement of this committee's mandate. It seems reasonable to assume that the majority of other physiotherapists who are researchers in our Canadian Universities will also be willing to engage in a strategic plan that aims to increase the promotion of research in the CPA's vision, mission and values.

2. The main role of the CPA in research should be in the promotion of knowledge translation (KT) and knowledge mobilization (KM)

Members of the SRC strongly recommend that the CPA should focus on KT and KM to enhance the integration of research evidence in clinical practice. They acknowledged, however, that KT/KM should be a shared responsibility between knowledge generators and knowledge users. They emphasized the importance of both recognizing the contribution of physiotherapy researchers as well as their responsibilities in ensuring that new knowledge gets into the hands of those who can implement it. The CPA should also consider creating a full or a part-time position in the CPA Office to recruit a researcher specialized in KT.

Suggestions included:

- **Be a Knowledge Broker:** That the CPA focus on developing a network to serve as the key knowledge broker for physiotherapy research in Canada to foster a culture of multi-stakeholder collaboration, guided by current best practices from implementation science. To encourage the uptake of the scientific bases of physiotherapy, the CPA could have a role in emphasizing the value of engaging with new evidence by providing tools and training for critical appraisal of evidence, providing access to relevant research publications, and mechanisms for tracking both the research reviewed and any change in clinical practice or outcomes as a result.
- **Implement New and Innovative Forums:** Leveraging virtual platforms for national physiotherapy virtual research rounds that highlight the work of physiotherapist researchers and other researchers contributing to physiotherapy-related science to help advance the profession, and ensuring that access to such a KT platform is part of the services linked to CPA membership.
- **Build a Research Community:** Development and maintenance of a database of Canadian PT researchers, practice experts and clinical specialists. Such a database would enhance the CPA's role in bringing together the physiotherapy community, including the approximately 55% of PTs in Canada (based on 2019 CIHI data and CPA records) who are not CPA members. The CPA could also play a key role in connecting the public, other health providers, clinicians, and researchers, by creating a referral system in tandem with the national database. Such a referral system could be accessed by other CPA members, and also by the media and policy makers/government representatives, to facilitate access to experts and enhance quality evidence-based care.

3. The Physiotherapy Foundation of Canada (PFC) as a Catalyst for Physiotherapy Innovation and KT/KM:

The SRC recognizes that the PFC has an important role to play in the CPA's research vision and that fundraising efforts appear to have increased in recent years. However, the SRC suggests that the PFC requires a revised business model, clearly identified research priorities and funding partnerships if it is to act as a research catalyst. The SRC suggests the following to enable the PFC to play a more important role in the CPA's future research vision:

- **Develop a Business Model:** The SRC strongly recommends that the CPA develop a more effective business model for the PFC to ensure a more stable funding base and to reduce administrative costs to less than 20% of funds accrued.
- **Research Levy:** Most members of the SRC were strongly in favour of levying a \$10-15 mandatory fee for research from each CPA member at the time of annual membership renewal to ensure a stable funding base. The SRC recommends that the CPA and PFC explore with CPA's Divisions how funds belonging to the Divisions could become part of the PFC's funding base.
- **Develop Research Priorities:** An impediment to partnership funding is the lack of research priorities that are essential for the development of partnerships and fund raising in general. If the PFC is to be a catalyst in the promotion of research in line with the CPA's foci, funding must be aligned with research priorities. The CPA needs guidance from experts to set research priorities that meet the needs not only of the CPA and its Divisions but also of its scientists, clinicians and the patient population. Setting priorities is a complex process that involves obtaining the opinions of key stakeholders such as: clinicians, patients, researchers, educators, regulators, insurance agencies and funders by various methods. The establishment of research priorities will enable partnerships with funding agencies such as the Canadian Institutes of Health Research (CIHR), the Arthritis Society and the Heart and Stroke Foundation of Canada and help raise the profile of physiotherapy science and increase the participation of physiotherapy researchers on peer-reviewed evaluation panels.
- **Maintain Interim Status Quo:** Until the CPA's and PFC's research priorities are established, the SRC suggests that the same types of PFC funding as in the past be maintained/enhanced. These include scholarships (master's/PhD students) and small project grant funding. Project grants include catalyst, KT and cost-effectiveness projects preferably with clinical applicability. The inclusion of clinician partnerships in all grants should be strongly encouraged. The SRC also recommends that directives related to obtaining each type of scholarship or grant be firmly applied and that recipients of PFC awards be strongly encouraged to submit their results for publication in *Physiotherapy Canada*.

4. Role of the National CPA Congress in the Research Vision

Members of the SRC acknowledged the value of the CPA National Congress and some of the strides taken recently to make it a valuable event for attendees, but also agreed that the present model could be improved to enhance its role in enabling the CPA's strategic research vision. SRC members do not believe that the CPA Congress is viewed as a "must attend" annual event by Canadian physiotherapy clinicians or academics, in contrast to examples of other very successful congresses. They discussed five broad themes that need to be addressed if Congress is to fulfill its role in research promotion and KT:

- **Redefine Congress:** The first is to clarify its purpose and value; why have a congress, what are its goals, to whom is it targeted, what metrics will define its success? Will the congress content impact on physiotherapy practice and advance PT research?

- **Integrate PT Science with Clinical Practice:** Second, is the need to optimize access by increasing Congress visibility of content and optimizing benefit to cost of attendance (either reducing cost or increasing benefit). The SRC noted that Congress should showcase Canadian leaders in PT science and clinical practice, not only to increase the visibility of the excellent PT researchers and clinicians we have in Canada, but also as a means of increasing visibility of the whole congress and move the field forward. Lessons learned in the present pandemic and the organization of virtual congresses will no doubt impact the access, visibility and costs of future congresses.
- **Collaborate with Partners:** Third, is the need to develop new strategies to improve linkages and partnerships such as:
 - having more joint meetings with Provincial Branches (CPA-Provincial Branch partnered congress),
 - providing space and promotion of the CPA Congress as a place for universities to hold alumni events or other recognitions,
 - organizing some CPA Congresses or events in collaboration with local PT Department/School optimizing sponsorship relationships to offset costs of attending.
- **Make Congress Engaging:** The fourth theme is the importance of finding ways to shift the collective view of CPA Congress as something to which one *should* go or *have to* go, to something to which one *wants* to go. Suggestions included surveys to inquire on motivations related to congress attendance, various types of congress programming to meet the interests of different groups and examining how other successful congresses are organized.
- **Involve Stakeholders in the Planning:** Lastly, the need to include various stakeholders on the congress planning committee (PT scientists, educators, clinicians, PT graduate students, funders and patients) was noted. The importance of equity, diversity, inclusiveness and belonging arose as an important consideration in planning and delivery of Congress programming.

5. The Role of the *Physiotherapy Canada* Journal in the Research Vision

The SRC acknowledges that the many improvements over recent years have resulted in the recognition of *Physiotherapy Canada* as a good journal dedicated to physiotherapy. To ensure, however, that *Physiotherapy Canada* continues to be an integral part of the CPA's research vision, the SRC has three recommendations:

- **Support *Physiotherapy Canada*:** The CPA should continue to support and strengthen *Physiotherapy Canada*. In addition, *Physiotherapy Canada* should continue to be at arms length from CPA, and the editor and editorial board continue to have control over the scientific content of the journal.
- **Focus on high quality scientific articles:** The focus of the journal should be on providing high-quality scientific articles to guide evidence-based practice, supporting both clinicians and scientists. It was noted that summaries to help with knowledge translation and special series were popular with clinicians and should be continued. To encourage the publication of high

quality research, the SRC suggests the need to find ways to engage the physiotherapy research community and University programs. For example, receipt of PFC grants could require submission of results for publication in the Journal. Likewise, MSc physiotherapy students in all Canadian universities who have conducted robust research studies should be encouraged to submit their results for publication in the Journal.

- **Celebrate our Science:** Maintenance and even an increase in the number of Silver Quill awards or the creation of other awards is suggested.
- **Promote the Journal:** To promote publications in the journal, use of social media and multimedia products to engage clinicians (e.g. videos, infographics) are suggested. *Physiotherapy Canada* should also continue to seek further indexing and to explore open access options to increase exposure and build our Canadian research profile. In addition, it is important to increase the visibility of the Journal on the CPA website.

6. Creation of a Permanent Research Advisory Committee

To ensure that the recommendations of this SRC 2020 report are explored and potentially implemented, members of SRC 2020 strongly and unanimously recommend that the permanent Research Advisory Council (RAC) proposed to supersede the SRC 2020 in its mandate, be created by the CPA.

The SRC 2020, as part of its mandate, proposes the RAC's mandate and membership below.

- **Mandate of RAC**

The RAC should be a duly constituted committee of the CPA created and in function by the first quarter of 2021. The first priority of the RAC will be to explore the findings of this report and to undertake implementation of recommendations when possible. Also, in the first six months of its creation, the RAC should develop a 3-year strategic research plan based in part on this report, to integrate research into the core vision, mission and values of the CPA. This plan should be accompanied by 6-month SMART (specific, measurable, achievable, relevant and time-limited) accountability goals to measure the committee's progress. The primary role of the RAC will be to bring together the stakeholders in physiotherapy education, research, and practice in Canada to work together to promote the science of physiotherapy and evidence-based practice. Thus, over the years, the RAC will lead the gradual integration of research into the vision, mission, and values of the CPA.

- **Chair of the RAC**

The Chair of the RAC should be a senior Canadian academic physiotherapy researcher who is a Full Professor or an Associate Professor in a Canadian university and a member of the CPA. The Chair of the RAC will report directly to the President of the CPA and hold a voting seat on the CPA Board of Directors. The Chair's mandate should be two years. To provide continuity in decision making about funding priorities, the Chair of the RAC should also chair the PFC Scientific Advisory Council.

- **Membership of RAC**

- The RAC should include at least three Canadian academic physiotherapists who hold faculty positions in a Canadian university (at least two at the Full Professor or Associate Professor level) who are members of the CPA. One of these will be the Chair and one should have expertise in KT/KM.

- The RAC should also include at least two physiotherapy clinicians, one engaged in private practice and the other in a publicly funded position and a physiotherapist clinician -scientist.
- The Chair of the CPA's KT committee should also be a member to facilitate the implementation of the RAC's strategic plan.
- The SRC also suggests the inclusion of a physiotherapist engaged in doctoral or post-doctoral training under the supervision of a physiotherapist-researcher in one of Canada's Universities and an individual who is not a physiotherapist but has pertinent expertise from the academic, government or business worlds (for example a senior administrator in the health or insurance industries).

The above categories of members bring the total membership of the RAC to 9 members. Two-year mandates are suggested. To ensure retention of institutional wisdom during member turnover, staggered mandates should be initiated immediately for the first members, with half (excluding the Chair) given a one-year membership.

- **Transition Period**

Following discussion with the President of the CPA, the co-chairs of the present report have agreed to facilitate the formation of the RAC and encourage implementation of the recommendations. It is not, however, an expectation that they will become members of the RAC.

STRATEGIC RESEARCH COMMITTEE 2020 REPORT

1.0 Introduction:

On February 19th 2020, CPA Board President Viivi Riis convened a virtual meeting with physiotherapy academic researchers from Universities and research centers across Canada to discuss the role of the CPA in the promotion of a Canada-wide physiotherapy research and knowledge mobilization agenda. Most of these researchers were members of a Strategic Research Committee that convened once at the Halifax 2015 Congress. Due to a number of converging factors, however, there had been no follow up to that meeting. Partly in response to an editorial published in *Physiotherapy Canada* (1) that questioned if the CPA was fulfilling its role in the promotion of research, the President was gauging the interest of the academic community in working with the CPA to promote the integration of research into CPA's vision, mission and value statements. Following their enthusiastic response, the President constituted a Strategic Research Committee (SRC) 2020 co-chaired, at the President's request, by Drs. Dina Brooks (McMaster University), Carol Richards (Université Laval) and David Walton (Western University). The President worked with the co-chairs to develop the SRC 2020 mandate and to select the committee members.

2.0 Mandate and Committee Membership:

The mandate (Appendix I) and membership of the SRC 2020 was approved by the CPA's Board of Directors at their March 2020 meeting. The President personally invited the proposed members to join the committee. The SRC 2020 is composed of 18 academic researchers, three clinicians and the CPA's Director of Policy and Research for a total of 22 members. Seventeen are Professors in 11 Canadian universities and one, a Past-President of the CPA, in an Australian university. They have a wealth of research experience and expertise in different domains of rehabilitation, in knowledge translation as well as in research governance. The clinicians, who represent three provinces, have a rich and varied clinical experience in both the public and private sectors as well as leadership and governance experience. The members of the SRC 2020 are presented in Appendix II. The final report was requested in time for the November 2020 Board of Directors meeting.

3.0 Process:

The chairpersons convened a virtual 2-hour meeting of the SRC on May 11, 2020. After welcoming remarks and introduction of the members, the SRC mandate was presented and discussed. The pre-circulated material that aimed to provide context to the discussions was reviewed (a list of this material is included in Appendix III).

After a general discussion, each member was requested to send a paragraph describing their initial comments on the SRC mandate to the co-chairs. Then, acknowledging that in-depth discussions were difficult in a virtual setting with all members present, the SRC committee members were divided into four subcommittees, with a chairperson appointed for each. The subcommittees were assigned the responsibility of delving into one or more items of the SRC mandate. They were requested to meet

virtually as many times as needed to cover the topics and then to provide a written report of their discussions. The presentation of the members in Appendix I gives the constitution and mandates of the subcommittees. Subcommittee reports (as drafts that inform this full report, for context) are presented in Appendix IV.

The main purpose of this report as per the SRC mandate is to: *provide strategic direction(s) for CPA to promote the integration of physiotherapy research and knowledge translation into its Mission, Vision and Values*. One of the first tasks was to examine how the CPA Congress, the Physiotherapy Foundation of Canada (PFC) and the journal *Physiotherapy Canada* and other existing research-focused resources could contribute to this strategic direction. This report is based on the sum of the information gleaned from the main committee meeting, the initial comments of individual members, subcommittee reports and discussions among the members and co-chairs. The report does not adhere strictly to the order of the items in the SRC mandate but rather seeks to integrate the different elements into a cohesive whole.

The preliminary final report, written by the co-chairs was reviewed and adapted based on comments from all the members of the SRC. The revised report was then submitted to the President of the CPA in time for the Board of Director's end of November meeting.

4.0 Highlights of Discussions and Recommendations of Subcommittees

4.1 The Chasm Between Clinicians and Researchers in Physiotherapy and the Role of the CPA

There was unanimous agreement among the SRC members that the CPA should augment its engagement in the promotion of research and knowledge translation (KT) of scientific evidence (5) to support clinical practice. Physiotherapy seeks to be an evidence-based profession with its own underlying basic and clinical science. To flourish, physiotherapy science needs to be nurtured by providing a research framework that includes research priorities, funding for those priorities, increasing research capacity by means of scholarships and fellowships, and the promotion of knowledge translation and implementation (6) of physiotherapy science in the practice of physiotherapy.

It is imperative to consider the different research expertise of the CPA membership. Physiotherapists in Canada hold a blend of undergraduate bachelor's level degrees and graduate professional master's level degrees. Few hold research MSc or PhDs degrees or post-doctoral training. Only a few PTs with advanced academic degrees are practicing physiotherapists or occupy knowledge translation-related positions in physiotherapy practice settings. The SRC acknowledges that formal clinician-scientist roles for physiotherapists in Canada are rare and not often sustained beyond dedicated projects. Most physiotherapy researchers are also university faculty who have developed their own niches of expertise and interact with a community of other researchers. These researchers may or may not include physiotherapy clinicians in their research teams, and in some cases that niche expertise has led some

high-performing academics to identify more with their academic field than physiotherapy more broadly. As seen in disciplines like medicine, the “resurrection” of secure, funded clinician-scientist roles for PTs could serve to close the gap between researchers and clinicians.

The SRC was unable to obtain information on the academic qualifications of the physiotherapists who are members of the CPA, although they are apparently collected. Such information is needed if the CPA is to play a role in bringing clinicians and researchers together. Further, the CPA’s capacity to play a key role in bringing together the physiotherapy community is limited by the fact that 55% of PTs in Canada are not CPA members. (There were 11,174 practising CPA members in 2019 [Source: CPA member database, 2020] and 25,294 PTs licensed to practise in Canada in 2019 (4)). The CPA should examine ways to encourage more Canadian physiotherapists to become members and to collect the research credentials of those who are members.

SRC members believe that many physiotherapists practising in a clinical setting may not be aware of the extent of physiotherapy research in Canada. A trans-Canadian qualitative study in 2017 found disparities between researchers’ priorities and the perceived needs of practising clinicians’ regarding priority knowledge gaps (3). As physiotherapists have transitioned into community-based private practices, members of the clinical community including clinicians, owners, and administrators have increasingly prioritized knowledge and skills related to business practice and entrepreneurship. Employers tend to encourage physiotherapy clinicians to participate in clinical courses rather than pursue engagement with research, and many clinicians feel under-equipped and unsupported to do research (5).

In contrast, researchers are more attuned to the current trends in scientific knowledge and gaps in evidence. At times, there may be pressure on academics to secure grants and publish in high-quality journals, and / or align with the interests of the funders which may be different than the priorities identified by the front-line clinicians. This can lead to the perception that clinicians do not prioritize new science and that researchers do not prioritize the real-world day-to-day needs of clinicians. Strategies to decrease this dichotomy must be addressed.

The CPA could play an important role in bridging the gap between researchers and clinicians. In addition, the CPA can advocate for more funding to investigate the problems faced by frontline clinicians and engage clinicians in identifying these priorities. In addition, researchers are eager to be involved in promoting research and building evidence and in knowledge translation and the CPA could engage them in these activities. Although collaborations between physiotherapy researchers and clinicians exist, they are limited, especially in areas of the country far from universities with physiotherapy programs. On the other hand, many physiotherapy researchers in universities across Canada are actively engaged in collaborative research projects with clinicians and are contributing to building research evidence for physiotherapy interventions. There are also examples of formal and informal programs specialized in promoting knowledge translation to help clinicians integrate best practice recommendations based on research findings in their daily practice.

Given the varied academic profiles of CPA members, and the perceived lack of collaboration in research activities between clinicians and researchers, the SRC discussed ways of integrating research activities and the integration of research findings into the core mission of the CPA. Most CPA members are clinicians and knowledge users rather than researchers who generate knowledge. Consequently, the SRC sees **the primary role of the CPA in research promotion as facilitating knowledge translation (KT) and mobilization (KM)**. The SRC acknowledges that the CPA has created a KT committee and that members of this committee are associated with CPA Divisions to promote KT in different practice areas. The CPA has also demonstrated success with previous KT/KM initiatives over the years with activities such as the “Lunch & Learn series” and more recently their COVID-19 and telerehabilitation content and webinars. Other mechanisms supported by the CPA to facilitate KT include Physiotherapy Canada, National Congress and the PFC but the SRC noted that they lacked common strategic research goals to amplify their impact. The SRC discussed the importance of bidirectional sharing of knowledge and information between clinicians and researchers so that physiotherapy science informs practice and practice informs research priorities and the need to recognize the contribution of physiotherapy researchers and their responsibilities in ensuring that new knowledge gets into the hands of those who can implement it.

4.2 Focusing on KT/KM and Reducing Barriers to Physiotherapy Research, Science and Practice

- **The CPA as a national knowledge broker:**

Knowledge translation is currently practised in pockets of research areas and in some fields, it is both a focus and indicator of research success. Often, researchers build trusting relationships with individual clinicians and community partners and draw on these when they embark on specific goals or projects. This approach is, however, slow, and generally small-scale.

There is a KT committee within the CPA that should function as the liaison among researchers, the President and Board of Directors of the CPA and CPA Operations. The SRC, however, had difficulty obtaining information on this important committee, in part because of its poor visibility on the website. To optimize its important role, this committee should be better integrated and focus both internally and externally.

A knowledge broker could serve as a **connector** across the CPA, connecting members in hospitals, clinics, universities, community partners, industry, and government. Such a position already exists in British Columbia (BC) through funding from the Physiotherapy Association of BC (PABC), the University of BC (UBC), and a provincial health authority. The knowledge broker reaches out, communicates, and builds relationships with physiotherapy stakeholders while simultaneously

gathering ideas and assisting with the translation of research findings (6). Using as an exemplar, a key role of the CPA knowledge broker would be to foster a culture of multi-stakeholder collaboration, guided by current best practices from implementation science and partnered/interprofessional collaboration (7). CPA should consider creating a full or a part-time position in the CPA Office to recruit a researcher specialized in KT.

- **Physiotherapy Science as a Core Professional Competency:**

Clinicians and the provincial professional colleges tend to consider completion of courses as key criteria in maintaining practice competency. Reading and appraising key articles in the respective physiotherapy disciplines is an important, and typically overlooked, aspect of competence. While article reviews and journal clubs are accepted by most regulatory colleges as evidence of continuing competence, such practices do not enjoy the valorization afforded to the plethora of in-person clinical skills workshops offered to physiotherapists. The SRC believes the *CPA could have a role in emphasizing the value of engaging with new research by providing tools and training for critical appraisal and mechanisms for tracking both the research reviews and any change in clinical practice or outcomes as a result*. All accredited programs should ensure that all graduates have a sound education in critical analysis of published articles. The CPA and Universities should consider a closer relationship with respect to continuing education and specialization.

- **National Physiotherapy Research Rounds:**

Regular virtual presentations by rehabilitation researchers, especially on projects that involve partnerships between researchers and practitioners, would highlight emerging physiotherapy science while allowing people to connect on a professional and personal level. Such a program would also provide a ‘value add’ for CPA membership. The successful ‘Lunch and Learn’ type of programming already offered by CPA, often describing issues related to clinical practice, could be a model to follow for this more research-focused purpose.

Access to research updates and presentations varies across the country. For example, in large urban centres, clinicians may be inundated with opportunities to expand their knowledge base, while clinicians in urban regions without a formal academic hub or those based in rural and remote communities, may have more limited opportunities. The technology to deliver content virtually is now widely available and can generally be adapted to meet specific demands of certain topics or workplace resources if necessary.

Leveraging that technology to keep clinicians and researchers similarly connected to a research and practice network will be crucial to future PTs’ professional development and knowledge exchange. *Access to such a KT platform could be part of the services linked to CPA membership to help advance the profession.*

- **Develop and maintain a database of Canadian PT research and practice expertise:**

It is difficult to build capacity and recognition when the researchers and clinical experts are difficult to identify. *The CPA may consider establishing a database of researchers, practice experts, and specialists across Canada.* This would help researchers, clinicians, and the CPA to connect more easily and effectively. The research and specialist practice communities are increasingly large such that meeting routinely face-to-face has become less practical, so it is crucial that we explore other ways of connecting. *This type of database would also help track changes in practice areas, trends in research questions, and emerging PT researchers.* Making our experts more accessible and bringing our PT community of excellence into the spotlight could prove useful for responding to crises, building a human workforce in targeted areas that may be less well resourced, planning for the future, and interacting with government, media and policy makers. There are models for such in other health professions that could be explored.

The CPA could also play a key role in connecting the public, other health providers, clinicians, and researchers together by creating a referral system in tandem with the national database. The referral system would help people access experts especially in niche areas or fields so that patients receive highest quality evidence-based care. Referrals between therapists could enhance and advance practice.

4.3 The PFC as a Catalyst for PT Innovation and KT/KM:

The SRC recommends *the maintenance of the PFC but with important changes in its business model and funding base* if it is to act as a catalyst for PT research and KT/KM to support a new research vision for the CPA. Since its creation in 1983 the PFC has been a symbol of the importance of research for the CPA and has fulfilled an important role that has been limited by funding constraints and the lack of research priorities.

- **Setting Research Priorities:**

If the PFC is to be a catalyst for the promotion of research in line with the CPA's foci, *funding must be aligned with research priorities.* The CPA needs guidance from experts to set research priorities that meet the needs of the CPA, its many Divisions and the well-being of persons requiring physiotherapy treatments. Setting priorities is a complex process that involves obtaining the opinions of key stakeholders such as: clinicians, patients, researchers, educators, regulators, insurance agencies and funders by various methods including questionnaires, surveys, focus groups, direct interviews, 'think tanks' and others.

The current lack of research priorities is seen by the SRC as a major limitation to increasing funding partnerships, be it with the CPA's Divisions or other agencies. Research priorities guide the development of training, research and KT requests for applications and funding allocations. The members of the SRC were conscious of the complexity related to the identification of research priorities in today's rapidly evolving medical science, including science-based principles of

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individualized therapy as it applies to physiotherapy, and the development of strategies to leverage funding from other sources. The consensus was that they could be part of the mandate given to the proposed Research Advisory Council (RAC).

- **Need to Increase the PFC Funding Base:**

The consensus among SRC members was that if the PFC is to fully assume its role, major changes had to be made to its administration, business model and funding base. Members of the SRC heard that there are major problems with the business model of the PFC that must be addressed to ensure its viability and role as a funder. Historically, there have been problems regarding the availability of funds for PFC programs, and fluctuation in funds available from year to year is a barrier to sustainability. The SRC also raised concerns over the modest amount of funding available, even in good years. Many factors contribute to this low level of funding: insufficient and/or inefficient fund-raising efforts, the reticence to levy a mandatory fee to support research from membership renewals, missed opportunities to leverage funds from Divisions and, notably, high staffing and consultant fees.

Most of the SRC members are strongly in favor of levying a \$10-15 mandatory fee for research from each member of the CPA at the time of annual membership renewal to guarantee a reliable yearly funding base. The SRC also learned that the financial relationship between CPA central administration and its Divisions is perceived to be a problem. Currently, funding is earmarked according to the source of the funds (e.g., Acupuncture Division) but there is little input from stakeholders (i.e., clinicians, researchers, clients, caregivers, administrators, trainees, educators) about funding priorities and needs. *The SRC also noted the need to increase funding partnerships with other funding agencies and the need to have research priorities as a prerequisite to establishing funding partnerships and the potential role of the proposed Research Advisory Council (RAC) in this endeavor.* Research priorities will enable partnerships with funding agencies such as the Canadian Institutes of Health Research (CIHR), the Arthritis Society and the Heart and Stroke Foundation of Canada, help raise the profile of physiotherapy science and increase the participation of physiotherapy researchers on peer-reviewed evaluation panels.

- **Array of PFC Funding Programs:**

The SRC suggested that until the CPA established research priorities that the same types of *PFC funding as in the past be maintained/enhanced*. These include scholarships (master's/PhD students) and small project grant funding. Moreover, the stipulation that scholarships/grants can only be held by a member or student-member of CPA studying or working in Canada and doing research that advances the practice of physiotherapy should be maintained. Project grant funding can include catalyst, KT and cost-effectiveness projects preferably with clinical applicability. The inclusion of clinician partnerships in all grants should be strongly encouraged. The SRC also recommends that directives related to being awarded each type of scholarship or grant be firmly applied and that recipients of PFC awards be strongly encouraged to submit their results for publication in *Physiotherapy Canada*.

4.4 Role of the National CPA Congress in the Research Vision

The SRC agreed that the present practice of organizing a congress centred around issues relevant to physiotherapy practice in Canada with the goal of facilitating collaboration, knowledge sharing, and a sense of camaraderie in the Canadian PT community was a sound initiative. CPA has successfully delivered the national congress over the years, an event that takes tremendous effort and organization, and in some years the Congress attendance has reached almost 1,000 participants (nearly 4% of all PTs in Canada), while other years have been substantially smaller. From their own lenses of conference attendance across a wide variety of professional and academic foci, SRC members did not believe that the CPA Congress was viewed as a “must attend” annual event by Canadian PTs. In contrast, the Combined Sections Meeting of the American Physical Therapy Association (APTA), and offerings of the Australian Physiotherapy Association, as examples, have become widely acknowledged as premiere “must attend” events, though the SRC was unable to state with confidence that those events attract *more* attendees on a per-capita basis.

SRC members identified five broad thematic areas to consider in organizing the annual CPA Congress so that it could fulfill its role in a new CPA research vision. These are described briefly below along with suggestions on initiatives by the proposed Research Advisory Council (RAC) to improve the contribution of the Congress to the research vision:

- **Clarify Purpose and Vision:**

This is the theme with the highest priority, insofar as it is difficult to discuss the other themes without first answering the big questions of “Why?”; why do we believe a CPA Annual Congress is needed? What role(s) or goal(s) should it fill? To what group should it be most targeted? What milestones or metrics should be used to define its success beyond registration and revenue numbers? How should physiotherapists and their communities be or behave differently because of this congress? The SRC suggested that the need to obtain clarifying answers to these questions was a high priority for the proposed RAC, in collaboration with CPA leadership and representatives of stakeholder groups. Engagement with the membership seems like a good path forward on this item.

- **Optimize Access and Visibility:**

Members are unlikely to attend an event if they a) don’t know about it or don’t know the themes being discussed, b) cannot afford the time or cost of attending, and c) do not view it as important for their professional development. The RAC should explore alternative formats, partnerships (e.g. universities or industry), and cost structures to optimize access by members. *The congress should showcase leading Canadian PT scientists and clinical practitioners* not only to increase the visibility of the excellent PT researchers and clinicians we have in Canada, but also as a means of increasing visibility of the whole congress.

- **Build Linkages and Partnerships to Reduce Barriers to Attendance:**

Several directions were suggested for the development of new strategies for linkages and partnerships to offer even more value to attendees. Examples to consider include: joint meetings with Provincial Branches (CPA-Provincial Branch partnered congress), providing space and promotion of the CPA Congress as a place for universities to hold alumni events or other recognition/award events, organization or co-organization of some CPA Congresses or events with the local PT University Program, and optimize sponsorship relationships to offset costs of attending.

- **Motivate Engagement:**

It is important to find ways to shift the collective view of CPA Congress as something to which one *should* go, to something to which one *wants* to go. Once the visioning and purpose is completed, a reasonable subsequent step would be to gather information for understanding what motivates or dissuades members from attending Congress through formal or informal surveys, interviews, or social media activity. The SRC acknowledges the inherent difficulties in creating an event that appeals equally to all segments of the PT community (i.e. clinicians, researchers, educators, administrators, advocates and policy makers) and suggests that the proposed RAC consider targeting Congress to one or few such groups to optimize impact, or consider alternative (e.g. rotating foci) structures so that all members can see their interests reflected in Congress programming. Another strategy to consider would be a ‘survey of the landscape’ looking to what other successful large professional meetings are doing and incorporate elements of those into Congress. Examples are integrating principles of ‘gamification’, requiring all presentations to include a clinician-researcher partnership, structuring each Congress around a theme that holds meaning for the target audience, or structuring congress to provide a ‘menu’ of practical workshops or microcredentialing from which attendees could engage in a ‘choose your own learning adventure’ type experience.

- **Involve Stakeholders in the Planning:**

Lastly, the need to include various stakeholders on the congress planning committee (PT scientists, educators, clinicians, PT graduate students, funders and patients) was noted. The working group also endorsed engaging with representatives from Indigenous, Black, Disabled, and other racialized or marginalized groups in their planning committees to optimize equity, diversity, inclusiveness and belonging of Congress programming.

4.5 The Role of the *Physiotherapy Canada* Journal in the Research Vision

As early as 1923, the first issue of *Physiotherapy Canada* was published to provide a means of communication for the fledgling association. In the 60s (8-10) and 80s (10,11) *Physiotherapy Canada* played an important role in explaining the importance of research by publishing articles aimed at explaining how a research paper was constructed, reviewed and published as well as research methods and applied statistics (10,11). In 1981 the journal inaugurated the Silver Quill Award to encourage the publication of high-quality articles. *Physiotherapy Canada* has continued to evolve over the years and

remained active in promoting research in addition to publishing peer-reviewed research articles as demonstrated by a series on KT in 2017-2018.

The SRC acknowledges the many improvements over the last years that have resulted in the recognition of *Physiotherapy Canada* as a good journal dedicated to physiotherapy. The following are recommendations to ensure that *Physiotherapy Canada* continues to be an important part of the CPA's research vision:

- **Support *Physiotherapy Canada*:**

The CPA should continue to support and strengthen *Physiotherapy Canada*. In addition, *Physiotherapy Canada* should continue to be at arms length from CPA, and that the editor and editorial board continue to have control over the scientific content of the journal.

- **Focus on Increasing Quality of the Scientific Publications:**

Physiotherapy Canada should place the highest emphasis on increasing quality of the science it publishes (e.g., impact factor, other indicators). The focus of the journal should be on providing high quality scientific articles to guide evidence-based practice, supporting both clinicians and scientists. The journal should continue with summaries to help with knowledge translation. Special series should continue to be encouraged as they appeal to clinicians. Targeted initiatives are needed to encourage high quality research to be submitted to the journal (e.g., have universities adopt *Physiotherapy Canada*; target/remind senior researchers to submit a high impact paper). PFC recipients should be strongly encouraged to submit their results for publication in *Physiotherapy Canada*.

- **Celebrate our Journal:** *Physiotherapy Canada* should continue with Silver Quill awards and consider increasing the number of awards or creating a new award.

- **Consider Ways to Promote *Physiotherapy Canada*:**

Physiotherapy Canada should promote the use of multimedia to engage the clinicians (e.g. videos, infographics) and use social media to promote publications in the journal. Other recommendations include to continue with Silver Quill awards and consider increasing the number of awards or of inaugurating a new 'Gold' award to create interest in the 'new' CPA research vision. *Physiotherapy Canada* should also continue to seek further indexing and to explore open access options to increase exposure. In addition, it is important to increase the visibility of the Journal on the CPA website.

5. The Next Step: Creation of a Research Advisory Council (RAC)

*To ensure that the recommendations of this SRC 2020 report are explored and potentially implemented members of SRC 2020 strongly and unanimously recommend that the permanent **Research Advisory Council (RAC)** proposed to supersede the SRC 2020 in its mandate be created by the CPA.*

The SRC 2020, as part of its mandate, propose the RAC's mandate and membership below.

- **Mandate of RAC**

The RAC should be a duly constituted committee of the CPA created and in function by the first quarter of 2021. The first priority of the RAC will be to explore the findings of this report and to undertake implementation of recommendations when possible. Also, in the first six months of its creation, the RAC should develop a 3-year strategic research plan based in part on this report, to integrate research into the core vision, mission and values of the CPA. This plan should be accompanied by 6-month SMART accountability goals to measure the committee's progress. The primary role of the RAC will be to bring together the stakeholders in physiotherapy education, research, and practice in Canada to work together to promote the science of physiotherapy and evidence-based practice. Thus, over the years, the RAC will lead the gradual integration of research into the vision, mission, and values of the CPA.

- **Chair of RAC**

The Chair of the RAC should be a senior Canadian academic physiotherapy researcher who is a Full Professor or an Associate Professor in a Canadian university and a member of the CPA. The Chair of the RAC will report directly to the President of the CPA and hold a voting seat on the CPA Board of Directors. The Chair's mandate should be two years. To provide continuity in decision making about funding priorities, the Chair the RAC should also chair the PFC Scientific Advisory Council.

- **Membership of the RAC**

- The RAC should include at least three Canadian academic physiotherapists who hold faculty positions in a Canadian university (at least two at the Full Professor or Associate Professor level) who are members of the CPA. One of these will be the Chair and a one should have expertise in KT/KM.
- The RAC should also include at least two physiotherapy clinicians, one engaged in private practice and the other in a publicly funded position and a physiotherapist clinician-scientist.
- The Chair of the CPA's KT committee should also be a member to facilitate the implementation of the RAC's strategic plan.
- The SRC also suggests the inclusion of a physiotherapist engaged in doctoral or post-doctoral training under the supervision of a physiotherapist-researcher in one of Canada's Universities and an individual who is not a physiotherapist but has pertinent expertise from the academic, government or business worlds (for example a senior administrator in the health or insurance industries).

The above categories of members bring the total membership of the RAC to 9 members. Two-year mandates are suggested. To insure turnover, however, staggered mandates will have to be initiated immediately with half of the members (excluding the Chair) given one-year mandates to ensure maintenance of institutional wisdom during member turnover.

- **Transition Period**

Following discussion with the President of the CPA, the co-chairs of the present report have agreed to facilitate the formation of the RAC and encourage implementation of the recommendations. It is not, however, an expectation that they will become members of the RAC.

6. CONCLUSION

The main purpose of the SRC 2020 was to provide guidance to the President and the Board of Directors of CPA about the research vision and implementation of that vision for science in Physiotherapy. The subcommittees provided suggestions on how *CPA Congress* may fit within the vision for research, made recommendations regarding the role of *Physiotherapy Canada* (Journal) and *Physiotherapy Foundation of Canada* (PFC) in the vision and advised on the *utilization of resources* available to promote or facilitate PT research in Canada. To ensure that the recommendations are explored and implemented, a permanent Research Advisory Council (RAC) must be created to integrate research in the vision, mission, and values of the CPA. The primary role of the RAC would be to bring together the main actors in physiotherapy education, research, and practice in Canada to work together to promote the science of physiotherapy and evidence-informed practice. The first priority would be the development of a 3-year strategic plan with SMART objectives to integrate research in the core mission of the CPA and explore and implement the recommendations from this report. This strategic plan should be meaningful to Physiotherapy and the optimization of function, health and well-being of Canadians.

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11. Examples of articles published in *Physiotherapy Canada* to encourage physiotherapists in the early days of research interest: How to write a scientific paper (R.A. Day, Jan/Feb 1980); Research, Why Bother (Editorial by K. Gowland, Sept/Oct 1980); Contents of a paper for presentation (B. Bishop Sept/Oct 1981); Manuscript review and editing process (J. Cleather, Sept/Oct 1981); five-part series on Research Methodology and Applied Statistics (L. Makrides et al., May/June-March/April 1981).

Examples of Strategic Initiatives for Knowledge Translation:

Montpetit-Tourangeau K, Kairy D, Ahmed S, Anaby D, Bussi res A, Lamontagne M-E, Rochette A, Shikako-Thomas K, Thomas A. A strategic initiative to facilitate knowledge translation research in rehabilitation. *BMC Health Services Research*. 2020; 20:973-983.

Bayley MT, Hurdowar A, Teasell R, Wood-Dauphinee S, Korner-Bitensky N, Richards CL, Harrison M, Jutai JW. Priorities for Stroke Rehabilitation and Research: Results of a 2003 Canadian Stroke Network Consensus Conference. *Arch Phys Med Rehabil*. 2007; 88:526-528.

Definition of Terms:

Knowledge translation (KT) is defined as a dynamic and iterative process that includes the synthesis, dissemination, exchange, and ethically sound application of health-related knowledge to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system. KT takes place within a complex system of interactions between researchers and knowledge users (e.g., clinicians, industry, community, non-for-profit partners) that can vary in intensity, complexity, and level of engagement, depending on the nature of the research and the findings as well as the particular knowledge user's needs (6).

Implementation science is defined as "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services" (7).

Working Definitions:

Physiotherapy Science is the body of knowledge that underlies the practice of physiotherapy. Physiotherapy science is focused on the interplay of physiological/biological, biomechanical and behavioural correlates of body movements, the detection of mechanisms of movement dysfunction and physiotherapy methods to optimize function, health and well-being.

Physiotherapy Research comprises investigations using different methodologies that are undertaken to generate, evaluate and implement physiotherapy science.

Physiotherapy Practice is the application of physiotherapy science in different contexts to enhance function, health and well-being.