The purpose of this message is to introduce the CCTCC REB Accreditation WG’s Final Recommendations (FRs), and the joint response by the CCTCC and Health Canada (HC) to the FRs. The WG was established in collaboration with HC, and reported to both organizations.

Background:

The CCTCC (Canadian Clinical Trials Coordinating Centre) REB (Research Ethics Board) Accreditation Working Group (WG) was established in 2015 to identify strategies to improve efficiencies of ethics reviews and advance strategic issues like accreditation in regards to clinical trials. The establishment of the WG is consistent with Recommendation #4 of the Action Plant to Help Attract More Clinical Trials to Canada as well as Recommendation #3 of the Senate Report entitled “Canada’s Clinical Trials Infrastructure: A prescription for Improved Access to New Medicines”.

Given the REB centralization and harmonization initiatives that have been taking place across Canada, the WG, as stated in their Interim Report (IR), did not see formal accreditation scheme as a given. The IR’s key recommendations called for investigating the:

- impact of these provincial initiatives
- models of review being adopted by these initiatives,
- standards and metrics currently being applied to REB operations (in Canada and USA)

The WG proceed with addressing the IR’s recommendations which resulted in the presented/attached FRs.

CCTCC REB WG FRs:

There are seven FRs in total, aimed at ensuring Canada’s REB competitiveness on a global scale. FR#7 which calls for establishment of a National Strategic Leadership Forum, is seen as the foundation of the other FRs. The FRs are based on data collected by interviews with key stakeholders in the Canadian and US REB fields as well as consultations and feedback provided by key REB stakeholders in Canada.
The contents of this communication include:

1. **Summary of the FRs and joint response by CCTCC and HC.**
2. **Full text of the FRs.**
3. **SPOR SHRER Report Committee recommendations – in fulfillment of FR 1.**

CCTCC and Health Canada wish to express their profound gratitude to the members of the REB Accreditation Working Group (WG) and specifically the chair of the WG – Laurel Evans and the co-chair Karine Morine for their continued dedication and invaluable efforts in making the attached report a reality.

Please direct any questions to Elena Aminkova, Interim Director of Project Facilitation, CCTCC by emailing eaminkova@cctcc.ca
PUBLIC RESPONSE by the Canadian Clinical Trials Coordinating Centre (CCTCC) and Health Canada (HC) to
CCTCC Research Ethics Board (REB) Accreditation Working Group (WG)’s Final Recommendations (FRs)

<table>
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<tr>
<th>Final Recmd (FR) #</th>
<th>Recommendation</th>
<th>Details and Additional Information</th>
<th>Suggested Responsible Body</th>
<th>Joint CCTCC and HC Response</th>
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| FR 1.             | 1. Distribute the SPOR SHRER Report Committee recommendations widely and take action on the applicable recommendations. | • The establishment of a national strategic forum (SHRER, R #1): consistent with CCTCC FR #7 (see below)  
• Promote a greater standardization such as SOPs, forms, training curriculum (SHRER, R #2): consistent with CCTCC FR #7 (see below)  
• Development of a system for evaluation and qualification of REBs (SHRER, R #3): consistent with CCTCC FR #3 (see below)  
• Development of a common set of metrics and benchmarks to assist REBs to assess their performance (SHRER, R #4)  
• Encourage research institutions to clarify and harmonize the roles and responsibilities | CCTCC & HC | CCTCC and HC support the wide public distribution of the SPOR SHRER Report Committee Recommendations as well as that of the CCTCC REB WG FRs. |
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<tr>
<td>FR II. 2.</td>
<td>Establish a registry of REBs that review and approve clinical trials that could ultimately be expanded to encompass all REBs in Canada.</td>
<td>The CCTCC could potentially incorporate clinical REBs within its existing <a href="https://www.clinicaltrialsmap.ca">Canadian Clinical Trials Asset Map (CCTAM)</a>. However, the registry should be developed so that it could foreseeably be expanded to include, on a voluntary or mandatory basis as appropriate, other Canadian REBs.</td>
<td>HC (as a lead), CAREB, PRE, &amp; CCTCC regarding the CCTAM</td>
<td>Joint CCTCC and HC Response: Health Canada will investigate the feasibility of proceeding with such a change as well as whether or not the objective of the recommendation can be met through other kinds of instruments. CCTCC supports this course of action.</td>
</tr>
<tr>
<td>FR III. 3.</td>
<td>Actively pursue regulatory options for standards equivalency for REBs that review regulated clinical trials.</td>
<td></td>
<td>HC (as a lead) &amp; relevant stakeholders</td>
<td></td>
</tr>
<tr>
<td>Final Recmd (FR) #</td>
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<td>FR IV.</td>
<td>4. Coordinate REB education and training efforts, and conduct a needs assessment of REB education requirements.</td>
<td>Several bodies are developing educational and training tools</td>
<td>CAREB, PRE in TC3 SRCR, N2, CBS, HC &amp; CITI Working in collaboration with one another</td>
<td>CCTCC will consider assisting by establishing mechanisms for collaboration between relevant stakeholders.</td>
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<td>FR V.</td>
<td>5. Investigate the feasibility of various approaches to sharing REB reviews of multi-centre research (including a possible online system and a national data warehouse).</td>
<td></td>
<td></td>
<td>This topic has been extensively studied and is well understood. Provincial bodies have already done considerable work to harmonize the REB review process and there already are agreements to this end in place. In some cases, there are some issues to be resolved, e.g. compatibility of different online systems. Therefore, the ongoing efforts on sharing REB reviews of multi-centre research should be promoted. Further sharing of REB reviews of multi-centre research should be encouraged and enabled, and additional collaboration where possible should be established.</td>
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<td>FR VI.</td>
<td>6. Conduct a study of real and perceived barriers to the acceptance of other REB reviews and publicly report on the findings and recommended solutions.</td>
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<td>This topic is currently being studied by a variety of stakeholders, including the GE3LS Network in Genomics and Personalized Health</td>
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<td>FR VII. 7.</td>
<td>Establish a national strategic leadership forum.</td>
<td>This recommendation underpins all other recommendations and needs to be done in collaboration.</td>
<td>Tri-Agency funders, IMC, HealthCareCAN, and HC, CCTCC, CAREB, ISED &amp; NAPHRO, representatives from provincial REB systems &amp; private sector</td>
<td>Health Canada and CCTCC will work in 2017 to further consider the feasibility of this recommendation.</td>
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Executive Summary

The CCTCC (Canadian Clinical Trials Coordinating Centre) REB (Research Ethics Board) Accreditation Working Group (WG) was established in 2015 to identify strategies to improve efficiencies of ethics reviews and advance strategic issues like accreditation. It builds on important reports that have put recommendations forward to improve multi-site ethics review, such as the Strategy on Patient-Oriented Research (SPOR) External Advisory Committee on Streamlining of Health Research Ethics Review (SHRER, 2013).

After initial discussions, the WG considered it as essential to undertake consultations with key informants to assist it in its deliberations (see the WG’s Interim Report). The questions asked during the interviews (n= 27) focused on the impact of existing accreditation or qualification programs, and the successes and challenges of current provincial REB streamlining efforts particularly in relation to the issue of efficiency of REB reviews for multi-centre studies. The results informed the WG’s Draft Preliminary Recommendations (DPRs).

The DPRs were presented at the Canadian Association of Research Ethics Boards (CAREB-ACCER) Annual General Meeting (AGM) on May 27, 2016 and distributed to groups of stakeholders for comment. This document incorporates the feedback received and represents the WG’s final recommendations to the CCTCC Executive Committee.

The WGs recommendations are itemized with brief descriptions in the section titled Summary of the Recommendations. Full descriptions and rationale for each are found in Section Three of this report, titled Recommendations and Rationale.

SUMMARY OF THE RECOMMENDATIONS

Based upon the experience and expertise of the WG, the balance of the Consultant’s report, comments received on the DPRs and subsequent discussions regarding these, the WG makes the following recommendations. Although the recommendations are not ordered in priority of importance, the WG wishes to emphasize that the recommendation for the establishment of a National Strategic Leadership Forum is the most important recommendation and it is the foundation of the other recommendations.

1. [http://www.cctcc.ca/default/assets/File/SPOR%20SHRER%20Report%20and%20Appendices%20Feb%202013%20Final.pdf](http://www.cctcc.ca/default/assets/File/SPOR%20SHRER%20Report%20and%20Appendices%20Feb%202013%20Final.pdf)
2. [http://www.cctcc.ca/default/assets/File/Interim%20Report%20of%20the%20CCTCC%20REB%20Accreditation%20Working%20Group%20public%20version%20November%202015.pdf](http://www.cctcc.ca/default/assets/File/Interim%20Report%20of%20the%20CCTCC%20REB%20Accreditation%20Working%20Group%20public%20version%20November%202015.pdf)
4. [Ibid](http://www.cctcc.ca/default/assets/File/CCTCC_REB_WG_Draft%20Recommendations%20Summary%20Not%20Endorsed%20May%202016.pdf)
5. [Ibid](http://www.cctcc.ca/default/assets/File/CCTCC_REB_WG_Draft%20Recommendations%20Summary%20Not%20Endorsed%20May%202016.pdf)
I. Distribute the SPOR SHRER Report\textsuperscript{6} widely and take action on the applicable recommendations. The recommendations in the SHRER report\textsuperscript{7} continue to resonate with the WG. The recommendations were publicly disseminated but never publicly responded to. The WG believes that the SHRER Committee recommendations\textsuperscript{8} should be reconsidered by the CCTCC and Health Canada in today’s context.

II. Establish a registry of REBs that review and approve clinical trials that could ultimately be expanded to encompass all REBs in Canada. As per the SHRER report\textsuperscript{9}, better awareness of the REB landscape is essential. A Registry of REBs that review and approve clinical trials should be established. Participation in the Registry should be mandated by Health Canada. The Registry should be developed in collaboration with CAREB-ACCER and/or the Interagency Advisory Panel on Research Ethics (PRE) so that it could foreseeably be expanded to include on a voluntary or mandatory basis, as appropriate, other Canadian REBs.

III. Actively pursue regulatory options for standards equivalency for REBs that review regulated clinical trials. Assessing or evaluating REBs would have an impact on efficiency because a standardized due diligence process would facilitate cooperation and reciprocity among REBs. As the regulatory body, Health Canada should actively pursue options for requiring REBs that review regulated clinical trials to meet the qualification standards of an existing system of REB accreditation, qualification or designation. As an interim measure, Health Canada should issue a public notice strongly encouraging REBs overseeing clinical trials to certify to sponsors that they meet accreditation, qualification or designation standards under an existing system in Canada.

IV. Coordinate REB education and training efforts, and conduct a needs assessment of REB education requirements. Access to education and training by REBs and researchers can positively impact the quality of REB reviews. The WG recommends that the primary organizations involved in research ethics education in Canada coordinate their education and training plans and wherever appropriate, include substantive ethics education. In order to avoid duplication of efforts a scan of current education initiatives should be undertaken and a needs assessment should be conducted, if warranted.

V. Investigate the feasibility of various approaches to sharing REB reviews of multi-centre research including a possible online system. A study investigating the feasibility of various approaches to consolidating, collaborating on or sharing REB reviews of multi-centre research should be undertaken. This includes, but is not limited to, the feasibility of a national on-line system, and/or one online system per province and/or interoperability between existing systems to support REB review of multi-centre research, starting with clinical trials. This might also encompass the establishment of a national data warehouse that would allow pooling of and restricted access to specified REB review and study information.

VI. Conduct a study of real and perceived barriers to the acceptance of other REB reviews and publicly report on the findings and recommended solutions. There are real and perceived challenges to extending REB jurisdiction beyond provincial borders and to implementing single or central REB review of multi-jurisdictional studies across Canada. CCTCC and Health Canada should commission an examination of national and provincial legislative barriers as well as institutional liability issues that prevent one...
institution from accepting the review of another Canadian REB. The examination should include consideration of solutions and approaches that promote the acceptance of reviews.

VII. Establish a national strategic leadership forum. There is a need for identified leadership to champion, shape and direct the development of research ethics at a pan-Canadian level. This includes facilitating the implementation of this WG and the SHRER Committee recommendations, as well as coordinating communications and sharing best practices amongst the provincial streamlining initiatives. The Tri-Councils, Innovative Medicines Canada (IMC), HealthCareCAN and Health Canada should initiate consultations with key stakeholders to establish a national strategic leadership forum charged with identifying and facilitating initiatives for enhancing human research protections in Canada. The model of the United States (US) Secretary’s Advisory Committee on Human Research Protections (SACHRP) should be considered when developing the national strategic leadership forum. It would be funded by and accountable to the key stakeholders involved in the area of human research protections. Potential key stakeholders are suggested in this document on page 22.

1. MANDATE AND TERMS OF REFERENCE

The CCTCC was created in 2014 to implement an action plan to strengthen and improve clinical trials in Canada and streamline processes for companies and researchers\(^\text{10}\). To advance its goal to improve efficiencies of ethics reviews and advance strategic issues (like accreditation), in April 2015, the CCTCC established a WG to investigate the development of a pan-Canadian accreditation system for REBs that review clinical trials. Three key reports formed the basis of the CCTCC REB Accreditation WG mandate the:

- “To Your Health and Prosperity - Action Plan to Help Attract More Clinical Trials to Canada” (2012)\(^\text{11}\),
- report of the Standing Senate Committee on Social Affairs, Science and Technology on Canada’s Clinical Trial Infrastructure (2012)\(^\text{12}\), and
- report of SPOR SHRER (2013)\(^\text{13}\).

Given the extensive changes in the REB landscape since the publication of those reports, as well as the previous failed attempts at REB accreditation, it was imperative for the WG to confirm the problem it was being asked to address. The WG concluded that the principal issue was inefficiency of the REB review process for multi-centre clinical trials. Evidence of the impact of a system of assessment of REBs upon the problem of inefficiencies was however, lacking.

In its Interim Report from September 2015\(^\text{14}\), the WG requested a revision to its mandate to allow for critical appraisal of the issues, including consultations with relevant stakeholders. A central principle for the WG was that recommendations should be evidence-informed. Gathering up-to-date information on

\(^{10}\) www.cctcc.ca


\(^{13}\) ibid\(^\text{1}\)

\(^{14}\) ibid\(^\text{1}\)
the impact of existing accreditation or qualification programs, as well as the successes and challenges of provincial REB streamlining efforts were important components of this overall process. A Consultant was engaged to collect and analyze this information through focused interviews with representatives of REB streamlining initiatives, research ethics experts, and organizations and jurisdictions operating under some form of accreditation or REB assessment process. REB efficiencies and their relationship to a system of accreditation would then, be assessed within the context of a comprehensive, systematic investigation.

The Consultant’s findings informed the WG deliberations and recommendations. For additional transparency, the Consultant’s Report is attached to these final recommendations as Appendix A, pages 29 – 80. The DPRs\textsuperscript{15} were presented at the CAREB-ACCER AGM on May 27, 2016 and distributed to groups of stakeholders for comment. Due to timing considerations, CCTCC established a deadline of June 17, 2016 for feedback\textsuperscript{16}.

These recommendations reflect the deliberations of the WG since its establishment in April 2015. They include consideration of the information contained in the 40 page interview report compiled by the Consultant. The Consultant’s report consists of information compiled from 27 interviews conducted with 28 participants. Based upon her analysis, theoretical data saturation began to be reached after the first few interviews and she did meet thematic saturation in accordance with applicable standards for studies employing similar methods. These recommendations also reflect comments received and dialogue that took place during the CAREB-ACCER AGM as well as a limited number of comments submitted to the CCTCC as a result of a broad call for comments following the AGM via list-serve dissemination to CAREB-ACCER, Network of Networks (N2) and Canadian Bioethics Society (CBS) members. There were follow-up teleconferences between the Chair of the WG and two of the organizations that submitted feedback.

The membership list of the WG is available in Section Seven, titled REB Accreditation WG List, page 28. Members were chosen based upon their varied expertise and knowledge of research ethics and included representation from both public academic institutions, and private REBs.

The WG wishes to emphasize that based upon the Consultant’s interviews and the comments received on the DPR\textsuperscript{17} in general, as well as in the collective opinion of the WG, Canada’s REB community believes that implementation of some form of an assessment process for REBs in Canada could lead to many positive outcomes. It will be important however, to ensure that consultation and feedback is continued, so that any finally adopted system is built on meaningful community consultations so that the system will be:

- easier to operationalize,
- able to address institutional and other requirements, and
- credible with the research and research ethics communities.

\textsuperscript{15}Ibid\textsuperscript{3}

\textsuperscript{16}The WG was established in April 2015 and original expectations were that recommendations would be delivered within a year. Due to the requisite change in the Terms of Reference timelines were necessarily extended. However, the CCTCC mandate extends only until December of 2016. It was important that the WG’s final recommendations be presented to the CCTCC for its consideration by no later than Mid-August of 2016, due to the fact that CCTCC deliberations concerning extension of its mandate will be occurring as of September 2016.

\textsuperscript{17}Ibid\textsuperscript{3}
2. FEEDBACK FROM THE CONSULTANT’S INTERVIEWS AND COMMENTS ON THE DRAFT RECOMMENDATIONS

The WG recognizes that a broader consultation would be necessary to move forward on the recommendations. However, the WG believed that it was critical to engage the research ethics community early in the process and prior to final recommendations being made. Details of the importance and rationale for that engagement are included in this document, as well as in the DPRs. 

Although there was general support of the recommendations and potential benefits of a system of assessment of REBs there were many divergent views for the WG to consider. The varying views that were expressed in both the interviews and comments on the DPRs were carefully considered and discussed by the WG in its deliberations. In its final recommendations, the WG has made its best efforts to articulate those differences and where possible to propose some ways of potentially resolving them. Nevertheless, the WG recognizes that it is necessary for it to make concrete actionable recommendations that if adopted, will finally allow for some forward momentum.

Comments were received from 4 organizations and 4 individuals/groups (the list of respondents is provided on page 29). The short consultation period may have contributed to a lower than expected response rate, although consultation fatigue and lack of action on previous reports may have been contributing factors. In addition, given the similarity to the SPOR SHRER recommendations in 2013, it is possible that the WG recommendations were acceptable to the majority of the stakeholders, who may not have felt compelled to comment again.

Of the 8 responses received, 4 endorsed the recommendations, 1 supported 8 of the 9 recommendations and 2 supported the recommendations in principle but did not endorse the report as written. An 8th respondent only offered 2 points of clarification.

In general, the comments received covered 3 key aspects of the DPRs, the:

- scope of the WG’s mandate,
- evidence informing the recommendations, and
- governance, leadership, and funding.

We discuss these below prior to outlining the WG’s revised recommendations (Section Three, titled Recommendations and Rationale) which are being made in light of these comments together with reconsideration of the data from the Consultant’s report, and further discussion and dialogue by the members of the WG.

Scope

The motivation for the establishment of the WG by Health Canada and the CCTCC funding organizations – the Canadian Institutes of Health Research (CIHR), IMC and HealthCareCAN - differs to some extent from the motivation behind the 3 reports underpinning the WG’s mandate, in particular the SPOR effort. This has resulted in persistent tension and debate related to the scope of the WG mandate – i.e., whether the
recommendations should apply only to REBs that oversee Health Canada regulated clinical trials, or to all REBs regardless of the types of human participant research they review.

The decision around scope is complicated by the fact that the REBs in Canada are extremely diverse, representing both private REBs authorized by private clinics, and public REBs authorized by institutions that range from small community colleges, community hospitals and health authorities, medium and large academic institutions and teaching hospitals, to specialized, regional REBs such as the Ontario Cancer Research Ethics Board (OCREB). In addition, most REBs that review clinical trials also review non-clinical trial research, including social and behavioural research. As such, any recommendations that require changes in infrastructure or in the organization of REBs reviewing clinical trials will, in the main, also be felt by the community that reviews other forms of research. Where the review of clinical trials is a minority part of the work undertaken by a REB this may represent a significant investment and implications in the ability of the REB to operate and function in relation to non-clinical contexts.

In addition, it is noted that CAREB-ACCER maintains that any national effort to enhance quality, efficiency and effectiveness of research involving human participants must be inclusive of all human participant research and all Canadian REBs22. It is important to recognize that previous recommendations by the SPOR SHRER Committee (an initiative of CIHR, one of the three joint Councils responsible for the Tri-Council Policy Statement), applied to all human participant research as well. Given the similarity between the conclusions drawn by the WG and the SHRER recommendations23, we see the application of our recommendations to extend beyond only those REBs whose reviews pertain to clinical trials.

The WG firmly believes that its recommendations should ultimately extend to all REBs and indeed to the broader spectrum of human research protections. However, due to a combination of factors described in this report including the desirability of proceeding in a staged iterative fashion, some of the recommendations are prioritized and currently directed primarily to public REBs (primarily academic and health-care institution REBs) that review regulated clinical trials. The intention is that in the longer term the recommendations should be able to be expanded to all REBs. There is no reason why means to enhance quality, efficiency and effectiveness should be limited to REBs that review regulated trials, and not be extended to the review of all studies with human participants.

A comment was received on the DPRs24 noting what was perceived as a lack of private sector input. The WG wishes to emphasize that private REB input was solicited and considered. A representative from a private REB was an active member of the WG and representatives of private REBs were interviewed by the Consultant.

Through analysis of www.clinicaltrials.gov, it has been estimated that 65% of industry sponsored clinical trials in Canada are conducted in the private sector (Personal communication from WG member Marianne Vanderwel). Private REBs overseeing those trials and trial sites were seen to be efficient and effective by the commenting organization and publications in the US support this25. In a Canadian survey of Rx&D (currently IMC) members, Leclerc et al (2012) found that private REBs were consistently reported to have

22CAREB-ACCER’s response to Request for Comments on the DPRs, June 20, 2016
23Ibid1
24Ibid3
shorter times for ethics approval\textsuperscript{26}. In general, however, the practice of outsourcing to private REBs has not been adopted in Canada outside of private clinics. There is also some data\textsuperscript{27} that the FDA has reported more violations and problems with commercial IRBs than with nonprofit boards. The final recommendations include the suggestion that private REB processes be investigated further to determine if they might in some way be adopted by public academic and hospital/health authority based REBs.

Evidence

As reported by SHRER\textsuperscript{28} in 2013, “there is a widespread consensus across Canada that efforts to streamline and harmonize research ethics review have the potential to improve efficiency, to reduce frustrations and to stimulate multi-site patient-oriented research. As a result, a number of initiatives in Canada have been launched in the last decade to improve the research ethics review process”. This position was reaffirmed in the Consultant’s report, which describes the progress many of the initiatives have made on activities related to improving REB quality, efficiency and effectiveness. In both the Consultant’s report and the comments received on the DPRs\textsuperscript{29}, there was broad general support for accreditation or another approach to the evaluation and qualification of REBs and research protection programs.

The WG recognizes, as some respondents to the call for comments noted, there is a lack of empirical evidence to support the recommendations, referencing for example, the problems with the current REB system, the lack of evidence on the impact of accreditation and the need for a mandatory registry and evaluation measures.

With respect to the problems with the current REB system, the WG notes that there is in fact empirical evidence with regard to public academic and health care REBs\textsuperscript{30}. These include common complaints in terms of approval times,\textsuperscript{31} problems with requirements for duplicate reviews\textsuperscript{32} and problems with

\textsuperscript{27}https://www.statnews.com/2016/07/06/institutional-review-boards-commercial-irbs/
\textsuperscript{28}Ibid\textsuperscript{1}
\textsuperscript{29}Ibid\textsuperscript{3}
inconsistent requirements. With respect to evidence directly related to the impact of accreditation; the WG acknowledges that the information that was available to it was experiential rather than empirical. As previously noted, the WGs recommendations have been informed by a triangulation of different information, emanating from the Consultant’s interviews, comments and discussion pertaining to the DPR, and the knowledge and experiences of members of the WG themselves. This collective evidence, including comments from individuals, interviewed by the Consultant, who were operating in jurisdictions with well-established mandatory or voluntary accreditation or qualification systems, supports the WG’s recommendation for an equivalency standard for at least those REBs that review and approve regulated clinical trials. It is relatively widely accepted that implementation of schemes of qualification, accreditation and designation have in practice, had an impact upon the capacity and willingness of institutions, and their REBs to accept the reviews of another REB. While the WG supports the need for and value of, acquiring empirical evidence pertaining to the impact of a scheme of accreditation, qualification or designation upon REB quality, effectiveness and efficiency, it believes that there are reasonable grounds to support the development of a pan-Canadian process (See Recommendation # III, page 14).

In its response to the DPRs, Clinical Trials Ontario (CTO) described the necessity, value and impact of its REB Qualification Program to the success of its Streamlined Ethics Review System (13 qualified institutions, 51 participating institutions to date). Based on institution participation and stakeholder input, CTO asserts that it could not have implemented its Streamlined Ethics Review System without the REB Qualification Program.

Based on feedback from the ethics community through the Consultant’s interviews, the comments on the DPR and upon opinions expressed by various members of the WG, there is a wide-spread belief that Ontario has been well-served by the fact that CTO created a model that promotes the trust and efficiencies in a single REB of record review. For REBs to consider relying on REBs outside of their province, the WG believes that a baseline standard would be needed at a minimum.

There was also support in the interviews and from comments received on the DPR for broad adoption of the CTO REB Qualification process. In that regard, the WG is aware that there have been informal discussions between CTO and institutions in other provinces about obtaining CTO qualification. Another suggestion in the comments received was that the N2/CAREB-ACCER REB Standard Operating Procedures, which have been widely adopted could form the basis of any standards. The WG endorses consideration of both of these suggestions.


34 bid

35 bid

36 bid

37 bid
It is important to note that representatives from OCREB support the CTO approach. In the absence of a mechanism to evaluate REBs at the time of its launch in January 2004, OCREB stated that it took considerable time and effort for institutions to develop the trust to delegate to OCREB. By the end of its first three years, seven institutions had authorized the use of OCREB, mostly smaller institutions with minimal oncology expertise on their local REBs. Currently, 28 of 30 are authorized to use OCREB. The OCREB representatives also noted that in 2014, OCREB was the first REB to be qualified under the CTO REB Qualification Program and that they found the process to be educational and informative. The OCREB representatives also pointed out that while OCREB did gain the trust of institutions over time they felt that REB Qualification provides a due diligence process that can achieve the same goal faster.

**Governance, Leadership and Funding**

There has been long-standing debate around the governance of research ethics in Canada\(^\text{38}\), the WG believes that it cannot make effective recommendations pertaining to the creation of a formally recognized national approach to some form of REB accreditation without making corresponding recommendations concerning a research ethics governance model. One respondent to the call for comments questioned whether governance falls within the mandate of this WG. In the opinion of the WG, in the context of a pan-Canadian ethics review system, the concepts of governance (or at a minimum some level of leadership) and accreditation or assessment are inextricably linked. A governance model is necessary for the creation of and sustainability of an assessment model. As described in Recommendation VII (page 20), there needs to be an authoritative leadership group if efficiencies in ethics reviews are going to be implemented on a national basis, beyond current provincial efforts.

Aligned with our recommendations pertaining to the scope of a system for assessment, the WG strongly believes that a research ethics governance model must be inclusive of all REBs regardless of the types of human research reviewed. It would be a disservice to the research enterprise in Canada to have one system of ethics governance for regulated clinical trials and no system or a different system of ethics governance for all other human research, particularly when most other countries have or are moving toward a comprehensive approach to research ethics oversight. Furthermore, given the reality that clinical trials are rarely, if ever, reviewed by boards that solely review clinical trials, it was deemed impossible to ascribe recommendations that would affect only the review of trials without also having an influence on the infrastructure of REBs more generally.

CAREB-ACCER’s key concerns, which are shared by the WG, are related to the persistent lack of funding and leadership for development of a system for assessment of and enhancement of research ethics board functions. As a result, CAREB-ACCER approached the recommendations with some skepticism. The WG is keenly aware that the present review has been preceded by prior reviews and recommendations that were subsequently not acted upon. As such, we recognize and share the frustration of the community at

the perceived inertia and consequently, the potential doubt that additional reports or recommendations could lead to concrete actions at the national level.

Acknowledging that it will be challenging to establish effective leadership and to obtain the necessary funding and commitment for a national accreditation effort, the WG upholds the recommendation to establish a national strategic leadership forum. The recommendation does not preclude REBs from seeking qualification, accreditation or designation under the existing standards. At present, despite the absence of a national strategy, collaborations within and across provinces are happening and will continue. This, unfortunately, could lead to fragmentation, rather than convergence of efforts. To be successful, any national initiative would need to evaluate and build on existing initiatives, including establishing benchmarks of quality, efficiency and effectiveness.

3. RECOMMENDATIONS AND RATIONALE

Based upon the experience and expertise of the WG, the balance of the Consultant’s report, comments received on the DPRs39 and subsequent discussions regarding these, the WG makes the following recommendations. We wish to note that many of these recommendations have been made in similar forms previously by other expert WGs. Additionally, many of these recommendations are currently either under discussion by the REB Community or are actually being undertaken as initiatives of various groups and organizations. The recommendations are ordered not in priority of importance, but in order of the potential chronology of implementation, although many of them if not all, could be commenced simultaneously.

Although the recommendation for the establishment of a National Strategic Leadership Forum is our final recommendation, The WG believes that it is the most important recommendation, as is emphasized throughout this document. While many if not all of the other recommendations could be successfully put into effect individually, the WG believes that a leadership forum is necessary to ensure that the goal of enhancing the quality, effectiveness and efficiency of REB reviews on a national basis is achieved in a cohesive and coordinated way and that uptake of the recommendations is maximized and developed in a context that includes all of the recommendations as a whole, thereby boosting their combined impact. Without a leadership group steering the process, efforts and results may be fragmented and disconnected and certainly the goal of achieving efficiencies on a pan-Canadian basis may be jeopardized. As evidenced by Figure 1, the WG sees the National Strategic Leadership Forum as the foundation of its other recommendations.

39Ibid
I. Distribute the SPOR SHRER Report widely and take action on the applicable recommendations

The SHRER Committee report\(^{40}\) contains many recommendations that are similar to those of this WG. Notably, recommendations were made for: a national strategic leadership forum, as well as the development of an evidence-base through the establishment of common metrics and/or benchmarks, and the development of an inventory of REBs. The Report and Appendices were made public, but not through a coordinated, comprehensive effort, aimed at achieving maximum impact. In addition, the Committee’s recommendations were never publicly responded to.

The WG feels that the SHRER report provides a valuable overview of the harmonization initiatives in Canada and that broader dissemination of the report would facilitate awareness of existing efforts in REB streamlining and also awareness of previous recommendations. As such, the SHRER Committee recommendations\(^{41}\) should be reconsidered by the CCTCC and Health Canada in today’s context and those organizations should publicly respond to the recommendations of that report, as well as to the recommendations of this WG’s report. These responses should include action plans as may be appropriate to advance the recommendations.

RATIONALE FOR RECOMMENDATION I

A theme which runs throughout this report is a need for transparency and engagement. This includes openness and broad dissemination of findings and engagement with key stakeholders. The recommendations that the SHRER\(^{42}\) advisory committee made to the SPOR WG and the SPOR National Steering Committee in 2013 continue to resonate with the members of this WG. Three years after they were developed, most of these recommendations continue to be worth pursuing. In fact, the WG members (some of whom were on the SHRER advisory committee) were struck by the similarities in the recommendations made by both groups. The WG believes that even with the passage of time, the results

\(^{40}\)ibid\(^{1}\)  
\(^{41}\)ibid\(^{1}\)  
\(^{42}\)ibid\(^{1}\)
of this WG’s activities, the development of CTO, and other developments within the research ethics field many of the recommendations are still valid today and worthy of consideration.

The SHRER Committee’s recommendations\textsuperscript{43} focused on developing greater harmonization and standardization of REBs, tools and strategies to support these efforts, as well as increasing communication/consultation within the research ethics community. They included establishment of a National Strategic Leadership Forum as a first step in moving towards improving efficiencies of ethics review and advancing strategic issues (as called for in the Clinical Trial Summit Action Plan\textsuperscript{44}, Recommendation #4). They also included development of an evidence-base, through establishment of common metrics and/or benchmarks and the development of an inventory of REBs. The balance of the recommendations strongly emphasized the value that a cohesive and cooperative research ethics community would bring.

The SHRER report and recommendations\textsuperscript{45}, including the summary of the status of the harmonization initiatives at that time, together with the appendices C.1 and C.2 which provided the results of an investigation into the common elements in initial REB application forms for clinical trials and the common elements for an adult informed consent form for clinical trials were made publicly available although there was no formally developed communications plan. The actual SHRER committee recommendations\textsuperscript{46} were never publicly responded to. To avoid duplicating past efforts, this WG suggests that the SHRER report and recommendations, together with the accompanying appendices should be broadly re-disseminated to the REB community and others and that the recommendations, together with the recommendations in this WG’s report, should be considered by the CCTCC and Health Canada. The CCTCC and Health Canada should publicly respond to the recommendations in both reports as appropriate including where applicable, providing action plans to advance the recommendations that they believe should be adopted.

II. ESTABLISH A REGISTRY OF REBS THAT REVIEW AND APPROVE CLINICAL TRIALS THAT COULD ULTIMATELY BE EXPANDED TO ENCOMPASS ALL REBS IN CANADA.

As per the SHRER report\textsuperscript{47}, we reiterate here the desire for better awareness of the REB landscape across Canada. A Registry of REBs that review and approve regulated clinical trials should be established. Participation in the registry should be mandated by Health Canada. The Registry should be developed in collaboration with CAREB-ACCER and/or the Panel on Research Ethics (PRE). The CCTCC could potentially incorporate clinical REBs within its existing Canadian Clinical Trials Asset Map (CCTAM)\textsuperscript{48}. However, the registry should be developed so that it could foreseeably be expanded to include, on a voluntary or mandatory basis as appropriate, other Canadian REBs.

RATIONALIZE FOR RECOMMENDATION II

\textsuperscript{43}ibid\textsuperscript{1}
\textsuperscript{44}ibid\textsuperscript{6}
\textsuperscript{45}ibid\textsuperscript{1}
\textsuperscript{46}ibid\textsuperscript{1}
\textsuperscript{47}ibid\textsuperscript{1}
\textsuperscript{48}www.cctam.ca
The WG recommendation to create a registry of REBs operating in Canada is similar to a recommendation made in the 2013 SPOR SHRER Report\(^{49}\), and there continues to be general support for a registry. If we are to move forward in efforts to improve efficiency, quality and effectiveness of REB reviews and processes in Canada, including developing an evidence-base for change, the WG believes that it is imperative that there be a source for information concerning REBs that are currently operating in Canada.

Currently, Health Canada requires information on REBs involved in the oversight of regulated trials through a Clinical Trial Site Information Form (CTIF) that is collected by study sponsors at each site. However, the REB information is not referenced consistently, thereby making the information difficult to retrieve in a systematic fashion. In addition, the forms are not stored in a database and so are not easily accessible.

A registry would require a standard collection method; consistency in the information collected and would facilitate access to information by various stakeholders. It would also serve to facilitate communication to and among REBs (e.g. dissemination and sharing of information related to education, forms and policies) and could facilitate cross-consultation amongst REBs. Further, in the present state in which the REB community operates in the absence of evidence regarding workload, practices and metrics, a registry would be the first step to developing an evidence-base which may be drawn upon for future decision-making. Knowing for example, the type and volume of research being reviewed by an REB could facilitate streamlining and benchmarking efforts.

CAREB-ACCER hosted a voluntary listing of REBs for a short time after the National Council on Ethics in Human Research (NCEHR) was dissolved in 2010. More recently, it has commenced some efforts toward re-establishing a national registry. However, CAREB-ACCER is of the view that a national registry is of value only if it includes all REBs that review all types of human research. It does not believe that, as a volunteer organization, it could mandate registration into a registry it would create and host.

As such, a key step is gaining support from an entity which, by nature of their mandate and responsibilities, has the authority and financial resources to ensure participation in and updating of information by REBs that review regulated clinical trials is assured. In the view of the WG, Health Canada is such an entity.

Making participation mandatory is, in the WGs opinion, the most effective way to ensure REB registration and ongoing accuracy of the information. A mandatory registry would be consistent with the US system of Institutional Review Board (IRB) registration for those IRBs that oversee regulated and US Federally funded research.

If CCTCC becomes a permanent centre with assured multi-year funding, it might be in a position to establish and maintain the registry as part of their CCTAM. However, that might restrict future applicability to all REBs. Overall, careful consideration must be given to the access and maintenance of the registry, as well as to the data requirements, to allow for eventual scalability to all REBs either on a mandatory or a voluntary basis, as is determined to be appropriate. Accordingly, the WG recommends that Health Canada work with the PRE and/or CAREB-ACCER on development of the registry. Sustainability in the long term should be factored into any development plans.

\(^{49}\)Ibid\(^1\)
III. ACTIVELY PURSUE REGULATORY OPTIONS FOR STANDARDS EQUIVALENCY FOR REBs THAT REVIEW REGULATED CLINICAL TRIALS

On the basis of the Consultant’s report and comments on the DPRs\(^{50}\), there was noted support for implementing assessment standards. The WG believes that assessing or evaluating REBs would have an impact on efficiency. We believe a standardized due diligence process would facilitate cooperation and eventual reciprocity among REBs. Health Canada should actively pursue regulatory options for requiring REBs that review regulated clinical trials under its regulatory framework to meet the qualification standards of an existing Canadian system of REB accreditation, qualification or designation. As an interim measure, Health Canada should issue a public notice that it strongly encourages REBs overseeing clinical trials to submit attestation forms that certify to sponsors that they meet accreditation, qualification or designation standards under an existing system in Canada. This in effect would mean that all REBs that review regulated clinical trials would need to demonstrate equivalency with one of the established standards: Association for the Accreditation of Human Research Protections Program (AAHRPP) accreditation, CTO REB Qualification, or Ministère de la Santé et des Services Sociaux (MSSS) designation. Integral to this process will be the development of appropriate metrics or benchmarks to evaluate impact and ensure that the process is evidence-based.

RATIONALE FOR RECOMMENDATION III

REBs that review regulated clinical trials are subject to numerous provincial, national and international regulations and guidelines. In Canada, very few if any public REBs review only regulated clinical trials. While the need to ensure quality, consistency and efficiency of REB reviews extends to all REBs, the most pressing requirement from a national economic and regulatory perspective is to ensure that those REBs that review regulated clinical trials meet common standards which should facilitate or accelerate the review process of clinical trials carried out in many sites or across jurisdictions.

In order to operationalize efforts toward efficiency, a mechanism to facilitate cooperation between REBs is intuitively necessary and establishing a baseline standard for operations, whether it is through a formal accreditation process, a qualification process similar to that of CTO, or a provincial designation system like the Quebec model seems to be a pre-requisite. While the investigations of the Consultant did not reveal direct evidence of the impact of accreditation, qualification or designation upon efficiency of REB review of multi-site studies, the WG believes that some mechanism for assessing or evaluating REBs would have an impact on efficiency by providing a standardized due diligence process to facilitate cooperation and eventual reciprocity among REBs. As noted by CTO in their response, an REB Qualification Program was necessary and valuable and had a direct impact upon the decision of REBs and their supporting institutions to participate in its Streamlined Research Ethics Review System. Most of the individuals interviewed by the Consultant believed that some form of accreditation or qualification of REBs could lead to positive outcomes such as leveling the playing field, increasing confidence in other REB reviews and ongoing oversight, and enhancing quality and consistency by fostering standardization of processes and documents. On the other hand, concerns were expressed that any assessment process should be meaningful and not a bureaucratic top down system or an expensive system that emphasizes compliance over ethics.

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\(^{50}\)Ibid\(^{3}\)
The information collected by the Consultant suggests that a system of assessment of REBs could be more successfully piloted with specialty research areas or industry sponsored Health Canada regulated clinical trials. There are operational standards such as the International Conference on Harmonization: Good Clinical Practice: Consolidated Guidelines (ICH-GCPs), the Canadian General Standards Board (CGSB) Standard and the US regulatory requirements that can be referenced, but there is no process in place to ensure that these applicable standards, guidelines and regulations are being applied in similar ways across REBs or between jurisdictions. Moreover, no data is being collected on a regular basis with respect to identifying the impact that changes are having on outcomes important to the ethics review process.

As the regulator of clinical trials conducted in Canada, Health Canada is the only entity that has the authority to require REBs that review regulated clinical trials to meet established standards. We agree in principle with the recommendation of the Senate committee that Health Canada’s clinical trial regulations require that REBs be accredited, certified or designated. Consistent with regulatory processes such a change should be preceded by substantive consultations. The WG believes, and it is supported by the data from the Consultant’s report, that consideration should be given to the existing standards. There is no need to create a new overarching standard. REBs would have to show that they meet the standards of one of the existing programs in Canada such as the AAHRPP accreditation standards, the CTO qualifications standards, or the MSSS designation standards. In the interim, Health Canada should issue a public notice that it strongly encourages REBs overseeing clinical trials to submit attestation forms to Sponsors that certify that they meet accreditation, qualification or designation standards under an existing system in Canada.

The WG is cognizant of the fact that imposing a qualifications or equivalence standard will undoubtedly have repercussions for those REBs that review only a small number of registered clinical trials. As noted in Section 2, recommendations that require changes in infrastructure or in the organization of REBs reviewing clinical trials will impact REBs that review other forms of research and for some, the requirements may represent a significant investment and impact the ability of the REB to operate in both spheres. Those REBs may have to review their current review processes and arrangements, and possibly look externally to find partners who have more dedicated experience in reviewing regulated clinical trials.

IV. COORDINATE REB EDUCATION AND TRAINING EFFORTS AND CONDUCT A NEEDS ASSESSMENT OF REB EDUCATION REQUIREMENTS

In the opinion of the WG, which is supported by the results of the Consultant’s interviews, high quality REB reviews are inextricably linked to access to education and training. Thus, any system of assessment of REBs would necessarily require that education and training for the REB staff and members are available. Currently there are a number of different organizations that are involved in research ethics education and training. These include CAREB-ACCER, the PRE, N2 and CITI (Collaborative Institutional Training Initiative), and the Canadian Bioethics Society (CBS). The WG recommends that these organizations strive to coordinate their education and training plans, and wherever appropriate, work jointly on ethics education that includes substantive ethics education as well as procedural (compliance and operations) information. To that end, a scan of existing REB education initiatives and needs-assessment efforts should be undertaken by some or all of these organizations and if warranted, an exercise to identify the top education priorities for research ethics community should be undertaken.

RATIONALE FOR RECOMMENDATION IV
The WG believes, and it is supported in its belief by the results of the Consultant’s interviews, that high quality REB reviews are inextricably linked to access to education and training. Most systems of assessment or accreditation of REBs require that education and training for the REB staff and members be available, and it is a specific requirement of the Canadian Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans TCPS2 2014. In previous expert reports education was considered to be part of the feedback loop for an accreditation system. The WG recommends that the organizations that are currently involved in research ethics education and training continue to be supported, but also that they strive to coordinate their education and training plans, and wherever appropriate, work jointly on ethics education that includes substantive ethics education as well as procedural (compliance and operations) information.

The need for more REB education was a recurring theme throughout the interviews conducted by the Consultant. The interviewees indicated that the best way to improve the quality of ethics reviews was to provide more education and resources, as well as to enhance communication amongst REBs. Access to education, particularly on new and emerging ethical issues, was considered a top priority.

Numerous ethics education and training programs have been established in Canada and the US over the past few decades including modules such as the TCP52 CORE tutorial and mandatory National Institutes of Health’s (NIH) Protecting Human Research Participants course. The Consultant has noted that one significant failure is the preoccupation of most research ethics education resources with compliance related issues at the expense of substantive challenges that REBs and researchers actually struggle with in their work.

To avoid assuming the research ethics needs and best interests of a particular community, the WG believes that it is necessary to conduct a meaningful research ethics needs assessment. The WG recommends that a scan be conducted of existing REB education and needs-assessment efforts and if warranted, embark on an exercise to identify the top education priorities for research ethics boards. Such an effort would draw on the substantive and procedural ethics expertise of the education team in conjunction with the target community in an approach that is inherently interdisciplinary. Consideration must be given to building on existing efforts and to avoid duplication. One past effort was conducted for the Canadian Stem Cell Network (CSCN) by McDonald et al., and is discussed in Longstaff et al., 2009 and McDonald and Longstaff, 2013. Researcher requirements for education in research ethics should not be ignored, given that researcher’s knowledge of both the process and substance of ethical requirements is interwoven into efforts to enhance the quality, effectiveness and efficiency of research ethics reviews.

V. INVESTIGATE THE FEASIBILITY OF VARIOUS APPROACHES TO SHARING REB REVIEWS OF MULTICENTRE RESEARCH INCLUDING A POSSIBLE NATIONAL ONLINE SYSTEM.

In the WG’s experience, on-line systems facilitate compliance, accessibility, transparency and reporting of metrics as well as collaborative sharing of information. However, there is a paucity of evidence regarding the impact on metrics and there may be significant financial or logistical barriers to implementing a single online system. The WG recommends that a study investigating the feasibility of various approaches to consolidating, collaborating on or sharing REB reviews of multi-centre research should be undertaken by CCTCC and Health Canada. This should include but definitely not be limited to the feasibility of a national on-line system, and/or one online system per province and/or interoperability between existing systems to support REB review of multi-centre research, starting with clinical trials. This also or alternatively might encompass establishment of a national data warehouse that would allow pooling of and restricted access to specified REB review and study information. The existence of current on-line systems and the costs of migrating to a single or any other system would have to be seriously considered.

RATIONALE FOR RECOMMENDATION V

In the experience of the members of the WG and including but not limited to organizations such as the University of British Columbia (UBC), OCREB, and CTO, quality (in some of its aspects), effectiveness, and in particular efficiency of REB reviews are enhanced by secure on-line systems that automate and streamline the ethics review processes, and are accessible to REBs and researchers regardless of their physical location. The collective experience of the members of the WG, which is supported by the Consultant’s interviews of individuals involved in streamlining initiatives across Canada, is that on-line systems facilitate compliance, accessibility, transparency and reporting of metrics. They also facilitate collaborative sharing of information.

In the WG’s experience, many ethics streamlining initiatives have started from an attractive but simplistic approach, with an emphasis on an initial review of a multi-site study. While streamlining the initial REB review presents its own challenges, the administrative complexity of managing post approval review activities involving multiple sites presents even bigger logistical challenges for researchers, REBs and sponsors. The 2013 SHRER report recommended that an inventory of REBs that use web-based systems should be taken, in order to promote the development of compatible systems. The WG expands on this recommendation to investigate the feasibility of a variety of approaches to consolidating, collaborating on or sharing REB reviews of multi-centre research including a national online system. While a single national online system ultimately may not be feasible, it should not be ruled out without assessing the potential barriers and solutions. Other countries such as the United Kingdom (UK) have successfully implemented one online system for multi-centre clinical research.

Representatives of CTO have stated that they recognized from the outset that the only feasible way for CTO to develop an efficient system to support a single REB review of multi-centre research in Ontario was to create a single portal and supportive infrastructure for the online submission and review of REB applications. Despite having separate processes and systems for the review of their single-site research, researchers and REBs involved in studies submitted through CTO are using a single CTO online system for

56 Ibid
57 www.hra.nhs.uk/research-community/applying-for-approvals/research-ethics-committee
multi-site research. Representatives from OCREB have confirmed that it has had an online system for five years that meets its needs. However, discussions between representatives of OCREB and CTO resulted in acknowledgement that having one system to support multi-site REB reviews would be of considerable value to researchers and research institutions in Ontario. According to these representatives, CTO and OCREB are collaborating on a formal project to migrate OCREB’s system over to CTO’s online system.

The experience of British Columbia’s harmonized review process, which involves multi-party collaborative reviews, indicates that the review process operates more efficiently when an online system is utilized, and as a result, it is moving toward creating a multi-jurisdictional workspace on UBC’s online system. Most if not all private REBs operating in Canada have online systems. They are an acknowledged cost of doing business without which, they would be unable to compete.

A national online system, presumably scaling up from an existing system, or and/or consolidating REB reviews to a single system per province and/or establishing interoperability between existing systems, would, we suspect, alleviate much of the administrative complexity of streamlining REB reviews. CTO has offered to collaborate with other provinces, to expand the use of its system outside of Ontario. Implementing a single system could prove to be extremely challenging, particularly given the existence of a number of varying systems across the country, both within the public and the private spheres, many of which have entailed significant investment and many of which are inter-linked with other research operations or with other REB panels or corporations. Accordingly, due consideration would have to be given to these existing on-line systems and their interconnection with non-REB functions or with corporate-wide REB functions in the case of private REBs.

The potential for developing a process for sharing reviews of the same clinical trial should also be investigated. For example, it might be possible to create a national data-warehouse that would collect specific REB review and study information that could be made accessible on a restricted basis to authorized individuals, organizations and institutions. Transparent sharing of information and REB determinations in multi-site studies could help lead to more consistency in reviews and could assist in the development of standards and metrics against which to assess REB performance. It could also aid in timeliness of reviews by allowing REBs to avoid having to re-debate the same issues in the course of their reviews. Due consideration would, of course, need to be given to intellectual and privacy rights in the context of industry-sponsored clinical trial studies. Shared REB review systems could facilitate this exchange.

This proposal is consistent with the recommendations of the TCPS2 2014 which states that where multiple REBs are involved in a study, the REBs may wish to coordinate their reviews including communicating any concerns they may have with other REBs reviewing the same project. While single REB review may be the ultimate goal, the Consultant’s findings regarding the provincial harmonization initiatives, support the assertion that sharing of reviews in a secure fashion may help achieve the trust needed by public REBs to be able to enter into agreements for reciprocal or limited local reviews.

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59 See web-sites for Quorum Review IRB, Western IRB (WIRB) Reliance, Chesapeake IRB, Schulman IRB and Veritas IRB Inc.
60 Ibid
VI. CONDUCT A STUDY OF REAL AND PERCEIVED BARRIERS TO THE ACCEPTANCE OF OTHER REB REVIEWS, PUBLICLY REPORT ON THE FINDINGS AND RECOMMENDED SOLUTIONS

There are real and perceived challenges to extending REB jurisdiction beyond provincial borders and implementing single and/or central REB review of multi-jurisdictional studies across Canada. Provincial privacy legislation has, for example, been listed as a potentially restrictive factor with respect to allowing inter-provincial acceptance of reviews. CCTCC and Health Canada should commission an examination of national and provincial legislative barriers as well as institutional liability issues that prevent (either through perception or due to actual limitations imposed) one institution from relying on or accepting the reviews of another Canadian REB. Specifically, this examination should consider recently proposed solutions (e.g. appropriate legal agreements, shared insurers, etc.) as well as legislative approaches that may assist with current legal impediments. The WG also suggests that the examination include consideration of approaches that actively promote the acceptance of reviews. Specifically, we recommend consideration of the private REB model to determine how it has overcome these issues as well as the evolving US experience with the NIH Policy on the Use of a Single Institutional Review Board for Multi-Site Research.

RATIONALE FOR RECOMMENDATION VI

National and provincial legislative barriers

Streamlining and harmonization initiatives are being implemented in most Canadian provinces. There is no national organization facilitating cross-communication between those initiatives and/or looking at the issue from the perspective of regulated clinical trials. The US Notice of Proposed Rule Making (NPRM) proposes to mandate that US institutions engaged in cooperative research rely on a single IRB for that portion of the research that takes place within the United States. Some US sponsors (notably the NIH) have already moved to requiring single IRB review (within the US) for multi-site studies that they fund. The US Federal and State legislative landscape with respect to IRB review is considerably more complex than Canada’s. There are thousands of IRBs in the US, compared to hundreds in Canada. US institutions are developing and entering into reliance agreements that allow their institutions to rely upon an external IRB or central IRB. The feasibility of having Canadian institutions enter into such agreements within Canada should be actively investigated along with the challenges of implementing such agreements. Models for streamlining REB reviews of multi-site studies across Canada have been considered and, in some cases, attempted. These initiatives have shown that it is challenging to streamline REB reviews not only within regions but even more across provinces due to administrative, risk management and legal concerns. In particular, it is challenging to extend REB jurisdiction beyond provincial borders due to legislative variations, specifically with respect to, provincial privacy legislation. For instance, the health information legislation in Alberta requires that research involving the identifying health information of

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64 See for example: http://www.micyrn.ca/WhatWeAreDoing.html#ethics
residents of Alberta be reviewed and approved by a designated Alberta-based REB and that reports of their decisions are reported to the Alberta Privacy Commissioner\textsuperscript{65}.

In order to streamline REB reviews of multi-site research across Canada, the WG believes that a formal legal review of the legislative barriers, including provincial privacy (and personal health information) laws should be undertaken.

**Institutional Liability Issues**

Despite statements contained within the TCPS2 \textsuperscript{2014}\textsuperscript{66} and existence of a report commissioned by Health Canada\textsuperscript{67}, information obtained from the Consultant’s interviews suggests that some members of the public institutional REB community continue to believe that institutional liability issues are a significant barrier to accepting the review of an external REB. These concerns are being expressed by representatives of both the academic and health authority REB communities. However, most of the streamlining initiatives appear to have successfully resolved these issues.

Private REBs operating in Canada have overcome some (but not all) of these challenges. They have developed systems and processes that have allow for single review and approval of a study, followed by a review of participating sites, focusing on local site issues and local investigator qualifications. With the exception of provinces that have prohibitive privacy legislation, the private REBs are able to review studies for sites across Canada. The feasibility of public institutions adopting the private REB model for studies that are pan-Canadian should be studied, including operational aspects as well as leadership and resources.

The WG recommends that a formal study of the institutional liability issues related to non-local (external) REB review be undertaken. The report should include consideration of the recently published article by Townend et al., 2016\textsuperscript{68}.

By engaging the appropriate expertise, workable solutions could be identified for overcoming the legislative and institutional barriers such as legislative change, legal agreements, acknowledgement of shared insurers, etc. The results of these investigations or a summary of them in a clarification document should be made public on research ethics-related web-sites (e.g., PRE, CAREB – ACCER, N2 and provincial harmonization initiatives) and broadly disseminated to the REB community.

**VII. ESTABLISH A NATIONAL STRATEGIC LEADERSHIP FORUM**

There is a need for identified leadership to champion, shape and direct the development of research ethics on a pan-Canadian basis. This includes facilitating the implementation of this report and the SHRER Committee recommendations\textsuperscript{69}, as well as coordinating communications and sharing of best practices amongst the provincial streamlining initiatives. The Tri-Councils, IMC, HealthCareCAN and Health Canada should initiate consultations with key stakeholders to establish a national strategic leadership forum

\textsuperscript{65} Health Information Act, Revised Statutes of Alberta 2000, Chapter H-5, Division 3.
\textsuperscript{66}Ibid\textsuperscript{42}
\textsuperscript{68}Ibid\textsuperscript{52}
\textsuperscript{69}Ibid\textsuperscript{1}
charged with identifying and facilitating initiatives for enhancing human research protections in Canada. The model of the US’s SACHRP should be considered when developing the national strategic leadership forum. It would be funded by and accountable to the key stakeholders involved in the area of human research protections. Potential key stakeholders are suggested on page 22.

RATIONALE FOR RECOMMENDATION VII

Human research protections and the subset of those protections that represents research ethics review in Canada lack a clearly defined governance model and appropriate resourcing. Despite previous proposals over the past decade⁷⁰,⁷¹, efforts to establish a national program of assessment of human research protections in Canada have remained at a standstill. In the WG’s collective opinion, which is supported by the CAREB-ACCCER response to the DPRs⁷², the two most significant reasons as to why past efforts have failed, relate to the lack of formal leadership and lack of resources, in particular, funding and support. There is a need for identified leadership as there is no clear authority to either undertake the required consultative work or to provide the necessary practical support for the implementation of any proposed assessment and governance model.

The US and UK systems while markedly different in both model and scope, have each had the support and endorsement of either a combined group of impacted stakeholder organizations (AAHRPP in the US), or the national Health Research Authority (HRA in the UK). Accreditation of IRBs in the US is a process applied to an overarching human research protections framework involving the institution, the IRB and the researcher. The AAHRPP Standards and Evaluation Instrument provide a set of objective requirements for the evaluation of the quality and level of protection that an organization provides. This is consistent with the regulatory requirements described in the US Common Rule, Food and Drug Agency’s (FDA) regulations as well as ICH GCP’s and local regulatory requirements. Accreditation in the US is voluntary and the costs are not incidental. Governance of REBs is overseen by the Department of Health and Human Services (DHHS) through its Office of Human Research Protections (OHRP). In addition to OHRP, the US has created the Secretary’s Advisory Committee on Human Research Protections (SACHRP). The SACHRP is a legislated committee that is responsible for advising the Secretary for Health and Humans Services on matters related to human research protections. When discussions pertaining to accreditation were occurring in the US, SACHRP established an accreditation sub-committee. They recently established a sub-committee on the NPRM.

There is historical support in Canada for establishing a strategic national leadership forum. In February 2013, the SHRER Committee concluded that a national strategic leadership forum should be created to:

- Facilitate communications between the various streamlining and harmonization initiatives
- Provide strategic insight into opportunities for national collaborations; and

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⁷²Ibid
• Identify potential groups to take responsibility for moving forward on the SHRER Committee recommendations\textsuperscript{73}.

On a national scale, there has been little to no cross-communication between the various streamlining and harmonization initiatives. There is no national leadership body charged with considering how pan-Canadian collaborations or reviews should be developed. There needs to be an authoritative leadership group if efficiencies in ethics reviews are going to be implemented on a national, as opposed to a provincial basis. The SHRER Committee recommendations\textsuperscript{74} were not taken forward in 2013. The current WG is making many of the same recommendations again in 2016. The WG believes that if the recommendations are not implemented this time, this report is destined to become a new tab in the binder of the next accreditation effort. Most significantly, such a failure will signal a lack of official support for a more robust system of human research protections in Canada. At the very least, this failure to act will negatively impact trust in the research ethics community regarding future endeavors.

The WG is not recommending the creation of a separate institution or organization that would serve as the governing body for human research protections in Canada, rather it is suggesting a national strategic leadership forum with varied (and changing) representation from across the country. Individuals with local, provincial, regional and national interests and expertise in research ethics would be invited to participate in the forum. These key leaders should convene regularly to provide strategic advice and direction related to national centralization and harmonization initiatives as well as accreditation and registration recommendations.

The WG recognizes that a centralist REB governance model such as the one in the UK is not something that would be appropriate in Canada. The WG believes that its recommendation for a national strategic leadership forum is appropriate given the federalist nature of Canada and the fundamental constitutional divisions that exist. As reflected in the Consultant’s report, it is clearly necessary to acknowledge the different needs and requirements of Canada’s provinces and territories, and to support their efforts to streamline research ethics reviews within their respective jurisdictions. We believe that, at least as a first step, the proposal for a national strategic leadership forum funded and accountable to a group of key stakeholders, is a “collaborative and federalist” model for ethics leadership that makes sense for Canada.

The WG suggests that the leadership forum should be funded by and accountable to an external advisory board, made up of representatives from the relevant private sector, Health Canada, the Tri-Councils [CIHR, Natural Sciences and Engineering Research Council of Canada (NSERC), and Social Sciences and Humanities Research Council of Canada (SSHRC)], IMC, CAREB-ACCER, HealthCareCAN, and Innovation, Science and Economic Development Canada (ISED). The National Alliance of Provincial Health Research Organizations (NAPHR0) might also be considered.

Enhancing the quality, efficiency and effectiveness of research ethics review and human research protections in Canada is directly linked to both economic and health and wellness benefits for Canadians because the quality and timeliness of ethical reviews and approvals impacts the knowledge translation process from study design to application of research results. The WG notes that ISED is one stakeholder that has not been significantly involved at the Canadian national table in these discussions. One

\textsuperscript{73}\textsuperscript{74}Ibid\textsuperscript{1}
respondent to the DPRs recommended the ISED as a potential leader, partner and funder. It is worth noting that Ontario’s initiatives (CTO and OCREB), which arguably have achieved the most success in harmonization and centralization of research ethics processes, have the support of their provincial counterpart, i.e. Ontario’s Ministry of Research and Innovation and Science (MITS). Significantly, they also have the largest amount of dedicated funding for their initiatives.

The WG fully recognizes that this final recommendation is likely to be the most difficult to obtain endorsement for. We recognize that it cannot be accomplished without a commitment of both support and funding from stakeholders within government and the private sector, and as we have noted, this has not been achieved in response to any of the previous experts’ reports over the past two decades. We believe, however, that implementing this recommendation is not only warranted, it is fundamental. The WG believes that given the importance of research ethics in the research to application life-cycle, the importance of quality, efficiency and effectiveness in research ethics reviews, and the need to streamline multi-jurisdictional reviews on a national basis, that establishing a national strategic leadership forum as suggested would be a relatively low cost way to accelerate and coordinate developments within the field of research ethics. Such an initiative will ultimately have a highly beneficial impact upon not just clinical trial research in Canada, but all research in Canada.

4. CONCLUSION: Moving Ahead. Finally.

In making its final recommendations the WG carefully considered many factors, which are detailed above. Many of the recommendations are the same or substantially similar to some of those made in previous expert reports, although the approach and scope may differ. While previous efforts were not acted upon, the WG hopes that the phased and initially narrower approach (starting with a focus on REBs that review and approve regulated clinical trials) as suggested in its recommendations will finally result in garnering the stakeholder support and funding necessary to make the recommendations a reality. In so doing, the WG firmly believes that benefits will extend to all Canadians, particularly to research participants, researchers, research institutions and research sponsors.

The title of this section is an intentional nod to the Moving Ahead. Final Report of the Experts Committee for Human Research Participant Protection in Canada of June 15, 2008. That Committee built on considerable work (analysis, consultations and consensus-building) that had occurred over the preceding decade. In acknowledging this work, we also acknowledge that discussion of some form of accreditation (and governance) for human research participant protection has been ongoing in Canada for almost 20 years. With the changing research landscape in other countries and an imminent change in the US, many provinces are moving ahead irrespective of national leadership. As reflected in the Consultant’s interviews, there is a diversity of harmonization and streamlining models and processes for REB reviews that vary depending upon region (provinces/territories) or areas of specialization, and each of them have developed processes whose objectives are to enhance quality, effectiveness and efficiency of research ethics reviews within that specific community. What is missing is a coordinated national effort to align these initiatives, and to provide strategic insight into opportunities for cross-communication and national

\[75\text{Ibid}^3\]

\[76\text{Ibid}^4\]
collaboration. For the clinical trial research community, national coordination is a fundamental imperative. Without it, Canada risks falling further behind in its capacity to attract clinical trial activity given the globally competitive environment. Equally important is the fact that the benefits of implementation will not be restricted to clinical trial research. Ultimately, the benefits will it is hoped, benefit all multi-jurisdictional research in Canada. This of course, is contingent upon ensuring that due consideration is given to ensuring the scalability of the relevant recommendations as they are implemented. The WG believes that its recommendations if acted upon will result in creating a mechanism for national coordination relatively quickly, and with a relatively small financial cost.

The WG wishes to acknowledge that given the diverging views held by different organizations, institutions and individuals, it is unlikely that all of the recommendations outlined above will be embraced and agreed to by everyone involved in research ethics reviews in Canada. Because of this potential, we wish to reiterate the need to build from the ground up and to engage with and incorporate feedback from the REB and other impacted communities. Fundamentally success will only be achieved if we build all programs and implement all recommendations with and for the stakeholders that are being served. If the credo “Nothing about us without us” is truly adopted this time, the WG believes that success can be achieved. As CTO has learned, “success comes from partnerships and working with our communities. We are most successful when we build programs with, and for, the stakeholders we serve. Caution is advised around if and how programs are imposed.”

The WG believes that now is the time to move forward and that if this opportunity is missed, that it may in fact be lost in its entirety.

It is long past time for action.

Respectfully,

The Members of the WG
5. BIBLIOGRAPHY


6. GLOSSARY OF ACRONYMS

AAHRPP – Association of Accredited Human Research Participants Protections
CAREB – ACCER - Canadian Association of Research Ethics Boards- Association Canadian/L'association canadienne des comités d'éthique de la recherche
CBS - Canadian Bioethics Society
CCTAM - Canadian Clinical Trials Asset Map
CCTCC - Canadian Clinical Trials Coordinating Centre
CGSB - Canadian General Standards Board
CIHR – Canadian Institutes of Health Research
CITI - Collaborative Institutional Training Initiative
CSCN - Canadian Stem Cell Network
CTIF - Clinical Trial Site Information Form
CTO - Clinical Trials Ontario
DHHS - Department of Health and Human Services
DPRs - Draft Preliminary Recommendations
FDA - Food and Drug Agency
HRA – Health Research Authority
ICH-GCPs - International Conference on Harmonization: Good Clinical Practice: Consolidated Guidelines
IMC – Innovative Medicines Canada
IRB - Institutional Review Board
ISED - Innovation, Science and Economic Development Canada
OCREB – Ontario Cancer Research Ethics Board
OHRP – Office of Human Research Protections
MITS - Ministry of Research and Innovation and Science
MSSS - Ministère de la Santé et des Services sociaux (Ministry of Health and Social Services)
NAPHRO - National Alliance of Provincial Health Research Organizations
NCEHR - National Council on Ethics in Human Research
NIH - National Institutes of Health
N2- Network of Networks
NPRM - Notice of Proposed Rule Making
NSERC - Natural Sciences and Engineering Research Council of Canada
PRE - Panel on Research Ethics
REB(s) - Research Ethics Board(s)
Rx&D – Canada’s Research-based Pharmaceutical Companies, currently Innovative Medicines Canada (IMC)
SACHRP - US Secretary’s Advisory Committee on Human Research Protections
SHRER – Streamlining Human Research Ethics Review
SPOR – Strategy on Patient-Oriented Research
SSHRC – Social Sciences and Humanities Research Council of Canada
UBC - University of British Columbia
UK - United Kingdom
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APPENDIX A

Consultant’s Report
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Executive summary

1. Background and purpose
The Canadian Clinical Trials Coordinating Centre (CCTCC) REB Accreditation Working Group was established in April, 2015 to explore the development of a pan-Canadian accreditation system for Research Ethics Boards (REB) that review clinical trials. After initial meetings and discussion, the Working Group proposed that given the considerable efforts across many provinces to create more efficient ethics review systems, accreditation should be viewed as one potential component to increasing efficiency of ethics reviews, rather than assuming that accreditation is an end in itself. The interview findings presented in this report are intended to assist the Working Group in their efforts to achieve this goal.

2. Methods
Criteria for participation in a semi-structured interview for this study included direct experience with REB processes or expert knowledge of REB policies and procedures. Participants included REB Members, REB experts from the academic and research ethics community, and REB administrators. Interviews were also conducted with representatives from independent IRBs. In total twenty-seven interviews were conducted with twenty-eight participants.

3. Results

3.1 An updated summary of harmonization and centralization efforts in Canada
There are a number of harmonization and centralization efforts set to improve REB efficiency and quality currently underway in Canada. This section includes a table that provides an overview of some of the key features for each system. The figure clearly illustrates the diversity of unique needs that each system is serving for their various communities.

3.2 Opinions
Interview results in this section are presented by popularity with the most commonly mentioned themes discussed first.

3.2.1 Successes and challenges

Successes
In terms of successes, the most common responses from participants were that their system had become a one stop shop that had improved efficiency and ease of use, and had become a streamlined and consistent system (n=6). An equal number of participants stated that their system had improved turn-around times for the ethics review of studies (n=6).

Challenges
When asked about the biggest challenges they faced with their harmonization or centralization systems, participants’ responses centered on two key themes. The most common theme concerned turf wars and dealing with change management (n=13). Many participants explained that a major difficulty they faced with their system was bringing others on board and convincing
them to give up control over work. They explained that their system was not embraced by all stakeholders because some individuals did not understand why the change was necessary or important. They found that it was difficult to build trust and help others to deal with their local issues such as institutional liability. Slightly fewer participants identified extra paperwork and administrative work as a major challenge (n=11).

3.2.2 Negative consequences
When asked specifically about the negative consequences they experienced as a result of their harmonization or centralization process the most common response concerned increased administrative workload and paperwork (n=15). Participants explained that the system led to higher volumes, greater costs, and more work for the Board of Record (BoR), which made it challenging to locate the necessary expertise required for the reviews and difficult to retain REB members. They explained that they did not have the administrative support to coordinate these efforts and ended up doing the work off the side of their desk.

Dedicated staff and funding
Perhaps some of the negative consequences and challenges mentioned in the above sections of this report stem from the overall lack of administrative resources and funding provided for the various harmonization and centralization efforts discussed by participants. Only eight participants stated that they had staff dedicated to their system (n=8). What’s more, most pointed out that this level of support was insufficient as these individuals were responsible for other tasks in addition to working on their system. In most cases, the activities associated with the new system were rolled into existing duties or an individual was temporary funded to assist in the process. This finding is of particular concern for the administrative staff of research ethics offices who are already stretched incredibly thin with their constantly expanding set of regular duties.

3.2.3 Electronic platforms
Twelve participants reported that they use an online platform for their system. However, this response is misleading given that some had just started using their system and others pointed out that not all parties within their systems were able to use this platform or multiple platforms were used within the system. A shared system that can be used by all parties is rare. This finding is significant given the emphasis that many participants placed on the need for a shared online platform for any harmonized or centralized review process as discussed in other sections of this report.

3.2.4 Quality, efficiency, and effectiveness

Quality
When asked what quality review means to their system the most common response was a review that did not focus solely on bureaucratic issues and consent forms or was overly conservative, paternalistic, or nitpicky (n=10). It was one that avoids duplication, fosters consistency, examined big picture substantive issues, and tried to make research better overall. In the case of harmonized or centralized processes, it was one completed through these systems that resulted in a review that was equivalent (in terms of quality) to a review from a single REB.
**Efficiency**
When asked to define an efficient ethics review process, the most common description was a review that was done in a timely manner while also meeting all necessary regulatory and other requirements and was conducted in a manner that added value to the research study (n=17). Participants also explained that better communication fostered timeliness, and flexibility allowed REBs to cope with urgent requests from research conducted during public health emergencies, for example. They asserted that efficient reviews avoided duplication and involved ‘on point’ REB discussions led by a competent Chair.

**Effectiveness**
The most common way participants described the concept of effectiveness was a review that helped support and served the needs of the research community to foster excellent research. An effective review was consistent with reviews from other REBs and identified actual ethics issues instead of procedural nit-picky issues. Effective reviews could be expected from REBs that had clear expectations that were well understood by the research community (n=12).

**Considering the significance of quality, efficiency, and effectiveness**
After discussing notions of quality, efficiency, and effectiveness, participants were then asked to consider which factor was the most important to a harmonization or centralization initiative. Participants most commonly reported that getting the review right and done in an efficient manner while maintaining high quality was the most important consideration (n=11). This kind of high quality review would include good scientific review, an ethics review conducted by REB members with the appropriate expertise, and making sure that the review was relevant to the protection of human research participants.

**Improving the quality of reviews**
Participants were asked to identify the ways in which the quality of reviews might be improved within their systems. Most participants said that the best way to improve quality was through providing more education and resources (including administrative support), more recognition for REB members, and by fostering more communication between REBs and REB Chairs (n=8).

**3.2.5 Measuring success**
Participants were asked about the ways in which they measure the success of their harmonization or centralization systems. The most commonly collected data included: response times, turnaround times, the volume of studies in their systems, consulting with research teams to acquire informal feedback, and analyzing complaints, etc. (n=10). In some cases, participants used their electronic systems to produce these data but many had to produce them manually. Most participants agreed that these metrics were ‘low hanging fruit’ and while important to collect, failed to address the most significant issues concerning the protection of research participants. In some cases, documentation on metrics was shared by participants and is provided in Appendix B. It should be noted that while many participants expressed the desire to consult with research participants, few were able to accomplish this goal.

**3.2.6 Perceptions of accreditation**
The notion of REB accreditation has no common definition and can mean different things to different people. When participants were asked to describe what accreditation meant to them,
responses were mixed. The most common response was that it was a process of being measured against standards to foster accountability and was really no different than the CTO qualification process, the MSSS designation process, the AAHRPP process, or the quality control processes they currently used within their systems (n=12).

**Accreditation as a method of enhancing quality, efficiency, and effectiveness**

Although participants had mixed views about the notion of accreditation, most believed that an accreditation system could potentially lead to many positive outcomes for their system. For example, when asked if an accreditation system would help enhance quality, and/or efficiency, and/or effectiveness in their system, the most common response was a positive one. Twelve participants agreed that an accreditation system may in fact level the playfield, increase confidence levels in the review process, and enhance the quality and consistency of reviews by fostering standardization of processes and documents. They also believed that an accreditation system would address current compliance gaps (e.g., around COI issues), and enhance professionalism by rewarding excellence (n=12).

**Professionalism and expertise**

Participants thought that education and training of REB members and staff was of critical importance as mentioned in numerous places throughout this report. When asked specifically if REBs needed to address the issue of professionalism and expertise, most agreed. However, it should also be noted that while participants pointed to the need for education and training, they did not necessarily agree that REB members and staff were currently unqualified. They merely pointed to the need for ongoing resources for all REB personnel regardless of how qualified they were at the present time.

Most participants agreed that there needed to be ongoing and regular education and training opportunities provided to everyone working within the research ethics review system (i.e., through CAREB conferences, a school for REB Chairs like Dean school, annual retreats, seminars, sessions and rounds with other groups, formal research ethics education offerings, summaries of relevant literature, discussions of common misunderstandings around ethics creep and other issues, myth busting, etc.). REBs also needed to actively recruit professionals and have access to ad hoc experts in their field. They wanted to be assured assistance from the departments they served when required. They also needed to preserve institutional memory by avoiding turnover. Participants stated that any proposed qualification process should be more than just a box to check, it needed to be meaningful (n=19).

**Lack of resources and other barriers**

Perhaps the source of the mixed reviews regarding REB accreditation is the perceived lack of resources available to support such a system in Canada. When asked about the barriers to accreditation that some REBs may face, the most common response was lack of time and resources (including educational resources and staff) and that imposing accreditation would cause smaller REBs to fold (n=15). The second most common response was cost (n=10).

**Current state of accreditation in Canada**

Most participants said that their system or REB was not currently accredited. They were also asked to describe any circumstances that may lead them to seek accreditation. The most common
response was that there would have to be an incentive and it would have to be financially supported by another body that also provided assistance and resources that would allow them to go successfully through the accreditation process. It would also have to be a mandatory system with serious consequences for not meeting standards or, alternatively, the peer pressure from other REBs to comply with an accreditation system would have to be substantial (n=8).

Other systems of accreditation
The participant sample included representation from the Association for the Accreditation of Human Research Protection Programs (AAHRPP) and the Alliance for Clinical Research Excellence and Safety (ACRES). Other accreditation programs that might provide useful information for the CCTCC include those established by the UK Health Research Authority (HRA) and a new system being developed by the ACRES referred to as a dynamic accreditation process. Both are presented in this section. The representatives from both AAHRPP and ACRES pointed out that they would be happy to work with CCTCC to develop an accreditation process that worked for the Canadian REB system and encouraged the CCTCC to contact them anytime about this matter. It will be interesting to see if the metrics and indicators proposed by the ACRES initiative will encompass some of the main themes raised by the participants of this study.

3.2.7 Trust and relationships

Trust
Participants agreed that trust and relationships played a critical role in the research ethics system. In the case of trust, most participants pointed out that the entire REB enterprise was a trust based system, or as one participant put it, a “virtuous cycle” (n=22). Participants pointed out that the entire system depended on REBs trusting each other, trusting that REB administrative staff had correctly pre-reviewed the applications, and trusting that what the researchers say they do in their applications is what they will actually do in practice. In turn, researchers trust that they will receive a fair and accurate review that addresses gaps their team overlooked. Participants thought this trusting relationship with the REB also extended to the institutions they represented, the general public, and sponsors.

Relationships
Participants agreed that relationships, much like trust, played a significant role in the ethics review process with most referring to positive outcomes that stemmed from strong, non-adversarial relationships between REBs, REB members, administrative staff, researchers, industry, and human research participants. They explained that good relationships led to improved communication and therefore better applications from and interactions with researchers. Good relationships amongst REB members allowed reviewers to raise questions or ask for second opinions in an ad hoc manner without fear of being judged. They explained that bad relationships and experiences undermine trust while good ones can help foster change. They thought that harmonization and centralization efforts fostered better relationships within the REB community through building a community of practice and shared norms (n=22).
Enhancing trust and improving relationships
Participants had a number of ideas about how to enhance trust and improve relationships within the ethics review system. Many thought that developing and sharing best practices (that were flexible enough to account for modified practices across systems), creating good outcome measures, and encouraging excellent transparent processes were a good start. They explained that REBs should not be afraid to share reviews and make mistakes during these efforts (n=8).

4. Next steps and recommendations

4.1 Examining past successes and failures
When considering next steps and recommendations for the future, it is important to first take the time to examine our past mistakes and successes. Participants were asked what they would do differently for their system if they had the chance to start over. The most common response was that they wished they had started with an online system that could automatically track and report on metrics. They also would have developed common or more complete forms and created a system that worked for the ethics review process and not just clients/researchers so that they had all the information they needed to conduct a proper ethics review in one place (n=9).

4.2 Streamlining multi-jurisdictional reviews: General recommendations from participants
The most popular methods participants raised to improve multi-jurisdictional review processes related to developing common forms, procedures, SOPs, and contract agreements. Participants also pointed to the need for common understandings of key terms like minimal risk and proportionate review. They thought it was important for REB staff to take more responsibility over the procedural aspects of REB work so that the REB members could focus on the actual ethical implications of the studies. They also believed that the administrative burden on researchers had to be reduced (n=10).

4.3 Major theme: Education and training
One of the most popular themes to emerge across the data from this study was the need for ongoing education and training to support high quality ethics review processes. Interview participants revealed two important educational initiatives intended to support the efficient review of complex genetic and genomic research studies that frequently include multiple sites and international collaborators (see below).

1. The Global Alliance for Genomics and Health initiative; and
2. The Genome Canada funded research ethics education network.

Training that focuses on specific topics as well as the procedural and compliance aspects of research ethics is obviously important. However, participants also identified a significant dearth of ethics education resources concerning general substantive ethics issues and the moral values that guide them through their work. There are many issues around ethics review that cannot be resolved by referencing articles from regulatory policies and guidance documents. REB professionals need access to materials that can help users navigate difficult situations and dilemmas through the use of case studies and other decision aids for example. Perhaps one way that the CCTCC could address participants’ expressed need for additional ethics education and training would be to promote free of charge ethics education materials produced through the...
initiatives listed above on their website as well as substantive research ethics education materials already developed by the CIHR Ethics Office and other bodies.

4.4 Major theme: Engagement and communication
A second important theme to emerge across the interviews was the need for continued engagement and communication at almost every level to promote high quality ethics reviews. This final section presents recommendations for engaging with (1) the REB community, (2) human research participants, and (3) the research community.
1. Background and purpose

The Canadian Clinical Trials Coordinating Centre (CCTCC) REB Accreditation Working Group was established in April, 2015 to explore the development of a pan-Canadian accreditation system for Research Ethics Boards (REB) that review clinical trials. After initial meetings and discussion, the Working Group proposed that given the considerable efforts across many provinces to create more efficient ethics review systems, accreditation should be viewed as one potential component to increasing efficiency of ethics reviews, rather than assuming that accreditation is an end in itself. The interview findings presented in this report are intended to assist the Working Group in their efforts to achieve this goal. The methods used for this study are presented in section 2 including a discussion of participant confidentiality measures. Section 3 provides an overview of interview results followed by recommendations and proposed next steps in section 4.

There have been numerous attempts to develop strategies aimed at improving both the efficiency and quality of REB review in Canada. The Vanderwel background paper prepared for Health Canada (HC) in 2012 does an exceptional job of outlining accreditation systems employed by other nations as well as initiatives intended to improve or monitor REB functioning in Canada. This report draws together the lessons learned from these past efforts as well as from other organizations currently accrediting IRBs/REBs such as the Association for the Accreditation of Human Research Protection Programs (AAHRPP).

The Strategy on Patient-Oriented Research (SPOR) report produced in 2012 provides a systematic overview of REB harmonization efforts in Canada. The notion of accreditation was presented in this report as a mechanism for fostering mutual confidence and trust in order to encourage greater reciprocity amongst REBs. The SPOR report also provides an extensive list of past initiatives that focused on the issue of accreditation in Canada. A selection of the vast array of reports expertly authored on the topic of REB harmonization, centralization, and accreditation in Canada are listed below. All are important, comprehensive resources authored by leading experts in the field of research ethics.

- The Health Canada Canadian General Standards Board (CGSB) 2007 Initiative;
- The 2008 Final Report of the Experts Committee for Human Research Participant Protection in Canada entitled Moving Ahead;¹
- The 2012 report of the Standing Senate Committee on Social Affairs, Science and Technology entitled Canada’s Clinical Trial Infrastructure: A Prescription for Improved Access to New Medicines;²
- The National Clinical Trial Summit reports such as Towards Health & Prosperity... An Update on an Action Plan to Help Attract More Clinical Trials to Canada (December

² Accessed March 6 2015 from: http://www.aihealthsolutions.ca/media/Senate-report.pdf
and To Your Health & Prosperity - An Action Plan to Help Attract More Clinical Trials to Canada (March 30, 2012)\(^3\);  
- The 2012 SPOR External Ethics Advisory Committee report entitled An Overview of Research Ethics Harmonization in Canada\(^4\); and  

The results and recommendations stemming from the activities listed above have met with varying degrees of success and a great deal of controversy within our field, most specifically around attempts to develop quality and efficiency metrics. **The aim of this report is not to duplicate any of these past efforts or to resolve the accreditation debate in Canada. What is presented here are findings from a series of key informant interviews that express current thinking around REB accreditation, harmonization, and issues relating to quality review.** Participants interviewed for this study believed strongly in the importance of high quality, consistent reviews in order to streamline ethics review in Canada. However, many did not believe that a new or US focused accreditation system would accomplish this goal for a variety of reasons discussed in the results section of this report. They instead pointed to pre-existing harmonization and centralization efforts currently underway in Canada that could be expanded or even accepted nationally to foster a more streamlined, high quality research participant protection system.

### 2. Methods

Key materials recently produced about clinical trials and REB accreditation, harmonization, and centralization in Canada were reviewed in order to prepare the interview schedule for this study. Findings from these materials, including the 2012 SPOR report interview questions, were used to inform specific key informant interview questions, which covered a range of topics relating to current harmonization initiatives, common understandings of issues related to REB review, performance measures and metrics, and perceptions of REB accreditation. A draft version of the protocol was reviewed by the CCTCC REB Accreditation Working Group and revised in response to comments collected from its members until a final set of questions was approved.

Criteria for participation in a semi-structured interview for this study included direct experience with REB processes or expert knowledge of REB policies and procedures. It should be noted that the word "system" is used in this report to encompass many different realities in the ethics review of research, which may include institutional systems, provincial systems, or specialized centralized review systems, for example. The data about these systems are merged into broad categories despite the fact that these systems have different types of impacts on the review process and operate under different jurisdictions. This recruitment approach was selected in order to achieve a sample that represents the diversity of interests within the Canadian human

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\(^3\) Accessed March 6 2015 from: http://www.cctcc.ca/index.cfm/reports-resources/national-clinical-trial-summit-documents/

research participant protection endeavor. In addition, individuals did not have to be involved in
systems that reviewed clinical trials specifically. If reviewing clinical trials had been used as a
mandatory inclusion criterion, many important initiatives, such as the BC Ethics Harmonization
Initiative (BCEHI) would have been excluded from analysis. Participants included REB
Members, REB experts from the academic and research ethics community, and REB
administrators. All were identified in collaboration with the CCTCC Working Group and
through snowball sampling with interview participants. The final sample represents individuals
from a variety of topic domains and regions including other nations. Interviews were also
conducted with representatives from independent IRBs (see Table 1).

Table 1. Regions and topics represented by interview participants

<table>
<thead>
<tr>
<th>Region</th>
<th>Topic of interest</th>
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<tr>
<td>BC</td>
<td>BC Ethics Harmonization Initiative (BCEHI)</td>
</tr>
<tr>
<td>Alberta</td>
<td>Alberta Health Research Ethics Harmonization (HREH)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>Saskatchewan Academic Health Sciences Network (SAHSN)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>University of Manitoba system</td>
</tr>
<tr>
<td>Ontario</td>
<td>Clinical Trials Ontario (CTO)</td>
</tr>
<tr>
<td>Ontario</td>
<td>The Toronto Academic Health Sciences Network (TAHSN)</td>
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<tr>
<td>Ontario</td>
<td>Northern Ontario School of Medicine</td>
</tr>
<tr>
<td>Quebec</td>
<td>The Quebec Ministry of Health and Social Services (MSSS) MESS Multi-Centre Research Ethics Review Mechanism</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>Capital District Health Authority in Halifax, Nova Scotia.</td>
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<tr>
<td>New Brunswick</td>
<td>New Brunswick Health Council</td>
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<tr>
<td>Newfoundland &amp; Labrador</td>
<td>Health Research Ethics Board (HREB) of Newfoundland &amp; Labrador</td>
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<tr>
<td>National</td>
<td>Health Canada/Public Health Agency of Canada REB</td>
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<tr>
<td>National</td>
<td>Canadian Network for Public Health Intelligence (CNPHI), Multicentre Interim REB Process Collaboration Centre</td>
</tr>
<tr>
<td>Research domain</td>
<td>Topic of interest</td>
</tr>
<tr>
<td>Stem Cells</td>
<td>Stem Cell Oversight Committee (SCOC)</td>
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<tr>
<td>Pediatrics</td>
<td>Maternal Infant Child Youth Research Network (MICYRN)</td>
</tr>
<tr>
<td>Oncology</td>
<td>Ontario Cancer Research Ethics Board (OCREB)</td>
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<tr>
<td>Other nations</td>
<td>Topic of interest</td>
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<tr>
<td>US</td>
<td>Common Rule changes</td>
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<tr>
<td>US</td>
<td>AAHRPP</td>
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<tr>
<td>US</td>
<td>ACRES</td>
</tr>
<tr>
<td>UK</td>
<td>UK’s Health Research Authority</td>
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<tr>
<td>Netherlands</td>
<td>Medical Research Ethics Committees (MREC)</td>
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<td>Independent REBs</td>
<td>Topic of interest</td>
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<tr>
<td>US and Canada</td>
<td>For-profit REBs</td>
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<tr>
<td>General experts</td>
<td>Topic of interest</td>
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</table>


In total, twenty-seven interviews were conducted with twenty-eight participants. In one case, an interview included two individuals working within the same initiative, which accounts for the higher number of participants than interviews completed. This sample size is well within accepted norms for qualitative research. Analyses of past interview studies have shown that it is quite possible to reach thematic saturation with homogeneous samples of between 20 to 30 participants. Research conducted by Granger et al.,\textsuperscript{5} demonstrates that new concepts tend to drop off substantially after approximately 10 to 15 interviews. For this study, theoretical data saturation\textsuperscript{6} began to be reached after the first few interviews were completed when new substantive themes failed to emerge from the data. This broad level of agreement across a variety of issues indicates many points of consensus within the participant sample and is also reflected in the aggregate data presented in the results section of this report.

Interviews took place between January 12 and March 21, 2016 and took one hour and twelve minutes on average to complete. All were conducted via telephone by the same interviewer apart from one French language interview, which was conducted by Dr. Julie Robillard. Both Drs. Longstaff and Robillard have substantial knowledge of research ethics issues and are fully trained in qualitative research methods. All interviews were audio recorded and extensive notes were taken throughout each interview. Notes were analyzed with NVivo software to determine major and minor themes from the data and emergent themes was amassed using principles from grounded theory.\textsuperscript{7} All analyses and report writing activities were conducted exclusively by Dr. Longstaff to maintain strict confidentiality of all raw participant data.

2.1 Participant confidentiality measures

Maintaining a strict level of confidentiality throughout the lifecycle of this study was extremely important to the majority of participants given the critical nature of interview subject matter and the fact that their identities could easily be inferred by others in the relatively small research ethics community in Canada. For this reason, audio recordings were not shared (and will not be shared) with anyone including the CCTCC Working Group members, all interview findings are presented in aggregate form only, and no quotations are used in this report.\textsuperscript{8} In the results section, interview data that address specific harmonization or centralization initiatives are

\begin{knitrout}
\small
\begin{verbatim}
| Canada   | Genome Canada initiative, international harmonization efforts, the history and progress of REB review in Canada. |
\end{verbatim}
\end{knitrout}


\textsuperscript{7} Strauss A; Corbin J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Sage, Newbury Park, CA.

\textsuperscript{8} Some participants asked for requests to be explicitly made to the CCTCC Working Group about sharing information and offering services or assistance. In these cases, participant affiliations are not masked.
presented separately from opinion based data. Responses tied to specific initiatives, regions, or topics could easily be used to identify specific individuals. Throughout the interviews, participants were also free to redact statements, which were then immediately deleted from the interviewer’s notes.

3. Results

Interview results concerning various harmonization and centralization efforts are presented separately from opinion based questions in order to mask the identities of participants. Section 3.1 provides an updated summary of harmonization and centralization efforts according to the participants of this study and documents they agreed to share with the Working Group. The following section (3.2) provides an overview of participant opinions regarding a variety of issues related to the initiatives outlined in section 3.1.

3.1 An updated summary of harmonization and centralization efforts in Canada

There are various harmonization and centralization efforts set to improve REB efficiency and quality of reviews currently underway in Canada. The Working Group and participants of this study both agreed that examining the progress of these efforts was a valuable exercise. Table 2 below provides an overview of some of the key features for each system.
Table 2. Harmonization and centralization efforts by region and specialization

<table>
<thead>
<tr>
<th>Process name</th>
<th>Type of research reviewed most frequently</th>
<th>Clinical trials y/n</th>
<th>Current state of process</th>
<th>Industry sponsored (%)</th>
<th>Main objectives</th>
<th>Steps involved</th>
<th>Involved institutions</th>
<th>Support: Legislated, formalized, or informal</th>
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<tr>
<td><strong>Regional</strong></td>
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<tr>
<td>BC Ethics Harmonization Initiative (BCEHI)</td>
<td>Mostly minimal risk.</td>
<td>None yet.</td>
<td>Funding to end in March, 2016 but looking into sustainability options.</td>
<td>None yet.</td>
<td>Foster efficient high quality reviews, protect human research participants, and attract research to the province.</td>
<td>Selection of BoR after PI submits harmonized cover sheet. Other REBs are involved at this time and can make comments simultaneously.</td>
<td>BC’s 4 major research universities and the provincial health authorities.</td>
<td>No formal mechanism. Funded and facilitated by the Michael Smith Foundation for Health Research until March, 2016.</td>
</tr>
</tbody>
</table>
| Alberta Health Research Ethics Harmonization (HREH) | Research involving human participants and their health information (as defined by the Health Information Act) | Yes.                | Ethics Review Reciprocity Agreement signed in 2013. Expires end of 2016. Involved institutions have committed to its renewal. | A significant proportion of clinical trials. | • Ensure protection of research participants, and recognize the autonomous nature of REB decision-making.  
• Encourage multi-site research.  
• Support provincial level metrics for strategic management of health research ethics in Alberta.  
• Contribute to | When one of 3 HIA designated REBs reviews an ethics application, this constitutes a “recognized review.” Any other designated REB shall accept the “recognized review.” | Alberta Innovates-Health Solutions, Alberta Health Services, Covenant Health, College of Physician & Surgeons of Alberta, University of Alberta, and University of Calgary. | Initiated under the Health Information Act. |
<table>
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<tr>
<th>Process name</th>
<th>Type of research reviewed most frequently</th>
<th>Clinical trials y/n</th>
<th>Current state of process</th>
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<th>Steps involved</th>
<th>Involved institutions</th>
<th>Support: Legislated, formalized, or informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saskatchewan Academic Health Sciences Network (SAHSN)</td>
<td>Minimal risk and above minimal risk (majority is behavioral and minimal risk).</td>
<td>Yes-a few.</td>
<td>Well-established processes since 2011.</td>
<td>Very few.</td>
<td>Alberta’s and Canada’s potential as an attractive and competitive research environment, attracting additional activity and investment to the province.</td>
<td>PI submits simultaneously and receives one harmonized review.</td>
<td>The University of Saskatchewan, University of Regina, and the Regina Qu’Appelle Health Region (RQHR)</td>
<td>No funding and no written agreements.</td>
</tr>
<tr>
<td>Clinical Trials Ontario (CTO)</td>
<td>Clinical trials.</td>
<td>Yes-all.</td>
<td>Launched in June, 2015.</td>
<td>Just under half.</td>
<td>Provide an infrastructure to help REBs be more efficient and attract more clinical trials to the province.</td>
<td>Centres sign a Participation Agreement with CTO. Application is submitted to CTO and they assign a CTO Qualified BoR (usually the PI’s home institution). If the REB cannot accept the study, another REB is approached. All BoR REB members have access to the system and documents and can submit comments. The BoR must use the CTO</td>
<td>There are presently 13 CTO qualified REBs and 45 participating sites.</td>
<td>Government supported and cost recovery for studies that are non-investigator initiated.</td>
</tr>
<tr>
<td>Process name</td>
<td>Type of research reviewed most frequently</td>
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<td>Current state of process</td>
<td>Industry sponsored (%)</td>
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<tr>
<td>The Toronto Academic Health Sciences Network (TAHSN)</td>
<td>Any type of research provided it includes more than one of their institutions.</td>
<td>Yes-a few.</td>
<td>Fully functioning since June, 2014.</td>
<td>Less than half.</td>
<td>To harmonize reviews amongst regional organizations.</td>
<td>Approval letter comes from the BoR but through the CTO system. The lead PI/applicant also responds through the CTO system. Once the study is approved, other centres/PIs can join and provide site specific issues with their application to the BoR. A BoR agreement is submitted for every study. CTO also handles post-approval activities.</td>
<td></td>
<td>In-kind contributions from the involved institutions and overheads from industry funded studies.</td>
</tr>
<tr>
<td>The Quebec Ministry of Health and Social Services (MSSS) MSSS Multi-Centre Research Ethics Review Mechanism</td>
<td>Health science.</td>
<td>Yes-many.</td>
<td>Running since Feb, 2015.</td>
<td>A lot.</td>
<td>They wanted to put a structure in place to relieve administrative burden while ensuring the</td>
<td>The sponsor needs to have an agreement with a PI at the BoR. Sites include all institutions that are part of the public health care system and social services network. Universities and There are 34 sites but universities and private clinics are not included.</td>
<td></td>
<td>Each of the 34 sites offers financial support and they can bill the sponsors as well.</td>
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<tr>
<td>Process name</td>
<td>Type of research reviewed most frequently</td>
<td>Clinical trials y/n</td>
<td>Current state of process</td>
<td>Industry sponsored (%)</td>
<td>Main objectives</td>
<td>Steps involved</td>
<td>Involved institutions</td>
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</table>

**Main objectives:**

- Protection of human research participants.
- Private clinics are excluded.
- Most use the same electronic submission platform that streamlines the ethics review process and the institutional authorization process, which includes contracts, use of institutional resources, etc. All 34 sites also use the same insurer so liability issues are resolved for MSSS. BoR agreements do not need to be drafted for each study.

The researcher will ask their REB to act as the BoR and if they agree, the researcher gives a copy of the agreement to the sponsor and the sponsor shares it with researchers at the other sites. The researcher at the BoR starts discussions with REB, sets timelines, responds to demands of the REB, etc. Then, the researchers at the other cites get a copy of the decisions through the sponsor. The researchers go to their office of research services, submit documents, work out administrative issues, but do
<table>
<thead>
<tr>
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<th>Type of research reviewed most frequently</th>
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<th>Industry sponsored (%)</th>
<th>Main objectives</th>
<th>Steps involved</th>
<th>Involved institutions</th>
<th>Support: Legislated, formalized, or informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nova Scotia Health Authority (NSHA) Research Ethics Board</td>
<td>Research from across the province involving patients, staff, resources, or data.</td>
<td>Yes-many.</td>
<td>Initiated in April, 2015 after all health regions amalgamated.</td>
<td>Most of the clinical trials are industry funded.</td>
<td>To foster centralized ethics review in the province.</td>
<td>not have to undergo ethics review at their home institution. When ethics approval is granted by the BoR, that researcher shares it with the sponsor and sponsor shares it with other sites. The other researchers share it with their institutions to compete their files. When contracts are finalized, an authorization form is provided by MSSS that indicates everything is ready to go and recruitment can commence. Post-approval activities are done solely by the BoR and site specific issues are communicated to the BoR by the relevant PIs.</td>
<td></td>
<td>Paid for by overhead for industry sponsored studies It is also legislated by Bill 89.</td>
</tr>
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</table>

Research conducted within the Nova Scotia Health Authority from the entire province. No academic institutions are involved except for Dalhousie medical.
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<tr>
<th>Process name</th>
<th>Type of research reviewed most frequently</th>
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<th>Current state of process</th>
<th>Industry sponsored (%)</th>
<th>Main objectives</th>
<th>Steps involved</th>
<th>Involved institutions</th>
<th>Support: Legislated, formalized, or informal</th>
</tr>
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<tbody>
<tr>
<td>New Brunswick Health Council</td>
<td>Mostly health science with very few humanities and social science studies.</td>
<td>Yes-many.</td>
<td>Operational since 2009.</td>
<td>About 30%</td>
<td>The health authorities were amalgamated to increase efficiency. Brought together four separate REBs. They work in a similar manner to Nova Scotia now.</td>
<td>Researchers submit by email or on paper and approvals are done by email and paper as well.</td>
<td>Hospitals in the region.</td>
<td>Supported through the provincial government but the regional directors established a single REB. The amended Regional Health Authorities Act initiated this system.</td>
</tr>
<tr>
<td>Health Research Ethics Board (HREB) of Newfoundland &amp; Labrador</td>
<td>All types of health research including everything from behavioral to clinical trials.</td>
<td>Yes-many.</td>
<td>Established in 2011.</td>
<td>About half.</td>
<td>The initial motivation was to protect their genetic resources in the province. Genetic research was being conducted in the province and samples and data were being taken out of the country without following any formal procedures. In addition, participants had no access to critical</td>
<td>The process just became paperless in 2016 and now uses electronic submissions through a researcher portal.</td>
<td>All health research conducted in the province must go through HREB.</td>
<td>Initiated by the Health Research Ethics Authority Act.</td>
</tr>
<tr>
<td>Process name</td>
<td>Type of research reviewed most frequently</td>
<td>Clinical trials y/n</td>
<td>Current state of process</td>
<td>Industry sponsored (%)</td>
<td>Main objectives</td>
<td>Steps involved</td>
<td>Involved institutions</td>
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<tr>
<td>National</td>
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<td>information that emerged from this research. The scope then grew to include all health research.</td>
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<tr>
<td>Health Canada (HC)/Public Health Agency of Canada (PHAC) REB</td>
<td>Any research with humans that is conducted by employees or through contracts or collaborations with HC and PHAC. Very little clinical research and lots of environmental science.</td>
<td>Yes-a few.</td>
<td>Officially started in 2010.</td>
<td>Rare.</td>
<td>To help share expenses and responsibilities at HC and PHAC.</td>
<td>A form is filled out on the web and sent by email and hard copy. Approvals sent by email and mail.</td>
<td>Research conducted by employees or through contracts or collaborations with HC and PHAC.</td>
<td>Government supported.</td>
</tr>
<tr>
<td>Canadian Network for Public Health Intelligence (CNPHI), Multicentre Interim REB Process Collaboration Centre</td>
<td>Public health.</td>
<td>No.</td>
<td>Disbanded.</td>
<td>No.</td>
<td>Required a process to deal with research conducted during emergencies. Initiated because of H1N1. The speed of review for multi-site public health</td>
<td>All reviews were done concurrently. Everyone sees the same package together but decisions were made individually so each REB can retain their authority</td>
<td>Institutions conducting public health studies with PHAC.</td>
<td>Supported by PHAC.</td>
</tr>
<tr>
<td>Process name</td>
<td>Type of research reviewed most frequently</td>
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<td>Domain specific</td>
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<td>emergency studies was an issue, even with expedited processes.</td>
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<tr>
<td>Ontario Cancer Research Ethics Board (OCREB)</td>
<td>Cancer research. Including COG pediatric studies</td>
<td>Yes-many.</td>
<td>Well established processes since 2003.</td>
<td>About half.</td>
<td>Centralized review model to provide oncology expertise, minimize redundancy, and increase efficiency while protecting the rights and safety of human research participants.</td>
<td>Institution signs a non-binding letter of intent and then decides whether a study goes to the local REB or to OCREB on a study-by-study basis. If OCREB acts of the BoR, a BoR Agreement must be submitted for each study. A PI from the multi-center trial will take the lead (Provincial Applicant) and submit a study-wide, generic application through the system (no letterhead, etc.). All other investigators will be notified once the study is approved and their center can join at any time and usually can acquire approval within 3 business days to conduct the study. OCREB also handles all post-approval activities. The local REBs are not involved in the reviews.</td>
<td>Twenty-eight Ontario institutions.</td>
<td>Allocated money from the government and through cost recovery for industry sponsors studies.</td>
</tr>
<tr>
<td>Maternal Infant Child Youth Research Network (MICYRN)</td>
<td>A few clinical trials. Most studies are</td>
<td>Yes-a few.</td>
<td>First face-to-face meeting in 2010.</td>
<td>None.</td>
<td>Provide a centralized review by topic</td>
<td>The MICYRN review can take place before or after REB review. Studies</td>
<td>Chairs and other members from</td>
<td>No formal mechanism. Grassroots. Does</td>
</tr>
<tr>
<td>Process name</td>
<td>Type of research reviewed most frequently</td>
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<tr>
<td>Stem Cell Oversight Committee of Canada (SCOC)</td>
<td>registries and longitudinal studies.</td>
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<td>not replace local REB review.</td>
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<td></td>
<td>Studies involving human pluripotent stem cells derived from an embryonic source and/or will be transferred into humans or non-human animals.</td>
<td>Cannot say on the record.</td>
<td>Long standing group established after the Human Pluripotent Stem Cell Research Guidelines were announced in 2002.</td>
<td>Cannot say on the record.</td>
<td>Compliment and supplement local REB review to ensure compliance with Chapter 12, Section F of TCPS 2 (2014).</td>
<td>SCOC review is independent from REB review so the study can be submitted as soon as funding is approved.</td>
<td>MICYRN-affiliated REBs who have expertise in pediatric research.</td>
<td>PUBLIC or private granting agencies (by mutual agreement) conducting this type of research.</td>
</tr>
</tbody>
</table>

SCOC review is independent from REB review so the study can be submitted as soon as funding is approved.
Table 2: At a glance

Of the fourteen systems presented in Table 2, OCREB is the oldest and one of the most respected within the REB community as noted by many participants of this study. It is not surprising then that they also collect some of the more robust data on metrics and are often used as a model for how to measure performance in other initiatives as discussed in Section 3.2.5 below. CTO, the NSHA REB, and MSSS are the newest additions to the Canadian REB landscape with all being officially launched in 2015. MSSS plans to produce its first report in July, 2016, which will provide an overview of the number of studies reviewed through their system, among other things. CTO is also collecting data on the functioning of their system and has already undergone an external review. The report produced during this review is not public but CTO would be willing to share it with CCTCC if invited to do so.

Table two clearly illustrates the diversity of unique needs that each system is serving for their various communities. While eleven review clinical trials in a range of volumes, two do not see any (and one cannot say on the record). The overall volume of research reviewed for each system also varies greatly. For example, the CNPHI Multicentre Interim REB Process Collaboration Centre reviewed approximately ten studies before its term ended. The NSHA REB, on the other hand, must gather every week to meet the demand of the research community they serve and are anticipating up to 400 new studies this year alone. The University of Manitoba system was also analyzed as part of this review even though it does not truly use a centralized or harmonized process. In their case, they are simply the only shop in town for health research in Manitoba. Although each institution does its own impact assessment, all researchers with a U Manitoba affiliation submit through them. Representatives from private IRBs were also interviewed. They reported that although it would be unusual, they would in fact be willing to participate in a harmonized review process if requested.

Many participants were asked to comment on the Notice of Proposed Rulemaking (NPRM) for Revisions to the US Common Rule. Among some of the proposed changes include modifying the informed consent process to make it more participant centered and transparent; requiring informed consent for the use of stored biospecimens in secondary research; expanding the current set of exempted research activities and activities that are not considered research; changing the conditions for waivers or alterations of consent; mandating the use of single IRBs for cooperative research; eliminating the requirement for continued review for studies under certain conditions; and, expanding the scope of clinical trials reviewed under the policy. Although it is currently unknown if and when these changes will be confirmed, some US research groups are assuming that they are likely to happen soon and have begun to change their processes accordingly. For example, the Michigan BioTrust for Health biobank has already adopted a new one-page consent form and brochure that complies what the proposed changes and has been reviewed by OHRP.9 A few participants thought that the notion of single review would be among the most difficult requirements for most IRBs to meet. In any case, the proposed changes will have a significant impact on the research ethics landscape in the US and for Canadian researchers who do cross border research.

---

3.2 Opinions

Interview results in this section are presented by popularity with the most commonly mentioned themes discussed first. Although twenty-eight people were interviewed for this study, individuals often mentioned multiple themes in response to a single question. Therefore, results cannot be expressed in percentages. Instead, the actual number of participants articulating particular views are provided in brackets in order to help clarify descriptive terms such as “most”, “many” or “few”.

3.2.1 Successes and challenges

Many of the participants interviewed for this study have been involved in various harmonization and centralization efforts for numerous years. We were interested in learning more about what had worked best for their current systems and what had been their biggest challenges according to their expert views.

Successes

In terms of successes, the most common responses were that their system had become a one stop shop that had improved efficiency and ease of use, and had become a streamlined and consistent system (n=6). An equal number of participants stated that their system had improved turn-around times for the ethics review of studies (n=6).

Slightly fewer explained that they found success in employing similar forms and systems or agreeing what forms to use and had improved administrative systems overall (n=5). The same number of participants asserted that the greatest success of their system was that it fostered better communication and trust and had involved the whole community when building a system that met everyone’s needs (n=5). The importance of grassroots consultation and building systems from the ground up emerged as an important theme for many participants. Some mentioned that researchers, sponsors, and institutions liked their new system and that it led to better customer service overall (n=4). A similar number said that it was hard for them to identify what was working well for their system because it was new or they had not experienced any improvements so far (n=4).

A few participants mentioned that their systems led to higher quality reviews and a process that they could control in order to protect the best interests of research participants (n=2). One participant explained that their system helped people to understand when they are meeting regularity requirements and another said that their greatest success was when they finally activated the process and stopped talking about it.
Challenges

When asked about the biggest challenges they faced with their harmonization or centralization systems, participant responses centered on two key themes. The most common theme concerned turf wars and dealing with change management (n=13). Many participants explained that a major difficulty they faced with their system was bringing others on board and convincing them to give up control over work. They explained that their system was not embraced by all stakeholders because some individuals did not understand why the change was necessary or important. They found that it was difficult to build trust and help others to deal with their local issues such as institutional liability.

Slightly fewer participants identified extra paperwork and administrative work as a major challenge (n=11). They explained that the new system had less flexibility overall when compared to their old system, took more time, was less efficient and clear, less consistent, more difficult, and there were no resources provided to them to help them cope with these issues. They pointed to the need for more institutional support and more administrative support in particular with one participant suggesting that a new system required a 1-800 number to call for coordination assistance.

A few participants stated that their new system made it difficult to retain REB members and also made it difficult for them to know what their researchers were doing since they were not familiar with the research going on at other sites. They preferred the institutional model of review that received submissions from researchers they saw on a daily basis from within their own organization (n=2). One participant mentioned that their new system did not have auditing and training opportunities or provide them with the opportunity to bring people together. Another participant explained that the geographic distance between the sites was now a problem and another mentioned that although their system was hard to set up initially, it seemed to be running smoothly at the present time.

3.2.2 Negative consequences

When asked specifically about the negative consequences they experienced as a result of their harmonization or centralization process the most common response concerned increased administrative workload and paperwork (n=15). Participants explained that the system led to higher volumes, greater costs, and more work for the Board of Record (BoR), which made it difficult to locate the necessary expertise required for the reviews and to retain REB members. They explained that they did not have the administrative support to coordinate these efforts and ended up doing the work off the side of their desk.

Some participants mentioned difficulties associated with the particular system they were using such as a lack of online platform, difficulties associated with learning the new system, finding it hard to let go of old processes over fears of institutional liability and other issues, not understanding the needs of local REB’s community issues, as well as not being familiar with researchers and research activities affiliated with other institutions (n=6). An equal number found it particularly difficult to manage the cultural change required to implement the new
system with many negative consequences stemming from people and politics and other turf wars (n=6). Slightly fewer reported that they had not experienced any negative consequences or did not want them stated on the record for the purposes of this study (n=5). One participant explained that their cost recovery process had failed and another discussed Conflict of Interest (COI) issues related to meeting institutional interests and the institutional pressure to accept studies. An unanticipated consequence mentioned by one participant was that studies had begun migrating to larger centres. They reported that they were currently in the process of establishing measures to reverse this trend so that smaller REBs would continue to operate within their system.

**Dedicated staff and funding**

Perhaps some of the negative consequences and challenges mentioned in the above sections of this report stem from the overall lack of administrative resources and funding provided for the various harmonization and centralization efforts discussed by participants. Only eight participants stated that they had staff dedicated to their system (n=8). What’s more, most pointed out that this level of support was insufficient as these individuals were often responsible for other tasks in addition to working on their system. In most cases, the activities associated with the new system were rolled into existing duties or an individual was temporarily funded to assist in the process. This finding is of particular concern for the administrative staff of research ethics offices who are already stretched incredibly thin with their constantly expanding set of regular duties.

In addition, most systems did not appear to have a sustainable funding model. Eight participants stated that their systems were funded by the government or through grant funding (n=8), seven reported that their systems were funded by in-kind contributions, overheads, though cost recovery mechanisms, or were back-funded (n=7). Three participants stated that their systems did not receive any funding to their knowledge (n=3). In one case, sponsors were directly billed for various costs. Of course participants representing private IRBs were self-funded and systems embedded in government systems received funding though internal mechanisms.

**3.2.3 Electronic platforms**

A large number of participants reported that they use an online platform for their system (n=12). However, this response is misleading given that some had just started using their system and others pointed out that not all parties within their systems were able to use this platform or multiple platforms were used within the system. A shared system that can be used by all parties is rare. This finding is significant given the emphasis that many participants placed on the need for a shared online platform for any harmonized or centralized review process as discussed in other sections of this report.

Five participants reported that they used a paper system, email, or an online form that could be emailed (n=5). A similar number stated that they did not use an online system currently but may adopt one in the future (n=5).
3.2.4 Quality, efficiency, and effectiveness

Developing shared concepts that can be widely endorsed by the user community is central to the success of any quality assurance or accreditation program. Yet, defining metrics has emerged as a significant area of controversy within the research ethics community in Canada. It is for this reason that participants were asked to define quality, efficiency, and effectiveness so that we could attempt to identify common themes that applied to our ethics review processes.

**Quality**

When asked what quality review means to their system the most common response was a review that did not focus solely on bureaucratic issues and consent forms or was overly conservative, paternalistic, or nitpicky (n=10). It was one that avoided duplication, fostered consistency, examined big picture substantive issues, and tried to make research better overall. In the case of harmonized or centralized research applications, it was one completed through the system that resulted in a review that was equivalent (in terms of quality) to a review from a single REB.

The second most popular response concerned the quality of the reviewing team (n=9). To produce a high quality review, reviewers had to have the requisite expertise and be sufficiently independent. The deliberations at the REB meeting should be rich and thoughtful and the administrative staff needed to be properly educated and trained.

Some participants explained that reviews that account for regulations and were consistent with SOPs and good internal policies should be considered high quality (n=7). A similar number stated that high quality reviews were ones that considered the human participant, were participant centered, considered future participants and patients, and did not result in complaints (n=6).

A fewer number stated that a quality review was one that was timely but not rushed and did not put up unnecessary roadblocks (n=4). Four also stated that a quality review should consider all aspects of the study but did not necessarily need to be exactly the same as one performed by another REB (n=4). Three participants thought that a quality review meant taking ethics principles and standards into account (n=3) and two believed that a quality review was one that fostered excellent research (n=2).

**Efficiency**

When asked to define an efficient ethics review process the most common description was a review that was done in a timely manner while also meeting all necessary regulatory and other requirements and was conducted in a way that added value to the research study (n=17). Participants also explained that better communication fostered timeliness, and flexibility allowed REBs to cope with urgent requests from research conducted during public health emergencies,
for example. They asserted that efficient reviews avoided duplication and involved ‘on point’
REB discussions led by a competent Chair.

Another common description of efficiency referred to a process with sufficient resources such as
staff and online automated systems (n=13). A properly supported system with clear performance
measures, SOPs, and metrics would allow properly trained administrators to help researchers
produce better quality applications and conduct pre-reviews that resolved many issues before
applications were presented to the REB. Such a process would reduce redundancies and costs by
allowing teams to use resources appropriately and not for inconsequential procedural issues.

Three participants explained that an efficient process used the expedited review process properly
and allowed for exemptions. It was a system that did not waste time on procedural issues that do
not actually protect participants (n=3). One participant stated that an efficient review is a review
that you had confidence in and another stated that a complete application led to an efficient
review. However, it is also important to note that overall, most participants viewed quality as a
more important metric to address than efficiency.

**Effectiveness**

The most common way that participants described the concept of effectiveness was a review that
helped support and served the needs of the research community to foster excellent research. An
effective review was consistent with reviews from other REBs and identified actual ethics issues
instead of procedural nit-picky issues. Effective reviews could be expected from REBs that had
clear expectations that were well understood by the research community (n=12).

Fewer participants stated that effectiveness meant providing reasonable decisions in a timely
manner or using timely processes (n=5). An equal number described effectiveness as meeting
regulatory requirements in a timely manner (n=5) or protecting research participants and making
sure they received all the information they required to make good decisions (n=5). Four
participants thought that effectiveness was a combination of quality and efficiency (n=4) and
three others explained that an effective review stemmed from having an REB with appropriate
expertise that produced thoughtful reviews (n=3). Two participants thought that obtaining
information about client satisfaction, metrics and data, and having adequate resources (e.g., an
online platform), led to effective reviews (n=2). One participant stated that an effective review
was one that considered all aspects of the ethics application.

**Considering the significance of quality, efficiency, and effectiveness**

After discussing notions of quality, efficiency, and effectiveness, participants were then asked to
consider which factor was the most important to a harmonization or centralization initiative.
Participants most commonly reported that getting the review right and done in an efficient
manner while maintaining high quality was the most important consideration (n=11). This kind
of high quality review would include good scientific review, an ethics review conducted by REB
members with the appropriate expertise, and making sure that the review was relevant to the protection of human research participants.

Another popular response concerned trustworthy and open communication between REBs and REB members. Participants pointed out that a REB meeting needed to be a safe space for deliberations where members could represent local institutions and research communities and had a common understanding of their shared values and notions of quality, efficiency, and effectiveness. REB members required appropriate education and guidance and the review process needed to be underscored by sound metrics and good planning (n=9).

Many participants asserted that consistent definitions and concepts were essential as were shared forms. They also agreed that it was important for reviews to be consistent and follow established standards while avoiding duplication and unnecessary documentation with each site. Participants believed that receiving a complete application that included everything you needed to review the study properly was an important step in avoiding inefficiencies (n=8).

It is important to note here that participants believed it was misguided to prioritize speed at the expense of quality or other metrics. Some were also concerned that a centralized system may not be capable of adequately addressing local issues and for this reason, there was a need to maintain the autonomy of local REBs by representing them in some way (or through other measures) on a centralized body.

Improving the quality of reviews

Participants were asked to identify the ways in which the quality of reviews might be improved within their systems. Most participants said that the best way to improve quality was through providing more education and resources (including administrative support), more recognition for REB members, and by fostering more communication between REBs and REB Chairs (n=8). Four stated that the best way to improve reviews in their system was to provide them with an online platform (n=4) and three believed that they needed metrics to determine quality while also encouraging everyone to view change and process improvements positively (n=3).

A few participants stated that less focus on administrative bureaucracy overall would improve their system (n=3). Two participants thought that standard documents that addressed all relevant aspects of an ethics review and worked for all involved sites would be a good way to improve the quality of their reviews (n=2). Two believed that better engagement with patients and the research participant community would improve the quality of reviews (n=2) while two stated that better engagement with the research community was required (n=2). One suggested that to improve quality, they would require access to documents associated with the entire lifecycle of the ethics application including post-approval activities and another thought that requiring REBs to accept the reviews of other REBs would help to improve quality.
3.2.5 Measuring success

Participants were asked about the ways in which they measure the success of their harmonization or centralization systems. The most commonly collected data included: response times, turnaround times, the volume of studies in their systems, consulting with research teams to acquire informal feedback, and analyzing complaints, etc. (n=10). In some cases, participants used their electronic systems to produce these data but many had to produce these data manually. Most participants agreed that these metrics were ‘low hanging fruit’ and while important to collect, failed to address the most significant issues concerning the protection of human research participants. A few participants stated that they were unsure as to how to go about collecting metrics for their system and therefore had no plan to use metrics, or had not been able to establish metrics at this time (n=2).

Many participants also said that they had developed shared forms and common language (n=8) for their systems. Yet, while participants agreed that common applications were helpful, some expressed concern about forcing researchers to use common consent templates given the rich diversity of research domains within their systems and the inability of one form to address the needs of all participant groups across all types of research. They did think however that it might be useful to provide some very high level standard wording in a common consent template.

It should be unsurprising that very few systems are set up to collect robust metrics given that there is little agreement regarding common notions of metrics within the Canadian REB community and many participants reported being under resourced and under staffed. Another likely reason for the dearth in systematically collected metrics could be the fact that most participants reported that their system had never been formally or informally evaluated (although some had undergone internal audits or typical Tri-Council or Health Canada audits). The few that had been were evaluated as part of the qualification process for CTO, were included in the MSSS REB designation system for Boards that seek to review research with those who lack the capacity to consent as captured by Rule 21 in the Civil Code of Québec, or had been evaluated some time ago by the now defunct National Council on Ethics in Human Research (NCEHR). That said, important exemptions exist. Appendix B provides an overview of some of the systems that are currently set up to collect metrics. It should be noted that while many participants expressed the desire to consult with research participants, few were able to accomplish this goal.

3.2.6 Perceptions of accreditation

The notion of REB accreditation has no common definition and can mean different things to different people. When participants were asked to describe what accreditation meant to them, responses were mixed. The most common reply was that it was a process of being measured against standards to foster accountability and was really no different than the CTO qualification process, the MSSS designation process, the AAHRPP process, or the quality control processes they currently used within their systems (n=12). Others stated that they saw it as a process of protecting human research participants by working with researchers and sponsors to improve quality in a way that enhanced professionalism and rewarded good performance (n=6).
Others saw accreditation through a more negative filter. Some participants were concerned that it would be a bureaucratic top down system or a hoop to jump through that would end up being another meaningless tick box they would have to check (n=4). Others saw it as an expensive and US regulatory focussed system that turned everything towards compliance instead of ethics. They thought the decision to accredit REBs in Canada needed to be based on sound data and must be justified to the community (n=4).

On the positive side, a few participants thought that accreditation might address the issue of multiple, duplicated reviews if it came with the authority to accept the reviews of other REBs (n=2). A few also hoped that it might encourage consistency in REB member knowledge through training requirements (n=2). That said, one participant stated that accreditation would not help their system and another explained that it was not a good idea. They suggested that it was more important to examine and expand what was already working within our current systems.

It is not possible to include cross tabulations in this report without exposing the identities of participants. However, it is worth noting that data specifically from interview participants who had real world experience working within systems that were accredited or were using some kind of quality assurance/designation/etc. program were examined to determine if their views differed from the overall sample of participants who may not have any experiential knowledge working within such a system (despite their broad expertise in research ethics). About one third of participants had experiential knowledge working within accredited systems or systems that use some sort of quality assurance program. When asked about accreditation, these participants, like the others, preferred a homegrown system like CTO to one like AAHRPP that many considered too focused on US regulations and issues of compliance. So while many participants did not think that a US regulatory focused system or a new accreditation system would be worthwhile, they were nonetheless supportive of expanding one of the current Canadian systems to foster quality ethics review. These participants generally viewed their own systems favourably and reasons offered for supporting these programs can be grouped for the most part into the two thematic categories shown below. One participant stated that accreditation systems were too compliance focused with not enough focus on ethics.

Thematic category 1: Enhancing quality and efficiency, enhances professionalism and performance, helps us know we are compliant/makes us more compliant (to be included in this category, participants had to express a positive view of their accreditation system even if it was only mildly positive).

Thematic category 2: Enhancing efficiency, good return on investment, better timelines (or consistency, or effectiveness), fosters reciprocity, reviews are streamlined. Fosters communication and collaboration, encourages a community of practice. Less siloed. More proportionate review. Fosters standardization.

One of the most difficult challenges around presenting results on accreditation stems from the fact that participants do not have a standard notion of accreditation. In addition, many do not necessarily include their system in their definition of accreditation, but for the purposes of this report, it seems reasonable to do so. What is clear is that most participants do not want a new
system or a US-based compliance system imposed on them. But they do support a system that would enhance quality, with some mentioning their own system specifically. Finally, most of the quantitative data that REBs collect do not address themes such as quality, pre and post comparisons, or enhancing the protection of research participants. This is likely due to the fact that these data cannot, and perhaps should not, be collected through quantitative methods and instead call for more in-depth qualitative evaluations and assessments.

Accreditation as a method of enhancing quality, efficiency, and effectiveness

Although participants had mixed views about the notion of accreditation, most believed that an accreditation system could potentially lead to many positive outcomes for their system. For example, when asked if an accreditation system would help enhance quality, and/or efficiency, and/or effectiveness in their system, the most common response was a positive one. Twelve participants agreed that an accreditation system may in fact level the playing field, increase confidence levels in the review process, and enhance the quality and consistency of reviews by fostering standardization of processes and documents. They also believed that an accreditation system would address current compliance gaps (e.g., around COI issues), and enhance professionalism by rewarding excellence (n=12).

A few stated that they could not say if accreditation would achieve any of these goals as it would depend on whether the proposed system was a data driven system that was more than a rubber stamp or simply a ‘feel good’ measure (n=3). A few others said that it would not enhance quality, and/or efficiency, and/or effectiveness in their system because it would just be another layer of unnecessary bureaucracy (n=3). A couple also explained that it would cause havoc for local REBs serving particular community groups (such as First Nations communities) and worried that such a system would not be able to cope with local and other important issues (n=2). Two others argued that we should be building on harmonization and centralization efforts like CTO that are already working (n=2).

One participants thought that accreditation may in fact enhance quality, and/or efficiency, and/or effectiveness in their system but that it would never happen because there was so much discrepancy in REB member training, and another said it could never happen because of legal institutional liability issues. One thought that an accreditation system for specialized research domains might be possible.

Professionalism and expertise

Participants thought that education and training of REB members and staff was of critical importance as mentioned in numerous places throughout this report. When asked specifically if they thought that REBs needed to address the issue of professionalism and expertise, most agreed. However, it should also be noted that while participants pointed to the need for education and training, they did not necessarily agree that REB members and staff were currently unqualified. They merely pointed to the need for ongoing resources for all REB personnel regardless of how qualified they were at the present time.
Most participants agreed that there needed to be ongoing and regular education and training opportunities provided to everyone working within the research ethics review system (i.e., through CAREB conferences, a school for REB chairs like Dean school, annual retreats, seminars, sessions and rounds with other groups, formal research ethics education offerings, summaries of relevant literature, discussions of common misunderstandings around ethics creep and other issues, myth busting, etc.). REBs also needed to actively recruit professionals and have access to ad hoc experts in their field. They needed to be assured assistance from the departments they served when required. They also needed to preserve institutional memory by avoiding turnover. Participants stated that any qualification process needed to be more than just a box to check, it needed to be meaningful (n=19).

Some participants stated that the issue of professionalism and expertise depended on the REB and Chair. They stated that while this may be an issue at other REBs, it was not an issue at their own (n=6). A few clearly stated that it was not an issue at all as far as they were concerned because regulations and other requirements already covered the issue of REB member expertise (n=4). A similar amount thought that accreditation and clear rules might be used to help with the issue of professionalism and expertise (n=3). Two reported that they required institutional support to address this issue and that in some cases they were prevented from hiring the staff they believed they needed because of internal policies and procedures (n=2). One participant said that they had heard horror stories about the quality of reviews produced by other REBs while another thought that specialized reviews for specific research domains (e.g., cancer or pediatric research) would be a great way to address the issue of professionalism and expertise.

**Lack of resources and other barriers**

Perhaps another source of the mixed reviews and range of concerns regarding REB accreditation stem from the perceived lack of resources available to support such a system in Canada. When asked about the barriers to accreditation that some REBs may face, the most common response was lack of time and resources (including educational resources and staff) and that imposing accreditation would cause smaller REBs to fold (n=15). The second most common response was cost (n=10). Others pointed out that the community would never be able to agree on common content or metrics and that securing buy-in would be very difficult if the system was imposed on them or viewed as another layer of bureaucracy (n=7).

Some participants suggested that an accreditation system required teeth and would have to be imposed on the community by a body like Health Canada or by sponsors threatening to remove clinical trials or agencies threatening to revoke funding from institutions that failed to meet accreditation standards (n=5). Others argued that accreditation was not needed and would not really address current problems with REB reviews. They pointed out that accreditation did not have a real history of working well for REBs with diverse research activities and that AAHRPP only addressed American regulations (n=4).

Two participants said that they could not comment on the barriers that REBs may face with accreditation unless they knew more about the proposed system (n=2). One participant thought
that a better alternative was to accredit national domain specific REBs (e.g., for cancer or cardiology research) and another said that the biggest barriers accreditation would face in Canada were legal and institutional liability issues.

Current state of accreditation in Canada

Most participants said that their system or REB was not currently accredited. They were also asked to describe any circumstances that may lead them to seek accreditation. The most common response was that there would have to be an incentive and it would have to be financially supported by another body that also provided assistance and resources that would allow them to go successfully through the accreditation process. It would also have to be a mandatory system with serious consequences for not meeting standards or, alternatively, the peer pressure from other REBs to comply with an accreditation system would have to be substantial (n=8).

Others could not identify conditions that would cause them to seek accreditation because they did not see the value of adopting a new process. They believed that they already had a system that worked well and did not believe that there was a shared understanding of what a new accreditation process would offer to REBs (n=7).

A few others stated that no conditions would lead them to seek accreditation because it was simply too costly for them (n=2). However, two participants said that they might be interested in a Canadian system depending on what standards they proposed (n=2). Two others thought that it might be a good idea to encourage accreditation for domain specific REBs at a national level (e.g., cancer or pediatric research) or with private REBs (n=2).

Other systems of accreditation

Some participants worked within systems that had been qualified through the CTO process, or had been designated to review certain types of research within the MSSS system, but the only participants to confirm that they were AAHRPP accredited represented private REBs/IRBs. It was also noted that unlike their public counterparts, private REBs/IRBs had assistance from internal IT departments to help address the mandatory reporting that was required to remain accredited as well as substantial financial support and resources.

The participant sample included representation from the Association for the Accreditation of Human Research Protection Programs (AAHRPP) and the Alliance for Clinical Research Excellence and Safety (ACRES). The representatives from both AAHRPP and ACRES pointed out that they would be happy to work with CCTCC to develop an accreditation program that worked for the Canadian REB system and encouraged the CCTCC to contact them anytime about this matter. Other accreditation programs that might provide useful information for the CCTCC include those established by the UK Health Research Authority (HRA) and a new system being developed by ACRES.
The HRA uses a centralized system that requires one ethics review for institutions within the UK. However, institutional approval is still required for research and development requirements and can take a great deal of time to secure. It is for that reason that the HRA is rolling out a new process this year to resolve this issue. Their goal is to ensure that the institutional review process is conducted in an efficient manner similar to ethics review. The HRA established an accreditation system for research ethics in the UK in 2007. The accreditation system includes a substantial set of SOPs and a self-assessment process using standards set by the government. Within this system, clinical trials must be reviewed by an approved (or flagged) REB. REB managers are asked to complete audits every 3 years and complete the self-assessment form. The HRA then randomly audits various studies within the system. The entire HRA system is ISO 9001 compliant and they are also required to submit to Department of Health audits.

Quality assurance personnel working within the HRA are able to review REB membership and attendance, how REB members are trained, timelines for reviews, and many other things with ease because they all use the same online system entitled HARP. All research is submitted and reviewed through HARP and quality assurance personnel can access everything on the system, which supports the activities required through the quality assurance and auditing processes. HARP replaced the previous online platform in 2013 and is now a one stop shop for ethics and quality assurance with the HRA. The representative from HRA was enthusiastic about sharing data and experiences with the CCTCC and extended an open invitation to members of the Working Group to visit their site anytime.

Another system of note for the Canadian REB community is a brand new initiative currently under development with ACRES and the British Standards Institution (BSI). ACRES has initiated a multi-stakeholder collaboration to develop global standards of excellence for clinical research sites. This program is intended to promote professionalism and reward performance by allowing high performing sites to be recognized for their work. It is viewed as a gold seal for a site that is committed to research excellence. The standards set by the program will encompass seven core domains including topics such as quality management, facilities, personnel, and patient engagement and three overarching domains for specialized research (pediatric research, first in human studies, and research with the cognitively impaired). The intention of this program is to lessen the burden of accreditation and for this reason, the system is known as dynamic accreditation. ACRES is currently in the third phase of standards development, which includes global consultations with REBs, CROs, sponsors, site managers and others to help develop indicators of quality. The criteria will ultimately be analyzed by the BSI in the UK, who are experts in writing standards. They will produce a draft of the standards for a working group and are planning to begin testing them at the end of this year. The standards will be continually reviewed and revised by a multi-stakeholder team through an independent, public process. ACRES also plans to engage BSI as an independent entity to house and manage the accreditation process.

To participate in the dynamic accreditation process, every site will require a data capture system that generates real-time data to ensure sites are operating according to the set standards and issues can be addressed immediately to prevent harms to participants. This process will allow REBs to base decisions and post-approval activities on empirical data emerging directly from the sites. This information technology platform is currently being implemented and will eventually
be offered to all sites in Canada. The representative from ACRES stated that they would like to work with CCTCC on this matter. The proposed platform will allow any management system to integrate onto it and operate together as one. ACRES plans to offer free systems, tools, and incentives to sites that choose to affiliate. They hope to begin pilot testing in the first part of 2017 and implement the program in late 2017. It will be interesting to see if the metrics and indicators proposed by the ACRES initiative encompass some of the main themes raised by the participants of this study.

### 3.2.7 Trust and relationships

#### Trust

Participants agreed that trust and relationships played a critical role in the research ethics system. In the case of trust, most participants pointed out that the entire REB enterprise was a trust based system, or as one participant put it, a “virtuous cycle” (n=22). Participants pointed out that the system depended on REBs trusting each other, trusting that REB administrative staff had correctly pre-reviewed the applications, and trusting that what the researchers say they do in their applications is what they will actually do in practice. In turn, researchers trust that they will receive a fair and accurate review that addresses gaps their team overlooked. Participants thought this trusting relationship with the REB also extended to the institutions they represented, the general public, and sponsors.

A few participants disagreed somewhat stating that it was not really a matter of the research community trusting the REB, it was about them building respect for their REB. They felt that when study teams made mistakes or were non-compliant, it was often by accident because they did not have a clear understanding of REB expectations or what they were expected to do (n=3). A few other participants did not believe that human research participants were even aware of REBs and that they instead placed trust in their research teams and physicians (n=3). One participant noted that accreditation or following the same SOPs did not necessarily lead to trusting other REBs. Another stated that for profit REBs had to work very hard to gain trust because the study teams could go elsewhere. They also asserted that for profit REBs were less impacted by COI issues because they were outside the home institution of the researcher. One participant stated that REBs should foster better communication with others in their communities to build trust while another wondered if our blind trust in each other was justified.

#### Relationships

Participants agreed that relationships, much like trust, played a significant role in the ethics review process with most referring to positive outcomes that stemmed from strong, non-adversarial relationships between REBs, REB members, administrative staff, researchers, industry, and human research participants. They explained that good relationships led to improved communication and therefore better applications from and interactions with researchers. Good relationships amongst REB members allowed reviewers to raise questions or ask for second opinions in an ad hoc manner without fear of being judged. They explained that
bad relationships and experiences undermined trust while good ones can help foster change. They thought that harmonization and centralization efforts fostered better relationships within the REB community through building a community of practice and shared norms (n=22).

On the other hand, some participants discussed the various negative trade-offs that can be associated with these sorts of relationships (n=6). They explained that relationships or perceived ‘coziness’ between researchers and REB members and staff could lead to COI issues (e.g., giving researchers you like a free ride), cloud judgment, and lead to blind, undeserved trust. A few participants pointed out that centralized REBs could help to address these risks since researchers are not served by their local institutional REBs during the review process.

One participant thought that more could be done to improve our relationships with the human research participant community and another referred to CAREB as an organization that helped to build good relationships in the research ethics world through their annual conferences and other activities. Another participant argued that institutions needed to improve their relationships with their internal REBs by providing more resources and support.

**Enhancing trust and improving relationships**

Participants had a number of ideas about how to enhance trust and improve relationships within the ethics review system. Many thought that developing and sharing best practices (that were flexible enough to account for modified practices across systems), creating good outcome measures, and encouraging excellent transparent processes were a good start. They explained that REBs should not be afraid to share reviews and make mistakes during these efforts (n=8).

Others suggested that the best way to foster trust and better relationships was to have more face-to-face interactions through conferences or by attending each other’s REB meetings. They thought researchers should also be invited to attend more REB meetings to explain their studies and that there should be more educational activities for everyone including mock reviews and facilitated discussions. Some also pointed to the need for meetings with the general public so everyone could talk together about difficult research ethics topics (n=7).

Six participants thought there should be more communication, phone calls, general discussions, and more networking activities available to the ethics community and that this would enhance trust and improve relationships (n=6). Two believed that an accreditation process that maintained the highest ethical standards for everyone and forced people to work together would be the best option (n=2). One participant thought that excellent people were the solution and another said that being clear about what problems we were actually trying to fix would help. Another participant explained that avoiding ethics creep or extending the REB mandate beyond what was appropriate would be an effective way to enhance trust and improve relationships. One suggested that a concurrent review process that allowed all REBs to contribute would be the best solution.
4. Next steps and recommendations

4.1 Examining past successes and failures

When considering next steps and recommendations for the future, it is important to first take the time to examine our past mistakes and successes. Participants were asked what they would do differently for their system if they had the chance to start over. The most common response was that they wished they had started with an online system that could automatically track and report on metrics. They also would have developed common or more complete forms and created a system that worked for the ethics review process and not just clients/researchers so that they had all the information they needed to conduct a proper ethics review in one place (n=9).

Many stated that the best approach was a grassroots one as opposed to one that was imposed, coupled with sufficient outreach with the research ethics community and ongoing communication and training. They recommended taking the necessary amount of time to do things properly and the need to have the right people involved from the start (n=7). A similar number explained that decisions about any new system needed to be grounded in facts and evidence and not hype or outlier cases. They said they wished they had accumulated more evidence on the experiences of human research participants as well as REB members and staff so that they could make adjustments to improve their systems over time (n=5).

Four participants said that upon reflection, they really could have used more coordination, facilitation, and staff support when they first started out (n=4). Three others explained that a new system should not try to reinvent the wheel and that the CCTCC needed to look at what was already working well for other systems in academic institutions and for those with institutional responsibilities they must address (n=3). Two said they would do nothing differently. One participant said they could have used more funding when they first started out, another said that they would have pursued a centralized review system where researchers cannot cherry pick their REB, and another suggested that the REB should retain close connections with research services to better serve the research community.

4.2 Streamlining multi-jurisdictional reviews: General recommendations from participants

The most popular methods participants raised to improve multi-jurisdictional review processes related to developing common forms, procedures, SOPs, and contract agreements. Participants also pointed to the need for common understandings of key terms like minimal risk and proportionate review. They thought it was important for REB staff to take more responsibility over the procedural aspects of REB work so that the REB members could focus on the actual ethical implications of the studies. They also believed that the administrative burden on researchers had to be reduced (n=10).
Many participants also supported the idea of national specialty reviews (e.g., for cancer, pediatric, military, or genetics research, or clinical trials, for example). However, they warned that if Canada did decide to support national reviews of domain specific research, these bodies would need to be careful to avoid being captured by special interests and growing numb to issues with which they are overly familiar. The CCTCC would also need to address legal issues across the provinces and local institutional liability issues that were often identified as a significant barrier to harmonization and centralization efforts (n=7).

Some participants believed that the best way to streamline multi-jurisdictional reviews was by leveling the playing field through establishing a qualification process that was both obtainable and manageable with one participant suggesting AAHRPP accreditation as a possible solution. They thought that this system should reward good behavior and be regulated so that each site had to act in a similar manner. They also maintained that it should be government mandated and funded (n=6). A similar number thought that CTO should be rolled out nationally in Canada (n=4). Four believed that we needed a shared online system to streamline reviews (n=4).

Three participants thought it would be best to review what is currently done at other sites and encourage more acceptance of studies approved by other REBs (n=3). Another three stated that we needed to start collecting metrics in order to develop a baseline that would help us to determine how best to move forward (n=3). Three other participants thought that we should move towards provincial REB systems across Canada (n=3). Three participants suggested that more education with CRO’s and sponsors and communication between and consultation with REBs and others would help to foster the review process (n=3). One participant explained that dedicated REB Chairs would help to move studies more efficiently through the review process, another thought that more institutional support and political will was necessary, one suggested that drawing on experts in information management might help, and another thought we had simply missed the boat altogether when it came to streamlining multi-jurisdictional reviews.

Interviews were concluded by asking participants what additional comments they might like to share with CCTCC Working Group. A few of them expressed frustration that we had taken so long to move forward with an accreditation system in Canada and declared that we lacked leadership in this area. They suggested that the provinces might be in a good position to take over centralized review (n=3). One noted that the CCTCC in particular had been too silent on the issue of accreditation. Other suggestions including learning from past mistakes, not imposing systems on the REB community, addressing the issue of institutional liability and study specific BoR agreements, developing common tools and forms, and working in advance to manage expectations if significant changes were going to be instituted by the CCTCC.

4.3 Major theme: Education and training

One of the most popular themes to emerge across the data from this study was the need for ongoing education and training to support high quality ethics review processes. Interview participants revealed two important educational initiatives intended to support the efficient review of complex genetic and genomic research studies that frequently include multiple sites and international collaborators (see below).
1. The Global Alliance for Genomics and Health initiative is a nonprofit organization dedicated to the public good. Their proposed mission is to accelerate progress in human health by helping to establish a common framework of harmonized approaches to enable effective and responsible sharing of genomic and clinical data, and by catalyzing data sharing projects that drive and demonstrate the value of data sharing. Of note to the Canadian REB community is their Regulatory and Ethics Working Group\textsuperscript{10}, which focuses on harmonizing policies and standards. They have developed consent policies and tools and a series of other educational materials that are available free of charge to everyone.

2. The second example is funded by Genome Canada. The aim of this initiative is to create a network of researchers who will develop ethics education materials to encourage the harmonization of genetic and genomic research ethics protocols in Canada. Accelerating the review of these studies is viewed as a necessary step towards translating research outcomes into the health care system. This initiative has just begun but will fill a much needed educational gap for REBs that continue to struggle with the review of research studies in the genetic and genomic science domain. Training that focuses on specific topics as well as the procedural and compliance aspects of research ethics is obviously important. However, participants also identified a significant dearth of ethics education resources concerning general substantive ethics issues and the moral values that guide them through their work. There are many issues around ethics review that cannot be resolved by referencing articles from regulatory policies and guidance documents. REB professionals need access to materials that can help users navigate difficult situations and dilemmas through the use of case studies and other decision aids for example. It is important to note that this finding is consistent with the empirical literature on the subject as discussed by Mitcham and Snieder, 2014, Anderson, 2016, and others.\textsuperscript{11} Perhaps one way that the CCTCC could address participants’ expressed need for additional ethics education and training would be to promote free of charge ethics education materials produced through the initiatives listed above on their website as well as substantive research ethics education materials already developed by the CIHR Ethics Office and other bodies.\textsuperscript{12}

4.4 Major theme: Engagement and communication

A second important theme to emerge across the interviews was the need for continued engagement and communication at almost every level to promote high quality ethics reviews. In particular, there was an expressed need to meaningfully consult with the REB community about any changes proposed by CCTCC. Many also pointed to the lack of engagement with the human

\textsuperscript{12}One example of substantive research ethics education is the CIHR Ethics Office Education Workbook. Accessed March 22 2016 from: http://www.cihr-irsc.gc.ca/e/48832.html
research participant community, and a few discussed the need to better communicate with the research communities we serve.

**Engaging the REB community**

As demonstrated in other sections of this report, the REB community appears to respond more positively to home grown, grassroots efforts. Many felt that systems built on meaningful community consultations such as OCREB and CTO were better able to address their institutional and other requirements and ultimately, easier for them to operationalize. It would therefore be wise for CCTCC to take every opportunity to engage and communicate with the wider REB community about any forthcoming activities. A simple first step could be a community town hall at the 2016 CAREB and CBS conferences to be held together in Toronto this year.

**Engaging human research participants**

Most of us are keenly aware of the irony associated with creating a human research participant protection system that has virtually no ability to communicate with or engage with participants. In fact, many experts who were interviewed for this study lamented the fact that they had been unable to collect data about the needs and experiences of human participants. The metrics and performance measures we do employ are primarily procedural in nature addressing topics such as volume and turnaround times. While it is important to collect these measures in order to assess the functioning of our systems, they do not address the substantive nature, or the moral values that guide us through our work.

How do we resolve this dilemma? The fact of the matter is that REBs and REB administrative staff cannot take on this important task alone. As demonstrated in the results presented in this report, they simply do not have the resources to conduct proper public engagement activities, and what’s more, they likely do not have the skill sets to meet this challenge without additional support and training. It would be deeply unfair to expect administrative staff, who must continually update their expertise around compliance and research ethics issues to now also become experts in qualitative and quantitative research methods. Perhaps one solution is to establish better partnerships with the research communities we serve to help us achieve this important goal.

**Engaging the research community**

It would be wise for the CCTCC to engage with the research community before any significant changes are proposed to ethics review systems in order to foster transparency and trust between our communities. One method of passive communication would be to publish CCTCC products in scientific journals. This report, for example, could easily be transformed into a publishable academic paper. More in-depth engagement activities such as stakeholder interviews or focus groups regarding proposed CCTCC initiatives may provide opportunities for quality improvement and critical feedback. For example, many participants of this study expressed
concern about the administrative burden that new systems and compliance-related requirements placed on REBs members, administrative staff, and the research community. The just distribution of resources and services (including grant funds) is certainly an ethics issue. Identifying and reducing unnecessary bureaucracy will allow all of us to focus more effort on the substantive ethics of our work. It is important to understand how changes in the research ethics world impact research communities so that we can continue to add value to the research enterprise.

Our research colleagues may also be willing to help us collect the evidence we need to address the substantive goals of our work related to the experiences of human research participants. These activities could be as simple as distributing surveys to participants at the conclusion of a research study as proposed by McDonald et al., or as complex as collaborating on a deliberative public engagement event about pressing research ethics issues such as material incidental findings or return of results (see Burgess et al., 2014). Certainly the best interests of both the research and the REB communities are served when we work together to understand the needs of human research participants. By encouraging a transparent and honest flow of information between our communities, we can establish mutually beneficial partnerships that will allow us to co-produce good and ethical participant-centered research.

Acknowledgements

I would sincerely like to thank the CCTCC REB Accreditation Working Group for their constant support and guidance throughout this project. I would also like to acknowledge the work of Dr. Julie Robillard who conducted the French language interview. Dr. Robillard is an Assistant Professor of Neurology at the University of British Columbia and a Faculty member with the National Core for Neuroethics and Djavad Mowafaghian Centre for Brain Health. In addition, I would like to thank Engage Associates Research Associate Brittney LaPietra for her careful review of this report. Finally, I am grateful to all the participants who agreed to be interviewed for this study.

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Appendix A: Interview questions

*All interviews were audio recorded with consent.

**Questions were modified slightly in some cases if particular issues did not apply to the participant’s system or particular experience.

Initial introduction, who I am, who is funding this study and my relationship with CCTCC, the purpose of this interview, and why they were invited to participate in this project.

Any questions?

Permission to audio record confirmed.

1. Are you/is your institution involved with any harmonization/centralization processes? If yes, please name them.
   a. Please describe the type of research you review most frequently. Maybe you only review certain types with your effort?
   b. Do you review any clinical trials? If yes, what kind?
   c. What is the current state of your harmonization/centralization process? When did it begin, how many reviews have you done using it, what percentage are industry sponsored?
   d. What are the main objectives of these harmonization/centralization processes?
   e. What are the steps? Can you describe how a study would travel through this initiative from start to finish? What about post-approval activities?
   f. What other institutions are involved with your process? What role does each one play in the process?
   g. What motivated this initiative? (Was there a specific problem?)

2. Is there legislation or other requirements specific to the initiative, such as a requirement that a study be reviewed by a certain type of REB (e.g., provincially recognized REB)?

3. How has your initiative been formalized? (formal legal agreement, legislation, among whom?)

4. What has worked best for your system? (from the perspective of researchers, the REB, REBA staff, sponsors)

5. What had been your biggest challenge? (from the perspective of researchers, the REB, REBA staff, sponsors)

6. Have there been any negative consequences of harmonization/centralization? (Prompt-increased costs, increased workload for research ethics administration).
   a. How did you manage these issues?

7. Do you have dedicated staff working on your initiative?

8. Is the initiative funded/supported in any way?

9. Do you use an electronic system for reviews, and if so, which one and for how long?

10. If you could start again, what would you do differently (if anything)?

11. What does “quality review” mean to your board? (ask for their definition if they do not specify)

12. What does “efficiency” mean to your board? (ask for their definition if they do not specify)
13. What does “effectiveness” mean to your board? (ask for their definition if they do not specify)

14. When considering quality review, efficiency, and effectiveness, what do you think is the most important factor to a harmonization/centralization initiative?

15. Do you measure success of your initiative and if so, how (through reports for example?)?
   We are specifically interested in performance standards and metrics of REB operations. For example…
   - Do you have a model or shared set of definitions/concepts or flowcharts/FAQ’s, tools (consent templates, application forms) etc. that your REB has adopted (for harmonized or multi-jurisdictional reviews, for example)?
   - How do you measure performance? (for example quality, effectiveness, efficiency). Are you collecting any metrics or quality indicators about REB processes to measure the impact of your initiative?
     - (i.e. Baseline metrics – Volume, timelines (e.g., date received to review letter issued; meeting to review letter issued; review letter issued to initial PI response/final PI response, PI response to decision/approval, etc.), cost, satisfaction survey)

15a Have you been formally or informally evaluated? If not, do you plan to be evaluated in the future?

15b Have you established any performance measures? (For example, for turnaround times, client satisfaction). If yes, how do you track them?

Would you be willing to share the above information/documentation with us?

16. What could be done to improve the quality of reviews within your system (if anything)?

17. What does the notion of REB accreditation mean to you?

18. Do you think accreditation would help enhance quality, and/or efficiency, and/or effectiveness in your system?
   - 18a What are some barriers to accreditation that REBs might face?
   - 18b Are you currently accredited? If yes, list/describe.
     - If no, under what circumstances would your group seek accreditation?

19. What role does trust pay in your review process (if any)? (Prompt-with other REBs, with the system, with the research community?)

20. What role do relationships play in your review process (if any)?

21. What could be done to enhance trust and improve relationships in the review process?

22. Do you think REBs need to address the issue of professionalism/expertise? Why? How?

23. What more should be done to streamline multi-jurisdictional reviews in your opinion?

24. Is there anything else you would like me to know about your system? Or other issues you would like to talk about?

Conclude the interview and thank the participant for their time.
Appendix B: Shared documentation from interview participants (metrics and performance measures)

Participants were asked about the ways in which they measure the success of their harmonization or centralization systems. The most commonly collected data included: response times, turnaround times, the volume of studies in their systems, consulting with research teams to acquire informal feedback, and analyzing complaints, etc. (n=10). While many participants expressed the desire to consult with research participants, few were able to accomplish this goal. In some cases, participants used their electronic platforms to produce data on metrics but many had to produce these data manually. In addition, some systems did not collect metrics in a systematic fashion or report on them publicly. However, there were a few notable exceptions and a few of these groups were willing to share the metrics regularly collected and analyzed by their system. Others are in the process of developing a performance measure program or have already established a program but are unable to share this information at the present time for various reasons.

Systems like CTO and MSSS have only recently been initiated but are already actively working towards establishing performance measure programs.15 For example, for their inaugural year, MSSS requires follow up from all their sites every three months. As part of this process, each site must complete an excel spreadsheet that keeps track of various items such as time for reviews. They will also produce annual reports.

Requests have been circulated to other systems in hopes that they will be able to share additional information about their metrics in this report. If submitted, their data will be added to Table 3 below and circulated to the CCTCC Working Group. If members of the Working Group would like to share additional data on metrics used within their own systems after reading this report, they can submit them directly to the report author who will add them immediately to Table 3. It is important to note that seemingly minor differences in terminology within the metric statements can make comparisons unfair or inaccurate. It is vital that all terms are clearly understood by all parties if we seek to make comparisons across systems. For example, using a term like average days may mean total days to some and working days (total days minus holidays and weekends) to others.

15 As of July 11, 2016 these data were not yet available.
Table 3. Metrics employed by various systems

*Note: This table should be considered a working document that will be continually added to over time in response to new data from participants and representatives of other systems. To submit new data, please contact the author of this report or a member of the Working Group.

<table>
<thead>
<tr>
<th>System</th>
<th>Turnaround times</th>
<th>Types and number of studies submitted</th>
<th>Post approval activities</th>
<th>Meetings and other engagement activities</th>
<th>REB activities</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCREB</td>
<td>New studies</td>
<td>▪ Number of industry sponsored studies</td>
<td>▪ Volume of post-approval submissions, including participating centre applications and study closures</td>
<td>▪ Number and type of meetings with sponsors, CRO’s, stakeholders, and others</td>
<td>▪ Frequency of REB meetings</td>
<td>▪ Involved institutions that use OCREB as their BoR</td>
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<tr>
<td></td>
<td>▪ Time from submission to approval (business days) and reasons for delays</td>
<td>▪ Number of active studies</td>
<td></td>
<td>▪ Needs assessments with REB members, REB staff, and research staff</td>
<td></td>
<td>▪ Number of centers authorized to use OCREB by year</td>
</tr>
<tr>
<td></td>
<td>▪ Time from submission to meeting</td>
<td>▪ Number of new studies received</td>
<td></td>
<td>▪ REB member exit interviews</td>
<td></td>
<td>▪ Involvement in provincial and national efforts</td>
</tr>
<tr>
<td></td>
<td>▪ Time from meeting to review letter</td>
<td>▪ Number of studies reviewed by Full REB and number that are expedited, withdrawn, not approved, and deferred</td>
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<td>▪ Annual researcher survey</td>
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<tr>
<td></td>
<td>▪ Time from PI response to approval</td>
<td></td>
<td></td>
<td>▪ Annual survey of sponsors and CROs</td>
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<tr>
<td></td>
<td>Post-approval submissions</td>
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<td></td>
<td>▪ Monthly education sessions for study staff in the province to learn about research participant protection and other issues. Web sessions are also provided.</td>
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<tr>
<td></td>
<td>▪ Centre initial applications, centre and provincial amendments, continuing reviews, reportable events</td>
<td></td>
<td></td>
<td>▪ Number and type of other educational sessions</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>▪ Time from submission to approval</td>
<td></td>
<td></td>
<td>▪ Number and nature of discussions with other REBs and organizations</td>
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<table>
<thead>
<tr>
<th>System</th>
<th>Turnaround times</th>
<th>Types and number of studies submitted</th>
<th>Post approval activities</th>
<th>Meetings and other engagement activities</th>
<th>REB activities</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC REB system¹⁶</td>
<td>▪ Turnaround times –from department approval to certificate of approval issued (average days)</td>
<td>▪ Number of industry sponsored studies</td>
<td>▪ Number of post-approval activities</td>
<td>▪ Frequency of REB meetings</td>
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<td></td>
<td>▪ Time for expedited</td>
<td>▪ Active applications</td>
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<td></td>
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<td>▪ New submissions</td>
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<tr>
<td></td>
<td></td>
<td>▪ Number of deferrals</td>
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</tbody>
</table>

¹⁶ The UBC RISe online system is capable of producing a range of additional data upon request that are not included in this table. They often produce and review these data for internal reporting and quality improvement purposes.
<table>
<thead>
<tr>
<th>System</th>
<th>Turnaround times</th>
<th>Types and number of studies submitted</th>
<th>Post approval activities</th>
<th>Meetings and other engagement activities</th>
<th>REB activities</th>
<th>Other</th>
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<tr>
<td>TAHSN</td>
<td>• Time from submission to meeting full board)</td>
<td>• Meeting date to REB review being issued full board)</td>
<td>• Time from submission to REB review being issues (delegated)</td>
<td>• Time from submission to REB review being issued to receipt of PI first response (delegated &amp; full board)</td>
<td>• Time from receipt of PI first response to approval (delegated &amp; full board)</td>
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<tr>
<td>System</td>
<td>Turnaround times</td>
<td>Types and number of studies submitted</td>
<td>Post approval activities</td>
<td>Meetings and other engagement activities</td>
<td>REB activities</td>
<td>Other</td>
</tr>
<tr>
<td>HREA data collected on all REBs in the province that review</td>
<td>• Application turnaround times of research type (clinical trials, general, secondary use/chart audit) and full board</td>
<td>• # of pending applications</td>
<td>• # of amendments</td>
<td>• # HREB meetings</td>
<td>• # applications that involve the different RHAs</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• # of new applications</td>
<td>• # of renewals</td>
<td>• # of files reviewed per HREB</td>
<td>• # invoices sent</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Types of review (full board, delegated)</td>
<td>• # study closures</td>
<td>• # overdue invoices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>Turnaround times</td>
<td>Types and number of studies submitted</td>
<td>Post approval activities</td>
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<td>REB activities</td>
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- health research under the HREA Legislation (currently that is 3 REBs).
- Some data are reported monthly and some quarterly.

- Review and delegated review
  - Breakdown of how much time an application is with the researcher and how much time it is with the Ethics Office (including the HREB review)
  - # of reviews of applications

- # re-submissions
- # of reviews (and how many apps required more than one review)
- All active files
- # of applications based on researcher type/rank (student – undergrad, postgrad, faculty, external, physicians, PIs from outside province)
- # of applications based on institution (MUN, external, private) and location (NL, national or international)
- # of applications of research types (clinical trials – new drugs, clinical trials – new medical devices, clinical trials – other, industry-sponsored, Aboriginal studies, registries/biobanks, COG trials, oncology trials)
- Categories of research by subject matter

- # of outstanding renewals

- Meeting
  - # approved
  - # rejected
| AAHRPP according to their 2015 metrics report<sup>17</sup> | • IRB review times by type of review according to various points in the review process (time from submission to review, time from submission to approval, etc.).<br>• 5-year trends of mean IRB review times from submission to approval | • Type of research conducted (biomedical social science, etc.) (by %)<br>• Selected types of research that organizations conduct or review (investigational drugs, classified research, etc.) (by %)<br>• Organizations that conduct or review research involving vulnerable populations (by %)<br>• Sponsors of research (industry, federal, etc.) (by %)<br>• Mean number of active protocols organizations oversee and median and mean number of active protocols overseen by an IRB based on the number of IRBs per organization | • Number of protocol deviations and complaints reported to the IRB in the past year<br>• 5-year trends in mean numbers of protocol deviations and complaints reported<br>• Number of cases of non-compliance reported to the IRB in the past year<br>• 5-year trends in mean number of reported cases of non-compliance | • % of accredited organization by type (Hospital, VA facility, etc.)<br>• Where organizations conduct research<br>• Regulations and guidance followed by organizations (ICH Good Clinical Practice, EPA, etc.)<br>• Checking the boxes on the Federalwide Assurance (and comparison with organizations registered with OHRP)<br>• % that have their own IRB or not and use of external IRBs<br>• Number of IRBs per organization<br>• Compensation of IRB members, Chairs, and Vice Chairs by organization<br>• Technology use by organizations with an IRB (database, online system, etc.)<br>• IRB staffing and funding levels<br>• 5-year trends in mean IRB budgets<br>• Number of internal audits organizations conducted within past year<br>• 5-year trends in mean number of audits organizations conducted |

<sup>17</sup> See AAHRPP’s 2015 Metrics on Human Research Protection Program Performance Report, Updated March 30, 2016. They also show this data specifically for academic institutions and hospitals. Accessed August 12 2016 from: [https://admin.share.aahrpp.org/Website%20Documents/Metrics%202015/All%20Orgs%20Final%20Draft.pdf](https://admin.share.aahrpp.org/Website%20Documents/Metrics%202015/All%20Orgs%20Final%20Draft.pdf)
Strategy for Patient-Oriented Research

Streamlining of Health Research Ethics Review
External Advisory Committee

Report for Discussion

February 22, 2013
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Development of a Model Clinical Trial Application and Consent Form for the Strategy on Patient-Oriented Research (SPOR): Summary Report

*These Appendices are attached to the Report as separate files.
Executive Summary

The External Advisory Committee on Streamlining of Health Research Ethics Review (SHRER) was established in March 2012 to advise the Strategy on Patient-Oriented Research (SPOR) Working Group and SPOR National Steering Committee on processes, tools and strategies to improve the ethics review process for multi-site patient-oriented research in Canada, including but not limited to clinical trials. This report represents the SHRER Committee’s time-limited reflection on two main bodies of work: (1) a study of ethics review streamlining initiatives across the country related broadly to patient-oriented research and (2) a study of the feasibility of common application and consent forms specifically for clinical trials.

Over the past decade, a series of discussions, reports and academic papers have identified the current process of research ethics review as one of the barriers to multi-site research. As a result, a number of initiatives in Canada have been launched to improve the research ethics review process. While there are significant issues and much work to be done, these initiatives provide an important springboard for what may be considered at the national level. It is clear to the SHRER Committee that there is an opportunity to create a national approach that leverages and coordinates, rather than replaces or duplicates, existing efforts.\(^1\)

Recommendations

The SHRER Committee recommends the following to improve multi-site ethics review for patient-oriented research in Canada (in unranked order):

A. Greater harmonization and standardization of Research Ethics Boards (REBs)

1. Establish a national strategic leadership forum to:
   - facilitate communication between the various streamlining and harmonization initiatives
   - provide strategic insight into opportunities for national collaboration; and
   - identify potential groups to take responsibility for moving forward on the SHRER Committee recommendations.

2. Use the collective expertise of the national strategic leadership forum to define a national vision for greater standardization of REBs. The forum is an opportunity to identify the roles and responsibilities of key stakeholders in defining guiding principles and parameters for standardization.

   Standardization may include some combination of the following:
   - similar Standard Operating Procedures;
   - common forms or forms with common content; and/or
   - a common curriculum for education and training.

3. Ensure that all appropriate stakeholders are involved in the development of a system for evaluation and qualification of REBs and Human Research Protection Programs (HRPP) for patient-oriented research in Canada. Such a system may include all or some of:
   - REB/HRPP registration;
   - REB/HRPP certification; and/or

\(^1\) Note that the SHRER Committee’s report responds to Recommendation 4 in the “To Your Health and Prosperity, An Action Plan to Help Attract more Clinical Trials to Canada (2012), and its recommendations should also be considered in this context.
• REB/HRPP accreditation (i.e., assessment by an external third party against a recognized standard).

4. Develop a common set of metrics and benchmarks to assist REBs to assess their performance and promote transparency. This initiative should be linked to the broader slate of performance measurements relevant to other aspects of patient-oriented research improvement, such as budget review, contract negotiation, participant recruitment, and other streamlining activities.

5. Encourage the Tri-Agency federal funding agencies — the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council of Canada —to:
   • leverage research funding processes to encourage institutions and researchers to streamline research ethics review for multi-site research; and
   • provide guidance in the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2nd edition on the need to minimize duplication of ethics review in multi-site research.

6. Encourage research institutions across the country to clarify and harmonize the roles and responsibilities of the REB versus other roles and responsibilities of the institution with regard to research operations, in order to promote greater consistency across institutions.

**B. Tools and Strategies to Support Standardization and Harmonization Efforts**

7. Disseminate the SHRER Committee’s models of common elements for the REB clinical trial application form and the clinical trial adult consent form, and encourage and assess the adoption of their content nation-wide.

8. Building on the models of common elements already produced by the SHRER Committee, develop a common template for an REB clinical trial application form and for a clinical trial adult consent form to be made available to those REBs who wish to use them.

9. Establish a national repository of resources to assist in the streamlining and harmonization of ethics review. The repository should be maintained by an appropriate national body to collate and make this information widely available.

10. Develop a database of Canadian REBs and their contact information, forms, policies and protocols and any streamlining or harmonization initiative under which they fall. This database should eventually be linked to the *asset map* that is being developed for clinical trials.

11. Develop an inventory of REBs that use web-based systems to promote the development of compatible systems.

**Communication/Consultation**

12. Broadly disseminate the SHRER Committee’s report and two commissioned studies.

13. Seek feedback on the SHRER Committee’s recommendations from key stakeholders including REBs, researchers, provincial bodies and national bodies.
Introduction

The purpose of this report is to advise the Strategy on Patient-Oriented Research (SPOR) Working Group and SPOR National Steering Committee on processes, tools and strategies to advance harmonization of ethics review and improve the efficiency of multi-site ethics review of patient-oriented research, including but not limited to clinical trials, in Canada.

Over the past decade, concerns have been expressed regarding the difficulties of multi-site research ethics review in Canada, which have given rise to a number of initiatives to streamline research ethics review. While there have been a number of significant issues along the way and still much work to be done, these initiatives provide an important springboard for what may be considered at the national level.

Recently, inefficiencies in research ethics review have been identified as one of the major barriers to clinical research in Canada in To Your Health and Prosperity, An Action Plan to Help Attract more Clinical Trials to Canada (2012)\(^2\) and the Senate Standing Committee Report on Canada’s Clinical Trial Infrastructure: A Prescription for Improved Access to New Medicines (November 2012)\(^3\). The Senate Standing Committee Report recommended the development and implementation of an accreditation program for research ethics boards (REBs) and instructed Health Canada to “immediately undertake to develop an accreditation program for research ethics boards”, including a national standard for research ethics boards\(^4\). Indeed, the case for accreditation of REBs has been made many times over in the past decade as a precondition for streamlining multi-site ethics review. These reports are the latest in a series of discussions, reports and academic papers that have identified the current process of research ethics review as a barrier to multi-site research including clinical trials.

The current alignment of social and political interests to help address issues and opportunities in ethics review signifies an important opportunity for meaningful change in how research ethics review is conducted in Canada. Change cannot happen without a significant will, resources and the practical experience to be able to leverage existing initiatives into a national vision that is logical, coherent and most importantly, effective.

This report is the perspective of the Streamlining of Health Research Ethics Review (SHRER) Committee and represents a time-limited reflection on two bodies of work: (1) a study of streamlining initiatives across the country and (2) a study of the feasibility of common application and consent forms for clinical trials. Since the work of this committee responds in part to recommendation 4\(^5\) in the 2011 Clinical Trial Summit Action Plan, the SHRER Committee strongly encourages the release of the two studies done under its auspices, as well as broad consultation on this report with all stakeholders involved in the ethics review process.

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\(^3\) Online at http://www.parl.gc.ca/Content/SEN/Committee/411/soci/rep/rep14nov12-e.pdf

\(^4\) Senate Report (2012), pg. 25.

\(^5\) Recommendation 4 in To Your Health and Prosperity, An Action Plan (2012) is: “Improve efficiencies of ethics reviews & advance strategic issues (like accreditation)”.
**SHRER Committee Objectives**

The SPOR Working Group established the SHRER Committee in March 2012. The objectives of the SHRER Committee are to:

1. Consolidate the existing knowledge on the barriers that currently exist across the country with respect to streamlining research ethics review and subsequently recommend steps to improve the process.
2. Identify tools and strategies to improve the ethics review process of patient-oriented research.
3. Explore opportunities for information sharing and communication among REBs.

The SHRER Committee consists of individuals who bring expertise and direct experience with regard to organizational and regional ethics review streamlining initiatives. The SHRER Committee also draws on members of the Canadian Association of Research Ethics Boards (CAREB), and from staff at the Association of Canadian Academic Healthcare Organizations (ACAHO) and the Tri-Agency Secretariat on Responsible Conduct of Research (SRCR). The terms of reference and membership of the SPOR-SHRER Committee are in Appendix A.

**Knowledge-Gathering Activities**

To inform their recommendations, the SHRER Committee undertook two major scanning activities:

1. *An Overview of Research Ethics Harmonization in Canada*, a survey of selected streamlining initiatives in Canada, including key informant interviews on perceived needs, barriers and challenges; and
2. *Development of a Model Application and Consent Form for Ethics Review of Clinical Trial Studies for the Strategy on Patient-Oriented Research*, a survey of REB clinical trial application and adult consent forms, including key informant interviews and a literature review, to assess levels of commonality and the feasibility of standardization of forms.

The SHRER Committee also took into account the outcomes of two past meetings that CIHR organized on the ethics review of multi-site clinical trials in December 2010 and October 2011. Important considerations raised at these CIHR meetings included the benefits of common standards and forms towards advancing ethics review harmonization.

The scanning activities and their findings are described below.

**1. Scan: Selected Streamlining Initiatives in Canada**

This study, *An Overview of Research Ethics Harmonization in Canada*, was a systematic attempt to consolidate existing knowledge by documenting the insights of representatives of identified Canadian research ethics streamlining initiatives. Respondents to the semi-structured survey were affiliated with universities, provincial initiatives, research groups, government institutions and commercial Institutional Review Boards (IRBs).
Key Findings

(i) Two basic models of streamlined ethics review in Canada

There are a variety of streamlining initiatives currently underway in Canada (see a description in Appendix B). However, these initiatives can be grouped into two basic models\(^6\) -- the Board of Record model and the Collaborative Review model -- defined as follows:

a) **Board of Record**: A board of record model describes an REB that has been appointed by an institution or organization, under whose auspices the research is being conducted, to serve as the primary or sole authority for the research ethics oversight of the study.

A Board of Record model best describes the following initiatives:
- Institutions affiliated with the University of British Columbia (UBC) under one Board of Record agreement;
- Clinical Trials Ontario;
- Ontario Cancer Research Ethics Board (OCREB);
- Ontario’s HIV REB;
- Toronto Academic Health Science Network (TASHN);
- Nova Scotia Research Ethics Board (NS REB); and
- Newfoundland Health Research Ethics Authority-appointed Health Research Ethics Board (HREB).

Commercial REBs/Institutional Review Boards (IRBs) also illustrate the Board of Record Model.

b) **Collaborative Review**: The Collaborative Review model relies on the establishment of appropriate agreements between participating organizations, outlining a clear division of responsibilities. Research ethics review may in some cases be performed by a lead REB with local REBs undertaking a delegated review.

A Collaborative Review Model best describes the following initiatives:
- British Columbia Ethics Harmonization Initiative (BCEHI),
- Alberta Health Research Ethics Harmonization (HREH),
- Saskatchewan Health Research Ethics Working Group;
- Quebec Ministry of Health and Social Services (MSSH) Multicentre Mechanism;
- University of Alberta, University of Saskatchewan and UBC Reciprocity Agreement;
- Maternal Infant Child and Youth Research Network (MICYRN) Federated REB; and
- Public Health Agency of Canada (PHAC) model.

(ii) Variety in scope and management of initiatives

Streamlining initiatives for multi-site research, whether using a Board of Record or Collaborative Review model, demonstrate variety in terms of scope, legal mechanism, funding, management, and oversight responsibilities:

\(^6\) Note that one REB or Research Ethics Office (REO) may be involved in more than one model of streamlining research ethics review. An REO often has a broader mandate than an REB. An REO may oversee a number of REBs and also be responsible for additional research ethics and compliance activities such as conflict of interest, research integrity, education and continuing review/monitoring.
• **Scope:** Most of the surveyed initiatives are directed at health research with some targeted specifically to clinical trials, genetic research, adult oncology clinical trials, HIV/AIDS research and maternal and child health research. A few initiatives have agreed to streamline all human research ethics review.

• **Legal mechanism:** Initiatives are formalized by various means: by legislation (e.g., in Newfoundland and Labrador); as a formal delegation agreement signed on a study by study basis (e.g., for the Ontario Cancer Research Ethics Board); by legal reciprocity agreements between institutions; and in Quebec, through an administrative directive issued by the Ministry, applicable only to MSSS establishments.

• **Funding:** Funding for streamlining initiatives arises, or is proposed to arise, from a number of different sources including governments, research funding agencies, foundations, institutional funds and clinical trials review fees. Funding arrangements range from those projects which have been allocated millions of dollars to those being conducted on a strictly volunteer basis. A number of initiatives are currently seeking funding.

• **Management:** The Board of Record model typically involves the creation of a new REB, managed by full-time staff and its own Board of Directors. The Collaborative Review model typically has a steering committee made up of volunteer members from all of the institutions involved, working on the project as time allows.

• **Oversight responsibilities:** Many of the streamlining efforts are still in the development stage, and the question of how to handle ongoing (post-approval) and continuing review has not been fully addressed. In the Quebec Collaborative Review model, the lead REB handles all review and coordinates with local REBs, requiring Principal Investigators to inform the lead REB of any significant changes. In the Ontario Board of Record model for cancer research, OCREB becomes the sole REB for the study and handles the initial, ongoing and continuing review of the study at all participating centres. There appears to be a consensus emerging that the Board of Record or lead REB (in a Collaborative Review model) should be responsible for ongoing and continuing review.

(iii) **Tools for ethics review harmonization**

Standardized forms, electronic forms, web-based systems, websites and standardized metrics for evaluation were identified by respondents as important in promoting streamlined ethics review. In summary, the SHRER Committee heard the following with respect to the current use of these tools:

• **Standardization and sharing of forms:**
  • Common application forms are proposed or have been developed for some initiatives. Their development is complex and time consuming, particularly where there are multiple REBs, policies and legal requirements involved. Also, some institutions have invested significant resources in application forms to support their institutional online administrative systems.
  • The majority of streamlining initiatives do not require a common consent form and are either using the consent form of the lead REB, using existing templates from another committee as an example, or providing guidelines for the creation of consent forms.
• *Electronic applications and web-based systems*: Several of the initiatives have web-based administration systems. One of the challenges identified was the lack of compatibility between various online systems already in place at the various institutions. Interoperability of web-based systems across the University of Alberta, University of Calgary and UBC has been addressed, and Ontario’s OCREB web-based platform uses the same underlying platform (Huron) as these western Canadian universities. Collaborators in Nova Scotia will be able to access the online administration system housed in three of the provincial institutions. Other initiatives are using SharePoint or e-mail to share documents on-line or are still using paper-based systems.

• *Websites*: Most streamlining efforts have created a website (e.g., www.OCREB.ca), or are in the process of doing so. Some smaller harmonized REBs have their information included on the website of a larger entity, for example the HIV REB which is on the University of Toronto’s webpage.

• *Evaluation and Metrics*: The well-established projects are collecting both quantitative and qualitative measures for evaluating their processes⁷. Typical quantitative measures include number of ethics applications, the number of sites using the harmonized review process, the number of sites participating per study, the number of new and/or active studies, approval timelines for various steps in the review process. A number of the projects publish annual reports. Quality of review is more difficult to measure and projects have used satisfaction surveys of researchers and research staff as well as interviews or debriefings with those who have used the processes. The initiatives that are just getting underway indicate they are developing metrics as well. Initiatives also noted the importance of having databases or administrative systems that could be used to provide reliable metrics.

(iv) *Perceived Needs, Benefits and Challenges*

*Needs*

Respondents indicated that efforts to streamline research ethics review in Canada have been in response to a range of issues, including:

• the need for increased expertise for the review of specialized clinical trials;
• the desire to protect a provincial population from outside exploitation (e.g., in Newfoundland);
• researcher complaints about inefficient, inconsistent and time consuming research ethics reviews; and
• a decline in the number of clinical trials opened in Canada and a desire to regain the economic and health benefits of clinical research, specifically clinical trials.

It should be noted that, although research ethics review has been singled out on a number of occasions as one of the most important reasons for declining volumes of clinical research activity, the ethics review process is often intertwined with non-ethics review related issues that compound the delay in ethical review (for example contract negotiations which must be completed to finalize the ethics review, other institutional approvals, administrative issues, etc.).

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⁷ For instance, Unité de l’éthique, MSSS, Quebec, has published many documents where « benchmark practices” are described for designated REBs.
Benefits

Many streamlining initiatives are underway, and while examples of partial success exist, many other efforts are in the early stages of development and the benefits and challenges are not yet able to be fully assessed. Even at this early stage, however, respondents were able to articulate some of the benefits they were facing or anticipating. In summary:

- faster turn-around times were reported by two projects, while another reported mixed results in their pilot testing;
- efficiencies were noted because of a reduced number of application forms submitted and ethical reviews to respond to, and through access to an online research administration system;
- higher quality review was noted as a benefit by one project;
- improved communication amongst REBs, which was beneficial in improving opportunities for education and training, was cited; and
- although reduced workloads were anticipated, reductions were still unsubstantiated because of the high workloads associated with the development stage of these streamlining initiatives.

Challenges

Researchers did experience challenges with the streamlining initiatives, including:

- long wait times to develop new processes;
- inefficiencies as the systems are put into place;
- the increased complexity of navigating two processes for submission of ethics review (one REB for multi-site studies and one for local studies);
- loss of connection with the local REB; and
- difficulties in accessing an online research administration system.

Challenges for REBs and Research Ethics Offices (REOs) include:

- changing processes;
- convincing institutions to reassess the risk of streamlining processes and harmonization;
- trusting decisions made by other REBs;
- distinguishing between local administrative requirements and ethical issues;
- increasing workload, as the task of coordinating research ethics review shifts to the REB or REO from the researcher, and the increased interaction among REOs to manage workflows; in particular, strict institutional requirements for turn-around times may require significant work to clear up deficiencies in applications before the project can be formally submitted;
- addressing institutional responsibilities for research, as set out in Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, 2nd Edition (TCPS 2)\(^8\) and the US regulations\(^9\); in addition, research supported by US government funding requires the institution to be responsible for reporting unanticipated problems and non-

\(^8\)TCPS 2 is online at: http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-ephtc2/Default/

\(^9\)U.S. regulations under the Food and Drug Act and in the “Common Rule” are listed at: http://www.hhs.gov/ohrp/humansubjects/index.html.
compliance, requiring somebody in the institution to continue to be knowledgeable in all the research being conducted at that institution; and

- insufficient resources: there is a wide variation in the level of support for streamlining initiatives and a major determinant of success is having the necessary resources to engage in the time and effort needed for relationship building and communication; these were noted as critical to the success of these projects.

Accreditation of — or standards for — REBs was also noted as important to support streamlining initiatives in Canada. This accreditation or standard-setting would be in the context of a broader human research protection program (HRPP) that includes the institution, the researcher and the REB.

The extent to which many of these hurdles will diminish over time is still unknown. As more experience is gained with these streamlining initiatives, and robust metrics become available, we may be able to measure the extent to which the anticipated benefits are realized.

2. Scan: REB Application and Consent Forms for Clinical Trials

The development of model REB application and consent forms has been cited on several occasions as an activity of potential value to assist with the streamlining of the ethics review process (for example, in the outcomes of the CIHR invitational meetings in 2010 and 2011, and at the 2011 Clinical Trial Summit). The objective of this information-gathering activity was for the SHRER Committee to assess the level of commonality in the existing forms for clinical trials and explore the feasibility of producing standard templates.

An inventory of REBs overseeing multi-site clinical trials was completed and vetted by the SHRER Committee (n=176 REBs). Baseline information was collected through an environmental scan of 112 initial application forms and 111 informed adult consent forms. Semi-structured interviews (n=63) and an extensive literature review were also undertaken to provide further intelligence into the analysis and synthesis of the data collected.

**Key Findings**

- The 112 application forms and 111 adult consent forms showed a high degree of commonality within each type of form, having over 80% of elements in common.
- The majority of elements in these application and adult consent forms reflect regulatory requirements and are also aligned with best practices as described in the literature.
- The order of the elements on the forms, their details, and the structure of the forms differ to meet the needs and preferences of individual REBs.
- Approximately 40% of REBs (n=68) are currently revising and/or evaluating their clinical trial application and/or consent forms. Others have already made considerable investment in the development of their forms including electronic formats.

**Identification of Common Elements**

In recognition that many REBs and regional initiatives have already invested substantially in the development of their own forms for clinical trials and that the imposition of a new standardized template may not be practical or welcome, the SHRER Committee developed models of common elements for REB application forms and adult consent forms as a flexible tool to foster
recognition of the commonality among these forms and thereby facilitate streamlining efforts (see Appendix C).

These models of common elements for clinical trial forms reflect requirements in regulations, TCPS 2, the proposed Canadian General Standards Board (CGSB) Standard, and existing best practices. Given that 40% of REBs interviewed reported that they are currently revising their application and adult consent forms, there is an opportunity for REBs to use these models in the design of their templates. These models represent an important education tool and may be a good starting point towards greater standardization of forms across initiatives. These models of common elements have the advantage of being more flexible than a “standard template” and being adaptable to different contexts, and may be useful in reciprocity agreements as they represent the essential elements for ethics review of clinical trials.

Summary and Conclusion

There is a widespread consensus across Canada that efforts to streamline and harmonize research ethics review have the potential to improve efficiency, to reduce frustrations and to stimulate multi-site patient-oriented research. As a result, a number of initiatives in Canada have been launched in the last decade to improve the research ethics review process.

The SHRER Committee scanned the landscape of current local, regional, provincial and therapeutic area-specific REB streamlining and harmonization activities to inform the consideration of options going forward. Two basic models emerged in this exercise as productive ways of facilitating multi-site ethics review: (a) the Board of Record model, where one REB is appointed as the primary or sole authority for research ethics oversight of a multi-site study, and (b) the Collaborative Review model, which relies on appropriate agreements between participating institutions and where one REB may be designated as the lead REB with local REBs undertaking a delegated review. It will be important to follow the evolution of these initiatives over time to enable sharing of lessons learned from the implementation of these two different but related models. For example, resources and tools being used in these various initiatives — such as common forms, protocols and policies — should be made available nationwide, along with information on REB web-based systems, to enhance opportunities for coordination and interoperability.

The SHRER Committee heard that greater harmonization and standardization of REBs has the potential to foster trust among REBs and that this trust is the necessary basis for working together on improving the process for multi-site ethics review. A national vision, guiding principles and parameters would assist these efforts and should be developed with the involvement of all stakeholders. A range of standardization options should be explored and this should include the development of a system for evaluation and qualification of REBs and HRPPs. As well, the development of a common set of metrics and benchmarks for REB performance should form part of an assessment of a broader slate of clinical research activities.

The SHRER Committee focussed much of its work on the broad scope of patient-oriented research. With respect to clinical trials specifically, standard templates for REB application and consent forms across clinical trial sites have frequently been cited as desirable. The SHRER Committee’s scan of REB clinical trial application and adult consent forms revealed that these forms have a majority of content in common, reflecting regulatory requirements and best practices. The SHRER Committee also learned that many REBs have already invested in the development of their own forms, but a substantial number of REBs are currently revising their forms and might be receptive to a common approach. Thus, the SHRER Committee considered
that a useful first step would be to develop models of common elements for these clinical trials forms, to be made widely available to REBs along with encouragement to adopt their content.

It is clear to the SHRER Committee that there is an opportunity to create a national approach that leverages and coordinates, rather than replaces or duplicates, existing efforts. Therefore, a national strategic leadership forum should be established to convene the breadth of stakeholders involved in ethics review, including those leading Board of Record and Collaborative Review initiatives, to build a national vision and coordinated approach to improving multi-site ethics review for patient-oriented research in Canada. This national forum would provide the opportunity to clarify the roles and responsibilities of all stakeholders, including research funders, institutions, REBs and researchers.
Recommendations

The SHRER Committee recommends the following to improve multi-site ethics review for patient-oriented research in Canada (in unranked order):

A. Greater harmonization and standardization of REBs

1. Establish a national strategic leadership forum to:
   - facilitate communication between the various streamlining and harmonization initiatives;
   - provide strategic insight into opportunities for national collaboration; and
   - identify potential groups to take responsibility for moving forward on the SHRER Committee recommendations.

   Representatives from across the country with local, provincial, regional and national interests should be invited to participate in the forum.

2. Use the collective expertise of the national strategic leadership forum to define a national vision for greater standardization of REBs. This forum is an opportunity to identify the roles and responsibilities of key stakeholders in defining guiding principles and parameters for standardization.

   Standardization may include some combination of the following:
   - similar Standard Operating Procedures;
   - common forms or forms with common content; and/or
   - a common curriculum for education and training.

3. Ensure that all appropriate stakeholders are involved in the development of a system for evaluation and qualification of REBs and Human Research Protection Programs (HRPP) for patient-oriented research in Canada. Such a system may include all or some of:
   - REB/HRPP registration;
   - REB/HRPP certification; and/or
   - REB/HRPP accreditation (i.e. assessment by an external third party against a recognized standard).

4. Develop a common set of metrics and benchmarks to assist REBs to assess their performance and promote transparency. This initiative should be linked to the broader slate of performance measurements relevant to other aspects of patient-oriented research improvement, such as budget review, contract negotiation, participant recruitment and other streamlining activities.

5. Encourage the Tri-Agency federal funding agencies— CIHR, NSERC and SSHRC —to:
   - leverage research funding processes to encourage institutions and researchers to streamline research ethics review for multi-site research; and
   - provide guidance in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, 2nd edition (TCPS 2) on the need to minimize duplication of ethics review in multi-site research.
6. Encourage research institutions across the country to clarify and harmonize the roles and responsibilities of the REB versus other roles and responsibilities of the institution with regard to research operations, in order to promote greater consistency across institutions.

B. Tools and Strategies to Support Standardization and Harmonization Efforts

7. Disseminate the SHRER Committee’s models of common elements for the REB clinical trial application form and the clinical trial adult consent form, and encourage and assess the adoption of their content nation-wide.

8. Building on the models of common elements already produced by the SHRER Committee, develop a common template for a REB clinical trial application form and for a clinical trial adult consent form to be made available to those REBs who wish to use them.

9. Establish a national repository of resources to assist in the streamlining and harmonization of ethics review. The repository should be maintained by an appropriate national body to collate and make this information widely available.

10. Develop a database of Canadian REBs and their contact information, forms, policies and protocols and any coordinating or streamlining initiative under which they fall. This database should eventually be linked to the asset map that is being developed for clinical trials.

11. Develop an inventory of REBs that use web-based systems to promote the development of compatible systems.

C. Communication/Consultation

12. Broadly disseminate the SHRER Committee’s report and two commissioned studies.

13. Seek feedback on the SHRER Committee’s recommendations from key stakeholders including REBs, researchers, provincial bodies and national bodies.

A plan of action for the implementation of these recommendations, with timelines and initial identification of responsible groups, is presented in the following Table.
### Table: Plan of Action for the Implementation of the Recommendations

<table>
<thead>
<tr>
<th>SPOR</th>
<th>National Strategic Leadership Forum</th>
<th>Specific Stakeholders</th>
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<tbody>
<tr>
<td><strong>Immediate</strong></td>
<td></td>
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<tr>
<td>Broadly disseminate the SHRER Committee’s report and two commissioned studies. (#12)</td>
<td>CIHR, NSERC and SSHRC to leverage research funding processes to encourage streamlining of ethics review; and to provide guidance in TCPS 2 on the need to minimize duplication of ethics review. (#5)</td>
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<tr>
<td>Seek feedback on the SHRER Committee’s recommendations from key stakeholders. (#13)</td>
<td>Research institutions to clarify and harmonize the roles and responsibilities of the REB versus other roles and responsibilities of the institution with regard to research operations, to promote greater consistency across institutions. (#6)</td>
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<tr>
<td>Disseminate the SHRER Committee’s models of common elements for REB clinical trial application and consent forms, and encourage and assess the adoption of their content. (#7)</td>
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<tr>
<td><strong>Short term (1 to 6 months)</strong></td>
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<tr>
<td>Establish a national strategic leadership forum to facilitate communication, provide strategic insight on coordination, and identify potential groups to move forward on these recommendations (#1)</td>
<td>Define a national vision for greater standardization of REBs. Identify roles and responsibilities of stakeholders in defining guiding principles and parameters. (#2)</td>
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<td></td>
<td>Develop a common template for an REB clinical trial application form and for a clinical trial adult consent form, for REBs who wish to use them. (#8)</td>
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<td>Establish a national repository of resources to assist in the streamlining and harmonization of ethics review. (#9)</td>
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<td>Develop a database of Canadian REBs and their contact information, forms, policies and protocols and any coordinating or streamlining initiative under which they fall. Link to the clinical trials asset map. (#10)</td>
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<td>Develop an inventory of REBs that use web-based systems to promote the development of compatible systems. (#11)</td>
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<td><strong>Medium term (6 to 18 months)</strong></td>
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<td>Ensure that all stakeholders are involved in the development of an evaluation and qualification system for REBs and HRPPs. (#3)</td>
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<td>Develop a common set of metrics and benchmarks to assist REBs to assess their performance and promote transparency. (#4)</td>
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10 For the full text of each recommendation, see the previous list. The recommendation number is in parentheses.
Glossary of Key Terms

Accreditation: Accreditation typically involves an independent review process to determine that an organization or program meets common standards, and has attained a level of organizational or program competence that is comparable to other organizations/programs with the same accreditation. A voluntary evaluation and qualification system for research ethics boards (REBs) and Human Research Protection Programs (HRPPs) could involve a number of sequential phases including: 1) registration, 2) certification and 3) accreditation. In such a phased-in system, accreditation is the most rigorous step, involving objective peer verification that a previously certified HRPP (including the REB) meets or exceeds common standards. (Adapted from CAREB Accreditation- Letter of Interest, January 29, 2012 version.) See also Registration and Certification.

Certification: A certification process could be a second phase in a voluntary evaluation and qualification process for REBs and HRPP. Following registration in a central public registry, a certification process would involve external expert assessment that an REB or HRPP meets baseline requirements and has appropriate policies and processes in place. Certified HRPPs (including REBs) could complete a final phase, which would be the accreditation phase. See also Accreditation and Registration.

Clinical trial: Any investigation involving participants that evaluates the effects of one or more health-related interventions on health outcomes (TCPS 2). Under the Canadian federal Food and Drugs Act, Division 5, a clinical trial is defined as: “an investigation in respect of a drug for use in humans that involves human subjects and that is intended to discover or verify the clinical, pharmacological or pharmacodynamic effects of the drug, identify any adverse events in respect of the drug, study the absorption, distribution, metabolism and excretion of the drug, or ascertain the safety or efficacy of the drug” (see: http://www.hc-sc.gc.ca/dhp-mps/compli-conform/clini-pract-prat/docs/gui_68-eng.php).

Clinical trial asset map: A mapping of information on a jurisdiction’s clinical trial assets, offerings and improvements, to be made available to clinical trial sponsors. Moving forward on Recommendation 9 in the Clinical Trials Summit Action Plan, Rx&D has struck a Clinical Trials Asset Map Committee to help global head offices navigate Canada's wealth of clinical trial assets. The Committee includes ACAHO members, as well as staff from the Department of Foreign Affairs & International Trade, Industry Canada, CIHR, ACAHO, pharmaceutical companies and others. Online information at: http://www.acaho.org/?document&id=364

Ethics harmonization: Efforts by institutions and multiple research ethics boards to adopt collaborative or centralized approaches to research ethics review of multi-site research.

Ethics reciprocity: A formal arrangement in which two or more institutions/REBs agree to rely on one another’s REB reviews. In other words, a situation whereby ethics approval at one authorized and trusted health REB is accepted (to varying degrees) as the REB approval of the research at the other institutions party to such agreement.

Ethics review streamlining: Any process which improves the efficiency of research ethics review, without diminishing protections for research participants.

Human Research Protection Program (HRPP): Defined by the former National Council on Ethics in Human Research as a comprehensive system within an institution or organization that ensures the protection of the rights and welfare of participants in human research, and that generally comprises a leadership/governance function, a review board, a continuous quality improvement program, researchers and research teams, and relevant departments and units within a given institution or organization. Similarly, the U.S. Association for the Accreditation of Human Research Protection Programs (AAHRPP) lists three domains of responsibilities for human research protection in its 2009 Accreditation Standards: (Domain I) the Organization; (Domain II) the Institutional Review Board or Ethics Committee; and
(Domain III) the Researcher and Research Staff (see https://admin.share.aahrpp.org/Website%20Documents/AAHRPP_Accreditation_Standards.PDF).

**Patient-oriented research:** defined by CIHR as a continuum of research, from initial studies in humans to comparative effectiveness and outcomes research, and the integration of this research into the health care system and clinical practice. The goal of patient-oriented research is to better ensure the translation of innovative diagnostic and therapeutic approaches to the point-of-care, as well as to help the provinces and territories meet the challenge of delivering high quality, cost-effective health care. It involves ensuring that the right patient receives the right clinical intervention at the right time, ultimately leading to better health outcomes (also referred to as “Clinical research” or “Clinical studies”).

**Registration:** Registration of REBs and HRPPs in a central public registry could be the initial phase in a phased-in voluntary evaluation and qualification process. A registry would provide key stakeholders with baseline information on numbers and types of REBs; contact information for HRPPs; information for researchers on which REBs to approach for multi-jurisdictional studies; and information to verify institutional status related to the *Tri-Council Memorandum of Understanding* with Institutions as well as other applicable requirements. See also *Accreditation* and *Certification*.

**Research Ethics Board (REB):** A body of researchers, community members, and others with specific expertise (e.g., in ethics, in relevant research disciplines) established by an institution to review the ethical acceptability of all research involving humans conducted within the institution’s jurisdiction or under its auspices (TCPS 2).

**Research Ethics Office (REO):** An REO typically supports the operations of the REB. An REO often has a broader mandate than an REB. An REO may oversee a number of REBs and also be responsible for additional research ethics and compliance activities such as conflict of interest, research integrity, education and continuing review/monitoring.
Appendix A

SPOR-SHRER Committee Terms of Reference

<table>
<thead>
<tr>
<th>Name:</th>
<th>SPOR External Advisory Committee for the Streamlining of Health Research Ethics Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIHR Staff Lead:</td>
<td>Danika Goosney, Director, Science, Knowledge Translation, and Ethics Branch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Membership:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chair:</strong> Sharon Freitag (Director, St. Michael’s Hospital Research Ethics Office, Toronto, ON; Past President of the Canadian Association of Research Ethics Boards (CAREB))</td>
</tr>
<tr>
<td><strong>Members:</strong></td>
</tr>
<tr>
<td>• Laurel Evans (Director of Research Ethics at UBC; Lead contact for the Michael Smith Health Research Foundation funded project, the BC Ethics Harmonization Initiative)</td>
</tr>
<tr>
<td>• Larry Felt (Chair, Health Research Ethics Authority, St. John’s, NL)</td>
</tr>
<tr>
<td>• Janet Manzo (Executive Director, Ontario Cancer Research Ethics Board)</td>
</tr>
<tr>
<td>• Diane Martz (Director, Research Ethics, University of Saskatchewan)</td>
</tr>
<tr>
<td>• Brian Rowe (Associate Dean Clinical Research, Faculty of Medicine &amp; Dentistry, University of Alberta; Edmonton, AB)</td>
</tr>
<tr>
<td>• Tina Saryeddine (Assistant Vice-President, Research and Policy Analysis, Association of Canadian Academic Healthcare Organizations)</td>
</tr>
<tr>
<td>• Susan Zimmerman (Executive Director, Secretariat on Responsible Conduct of Research)</td>
</tr>
<tr>
<td><strong>Observer:</strong> Nathalie Desrosiers (Coordonnatrice de l'Unité de l'éthique, Ministère de la Santé et des Services sociaux QC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CIHR Staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genevieve Dubois-Flynn, Manager Ethics Office</td>
</tr>
<tr>
<td>Sheila Chapman, Senior Ethics Policy Advisor, Ethics Office</td>
</tr>
<tr>
<td>(Penny Moody-Corbett, Director of the Strategy for Patient-Oriented Research and the Ethics Office, was a member until June 2012.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terms of Reference:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-oriented research is defined by CIHR as a continuum of research, from initial studies in humans to comparative effectiveness and outcomes research, and the integration of this research into the health care system and clinical practice. The goal of patient-oriented research is to better ensure the translation of innovative diagnostic and therapeutic approaches to the point-of-care, as well as to help the provinces and territories meet the challenge of delivering high quality, cost-effective health care. It involves ensuring that the right patient receives the right clinical intervention at the right time, ultimately leading to better health outcomes.</td>
</tr>
</tbody>
</table>
One goal of SPOR is to strengthen organizational and regulatory support for clinical studies in Canada and enhance patient and clinician engagement in these studies. Although Canada has a strong reputation in the area of clinical research, there are a number of inefficiencies which create delays in undertaking large multicentre clinical studies, one of which is the process of research ethics review.

The objective of the Health Research Ethics Review External Advisory Committee is to assist the SPOR National Steering Committee with streamlining ethics review and improving the efficiency of patient-oriented research in Canada by:

1. Consolidating the existing knowledge on the barriers that currently exist across the country with respect to streamlining research ethics review and subsequently recommending steps to improve the process.
2. Identifying tools and strategies to improve the ethics review process of patient-oriented research.
3. Exploring opportunities for information sharing and communication among REBs.

**Authority:**

The Committee will make recommendations to the CIHR SPOR Working Group

**Meetings:**

Meetings will be convened by the committee chair and conducted on a bi-weekly basis or as required. Meetings will be held by teleconference unless otherwise required. Decisions will be made by consensus wherever possible and by majority vote where consensus cannot be achieved. It is anticipated that this committee will provide a final report later in the fall of 2012.

**Quorum:**

A majority of its voting members (50% plus 1).

**Reporting:**

Written report of the work of this committee will be made to the Chair of the SPOR Working Group by the Chair of the Health Research Ethics Review Advisory Group.
Appendix B

Selected Canadian Ethics Review Streamlining Initiatives

<table>
<thead>
<tr>
<th>Basic Models for Streamlining Ethics Review in Canada</th>
<th>Selected Canadian Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Board of Record:</td>
<td></td>
</tr>
<tr>
<td>This model describes an REB that has been appointed by</td>
<td></td>
</tr>
<tr>
<td>an institution or organization, under whose auspices the</td>
<td></td>
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<tr>
<td>research is being conducted, to serve as the primary or</td>
<td></td>
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<tr>
<td>sole authority for the research ethics oversight of the</td>
<td></td>
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<tr>
<td>study.</td>
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<tr>
<td>British Columbia (BC)</td>
<td></td>
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<tr>
<td>A.1 University of British Colombia (UBC) “One Board</td>
<td></td>
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<tr>
<td>of Record” agreement:</td>
<td></td>
</tr>
<tr>
<td>In place since 2006 for institutions affiliated with</td>
<td></td>
</tr>
<tr>
<td>UBC including Vancouver Coastal Health, Providence</td>
<td></td>
</tr>
<tr>
<td>Health Care, BC Cancer Agency and BC Children’s</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mandatory UBC policy requirement</td>
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<tr>
<td></td>
<td>- Standard forms</td>
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<tr>
<td></td>
<td>- Harmonized contracts across sites</td>
</tr>
<tr>
<td></td>
<td>- Web-based system (RISE)</td>
</tr>
<tr>
<td>Ontario</td>
<td></td>
</tr>
<tr>
<td>A.2 Ontario Cancer Research Ethics Board (OCREB):</td>
<td></td>
</tr>
<tr>
<td>In operation since 2003; serves as a central REB for</td>
<td></td>
</tr>
<tr>
<td>multicentred oncology trials for 25 of 27 Ontario</td>
<td></td>
</tr>
<tr>
<td>institutions (as of 2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Non-binding Letter of Intent</td>
</tr>
<tr>
<td></td>
<td>- Board of Record Agreement on a study-by-study basis</td>
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<tr>
<td></td>
<td>- Standard Operating Procedures</td>
</tr>
<tr>
<td></td>
<td>- Standard guidelines, forms and templates for submissions</td>
</tr>
<tr>
<td></td>
<td>- Web-based system</td>
</tr>
<tr>
<td>A.3 Toronto Academic Health Sciences Network (TASHN):</td>
<td></td>
</tr>
<tr>
<td>Includes the University of Toronto and its affiliated</td>
<td></td>
</tr>
<tr>
<td>academic hospitals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Common consent forms and application templates</td>
</tr>
<tr>
<td></td>
<td>- Qualification standard for REBs to be a Board of Record for a multi-site study, with assessment by an external auditor (work in progress)</td>
</tr>
<tr>
<td>A.4 HIV Research Ethics Board:</td>
<td></td>
</tr>
<tr>
<td>In operation since 2008; a joint venture of the</td>
<td></td>
</tr>
<tr>
<td>University of Toronto and the Ontario HIV Treatment</td>
<td></td>
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<tr>
<td>Network; for HIV/AIDS research in Ontario</td>
<td></td>
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<tr>
<td></td>
<td>- Co-chairs represent academia and the HIV/AIDS community</td>
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<tr>
<td></td>
<td>- All reviews by full Board</td>
</tr>
<tr>
<td>A.5 Clinical Trials Ontario (CTO):</td>
<td></td>
</tr>
<tr>
<td>Independent non-profit organization established in</td>
<td></td>
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<tr>
<td>2011 by the Ontario Ministry of Economic Development</td>
<td></td>
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<tr>
<td>and Innovation; has working group on streamlining</td>
<td></td>
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<tr>
<td>ethics review</td>
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<tr>
<td></td>
<td>- Aiming for a single review in Ontario for clinical trials; standard operating procedures, web-based system, standard metrics</td>
</tr>
<tr>
<td>Nova Scotia (NS)</td>
<td></td>
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<tr>
<td>A.6 Nova Scotia (NS) Research Ethics Board (REB):</td>
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<tr>
<td>To be established as a Board of Record for multi-site</td>
<td></td>
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<tr>
<td>health research involving NS Regional Health</td>
<td></td>
</tr>
<tr>
<td>Authorities, but not including the universities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Board of Record will have representatives from all local site REBs; standard operating procedures, web-based system (ROMEO)</td>
</tr>
<tr>
<td>NFLD and Labrador (NL)</td>
<td></td>
</tr>
<tr>
<td>A.7 Health Research Ethics Authority (HREA)-appointed</td>
<td></td>
</tr>
<tr>
<td>Health Research Ethics Board (HREB):</td>
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<tr>
<td>HREA is a non-profit agency established in 2011 by</td>
<td></td>
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<tr>
<td>legislation; responsible for the general supervision</td>
<td></td>
</tr>
<tr>
<td>of all health research involving human participants in</td>
<td></td>
</tr>
<tr>
<td>NL; appoints the HREB for all industry-sponsored</td>
<td></td>
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<tr>
<td>clinical trials and genetic research projects</td>
<td></td>
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<tr>
<td></td>
<td>- For multi-site studies, one standard application form and a feasibility application for each local site</td>
</tr>
<tr>
<td>Area</td>
<td>Title &amp; Scope</td>
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</tr>
<tr>
<td>BC</td>
<td><strong>B.1 BC Ethics Harmonization Initiative (BECHI):</strong>&lt;br&gt; Involves the four major BC universities, including UBC and UBC-affiliated institutions (see A.1), and four health authorities</td>
</tr>
<tr>
<td>Alberta</td>
<td><strong>B.2 Alberta Health Research Ethics Harmonization (HREH):</strong>&lt;br&gt; Initiated in 2009; involves six institutions: Alberta Health Services, Alberta Innovates-Health Solutions, College of Physicians and Surgeons of Alberta, and 3 universities (of Alberta, of Calgary and of Lethbridge)</td>
</tr>
<tr>
<td>Saskatchewan (SASK)</td>
<td><strong>B.3 Saskatchewan Health Research Ethics Working Group</strong>&lt;br&gt; Set up in 2007, facilitated by the SASK Academic Health Sciences Network (SAHSN); includes 2 universities (of SASK, of Regina), and Regina Qu’Appelle Regional Health Authority (RQHR)</td>
</tr>
<tr>
<td>Quebec</td>
<td><strong>B.4 Quebec Ministry of Health and Social Services (MSSS) Multicentre Mechanism</strong>&lt;br&gt; Initiated in 2008; required for research involving more than four sites in Quebec</td>
</tr>
<tr>
<td>Cross-provinces</td>
<td><strong>B.5 Universities of Alberta, SASK, BC Agreement:</strong>&lt;br&gt; Agreement effective June 2012</td>
</tr>
<tr>
<td></td>
<td><strong>B.6 Maternal Infant Child and Youth Research Network (MICYRN) Federated REB</strong>&lt;br&gt; Proposed for Chairs of REBs of all MICYRN-affiliated institutions</td>
</tr>
<tr>
<td>National</td>
<td><strong>B.7 Public Health Agency of Canada (PHAC):</strong>&lt;br&gt; Piloted between 2009 and 2011; initially focussed on H1N1 research but expanded to include all public and population health research; ongoing funding to be determined</td>
</tr>
</tbody>
</table>
The following Appendices are attached to the Report as separate files:

**Appendix C**  
*Models of Common Elements for Research Ethics Board Application and Adult Consent Forms for Clinical Trials*

**Appendix D**  
*An Overview of Research Ethics Harmonization in Canada*

**Appendix E**  
*Development of a Model Clinical Trial Application and Consent Form for the Strategy on Patient-Oriented Research (SPOR): Summary Report*