Best Practices in Canadian Higher Education: Making a positive impact on student mental health

Best Practice Guidelines

Operationalizing evaluation criteria

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Introduction

The Best Practices Network in Canadian Higher Education (BP-Net) is a national mental health community of practice and knowledge exchange network that supports Canadian post-secondary campuses. BP-Net aims to promote and advance evidence-informed emerging, promising, and best practice mental health and wellness initiatives that improve Canadian post-secondary students' mental health and well-being. The Network has adopted a crowd-sourcing approach for campuses to share, inform, and adopt evidence-informed practices. BP-Net invites project submissions from post-secondary institutions (PSIs) where practices are evidence-informed and include an evaluation framework and/or preliminary data demonstrating position outcomes.

Over the last few years, there has been increased recognition of evaluation practices, quality improvement, and program accountability within the post-secondary sector (e.g., Centre for Innovation in Campus Mental Health, 2019; Daria Parsons Consulting Inc., 2015; University of Calgary, 2015). While campuses have developed innovative, comprehensive, and "tried and true" practices that support student mental health and well-being, many campuses have limited resources that support program evaluation. Therefore, measurable program outcomes may be unknown, not reported, and/or unknown to campus stakeholders. Based on this environmental scan and the determination that health programming typically falls along a continuum of effectiveness, we anticipate that the majority of campus mental health initiatives will also fall along the cutting-edge to emerging to promising end of a continuum, with fewer qualifying as leading or best practice (e.g., S. Bar-Ziv, personal communication, June 9, 2020; L. Krisowaty, personal communication, June 10, 2020). The Network's goals, therefore, are to provide an online resource to support program evaluation, disseminate program outcomes, and provide a vehicle for program sharing within the post-secondary mental health sector.

Best practice has been defined as "a practice supported by a rigorous process of peer review and evaluation indicating effectiveness in improving health outcomes for a target population, generally demonstrated through systematic reviews" (Association of Maternal & Child Health Programs, n.d.; Spencer et al., 2013). In recent years, the term "best practice" has increasingly been used in everyday language, but the term has perhaps lost its potency with respect to its intended meaning and scope. Despite the frequency of programs being referred to as best practices, it is quite possible that these programs have not been evaluated or do not actually meet the criteria for the designation of best practice. Additionally, there is no consensus on the specific criteria and evaluation tools to operationalize the designation of best practice (Ng & De Colombani, 2015; Spencer et al., 2013).

The purpose of this project is to operationally define best practice and to create an evaluation or rating tool to categorize programming that supports post-secondary student mental health as emerging, promising, leading, or best (see definitions of best practice categories in Appendix A). Based on this environmental scan and analysis, the BP-Net proposes a continuum ranging from cutting-edge or emerging (i.e., innovative, "tried and true", or new practices with an evaluation plan in place and some level of evidence of effectiveness; Spencer et al., 2013) to leading or best (i.e., most rigorously evaluated and peer-reviewed practices that have been replicated or can be adapted in other contexts and that consistently demonstrate positive outcomes against pre-defined objectives; e.g., Association of Maternal & Child Health Program, n.d.; Ng & De Colombani, 2015) for the evaluation of programs, services, strategies, and policies that support post-secondary student mental health. The long-term

goals are to establish national best practices and benchmarking, to provide campus learning opportunities, and to provide consultation for program evaluation.

The objectives of developing measurable evaluation criteria for post-secondary initiatives include:

1. The creation of a repository of tools and information that would assist PSIs to disseminate, share, adopt, and learn about evidence-informed and based practices that support student mental health.
2. The creation of a learning tool or mechanism to assist PSIs in quality improvement in order to further evolve programming along a best practice continuum.
3. The creation of a network that supports, encourages, and reinforces a culture of evaluation on campuses.

The outcome of this initiative would allow campuses to identify programming that has positive mental health outcomes for students, to share program evaluation tools and resources to support evaluation efforts, and to share research and evidence-informed practices that campuses can use to help advance new campus initiatives, and to provide a mechanism to reduce program development and associated resources (i.e., reduce efforts to "reinvent the wheel").

The purpose of this environmental scan was to identify, review, and analyze current best practice frameworks and to determine whether a particular framework, a combination of frameworks, or a newly created framework would best meet the goals and objectives of BP-Net. Further, this analysis would help identify whether a particular best practice framework would be suitable for evaluating programs and services vs. policies and strategies, or whether a different approach would be needed for each.

To guide this project, we identified the following values:

1. Inclusivity: develop or adopt a best practice framework that is inclusive to current campus mental health initiatives, while "moving the needle" to promising, leading or best practices.
2. Accessibility: develop a best practice framework that is simple, easy-to-use, and time efficient for both project applicants and reviewers.
3. Supportive: develop a project review process that is iterative in nature, allowing reviewers to obtain clarifying information from project applicants during the review process, allowing reviewers to provide constructive and supportive feedback to applicants, and to provide applicants with recommendations to further support their evaluation efforts.
4. Culture of learning: develop a community of practice where campuses can share, learn, support, adapt, or adopt evaluation and quality improvement initiatives.

This report outlines the methodology, analysis, recommendations, and consultation process with knowledge experts and BP-Net's Advisory Committee. Next steps to develop the BP-Net best practice guidelines for Canadian PSIs will also be outlined.

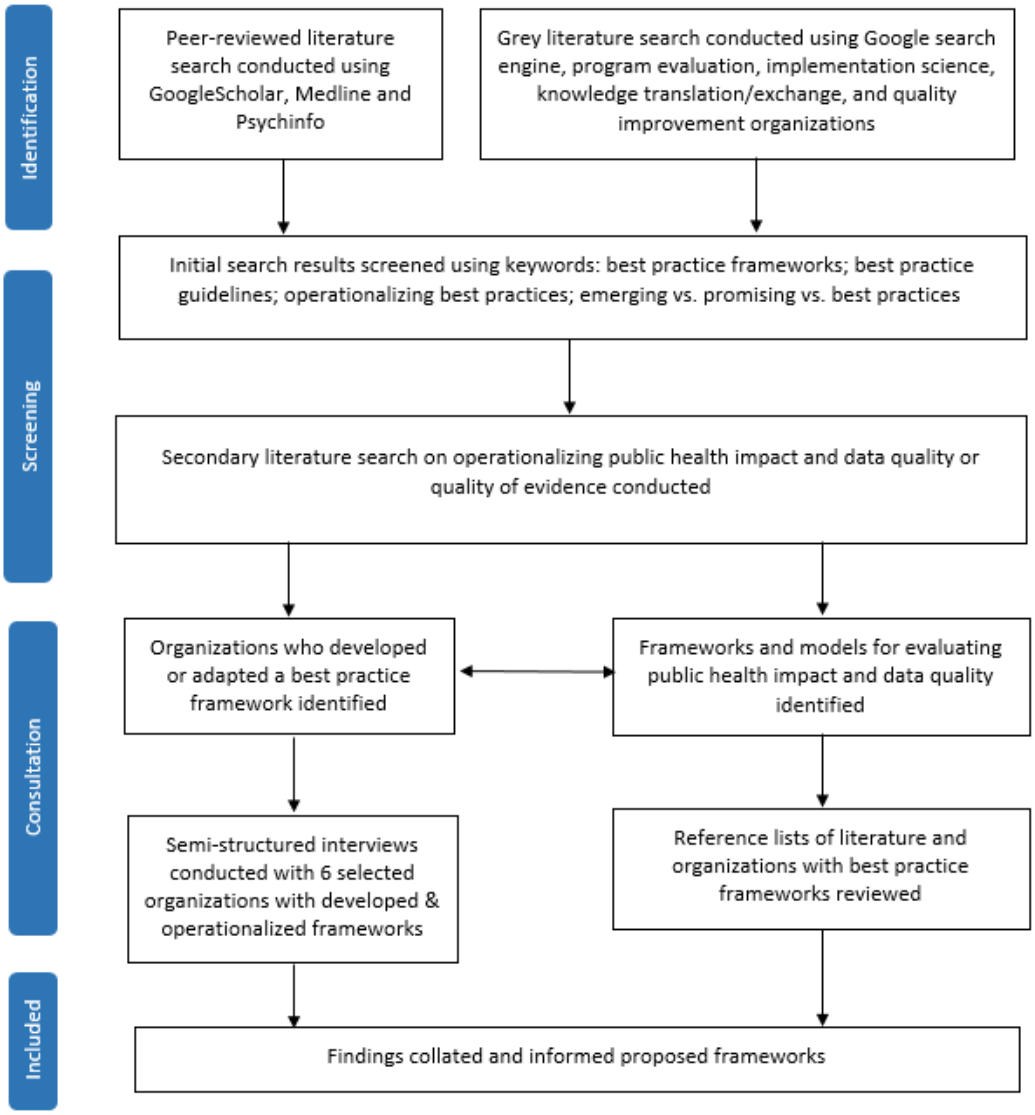
Methodology

An environmental scan of best practice frameworks for health and mental health programs, services, policies, and strategies (hereafter referred to as "practices") was conducted without a specified date range. Our methodology included searching for peer-reviewed and grey literature to find models and frameworks for operationalizing best practices with a focus on research, knowledge translation, implementation science, quality improvement, and program evaluation literature (see Figure 1). Keywords for the search included "best practice frameworks", "best practice guidelines", "operationalizing best practices", and "emerging vs. promising vs. best practices" using Google, medical

and psychological search engines (Medline, PsycINFO), as well as established program evaluation, implementation science, knowledge translation, knowledge exchange, and quality improvement organizations.

Figure 1

Best Practice Frameworks Environmental Scan Process



Note. This figure depicts the environmental scan process that the BP-Net Best Practice Guidelines Project Team employed in 2020 to identify best practice frameworks.

During the initial stages of this research, the Centers for Disease Control and Prevention (CDC) Conceptual Framework (see Figure 2; Spencer et al., 2013) provided further guidance for the environmental scan. CDC identified a conceptual framework for operationalizing best practices that included two interrelated components: public health impact and quality of evidence. This led to additional literature searches relating to operationalizing public health impact and data quality or quality of evidence.

Figure 2

A Conceptual Framework for Planning and Improving Evidence-Based Practices

Note. This figure illustrates the CDC Conceptual Framework for Planning and Improving Evidence-Based Practices in which practices fall along a continuum of interrelated components: impact and quality of evidence. Reprinted from Best Practices for Cardiovascular Disease Prevention Programs: A Guide to Effective Health Care System Interventions and Community Programs Linked to Clinical Services (CDC, 2017).

The public health impact component of the CDC Conceptual Framework consists of five elements: effectiveness, reach, feasibility, sustainability, and transferability. These elements are represented on the vertical axis and were partly derived from the RE-AIM framework for translational research (e.g., Gaglio, Shoup & Glasgow, 2013), the integrative validity model (Chen, 2010), and an evaluability assessment model for public health (Leviton, et al., 2010). The quality of evidence component of the framework refers to an evidence-based practice continuum. These elements are represented on the horizontal axis and denote four levels of evidentiary quality: weak, moderate, strong, and rigorous. A continuum of evidence-based practice appears at the intersection of the impact and quality of evidence components, where practices are categorized as emerging, promising, leading, or best (depicted by the arrow in Figure 2). The designation of a practice can fall along the continuum and is dynamic in nature, with the designation being dependent on the available evidence at that point in time and evolving as new evidence becomes available (CDC, 2017).

This second-stage literature search revealed additional frameworks and models for evaluating public health impact and data quality, including RE-AIM (e.g., Gaglio, Shoup & Glasgow, 2013), Promoting Action on Research Implementation in Health Services (PARiHS; Kitson, Harvey & McCormack, 1998), Grading of Recommendations Assessment, Development, and Evaluation (GRADE; Atkins et al., 2004), Strength of Recommendation Taxonomy (SORT; bell et al., 2004), and Appraisal of Guidelines for Research & Evaluation (AGREE; Brouwers, 2010; de Castro Maymone, Gan & Bigby, 2014).

that had well-developed best practice frameworks and tools were also identified; the respective project leads were then contacted and interviewed in order to further inform our analysis. The environmental scan and consultation process resulted in identifying one systemic review and eight published journal review articles relating to best practice, numerous reports and guides on the topic, and 11 organizations that had developed or adopted best practice frameworks with operational criteria. Based on an analysis of these best practice frameworks, we identified common and differing evaluation components and tools that assigned a practice to a best practice category.

Best Practice Frameworks: Consultation Process

A series of semi-structured interviews (45 to 60 minutes in duration) were conducted with six organizations from May to June 2020 to learn more about the development and implementation of their best practice frameworks and to determine their applicability to the Network's goals and objectives. The following organizations were interviewed:

Canadian organizations:

1. Health Quality Ontario (HQO)
2. Health Standards Organization (HSO)
3. Public Health Agency of Canada (PHAC)
4. Strategy Design and Evaluation Initiative (SDEI)

American organizations:

1. Association of Maternal & Child Health Programs (AMCHP)
2. Centers for Disease Control and Prevention

Although SDEI does not have a best practice selection framework, a consultation session was conducted because of their expertise in designing and evaluating complex public health strategies. It was felt that their evaluation approach could potentially be relevant for campus mental health strategies and their future adoption of the National Standard of Canada for Mental Health and Well-Being for Post-Secondary Students (Canadian Standards Association, 2020).

The following topics guided each interview (see Appendix B for additional details):

1. Methodology used to develop the best practice framework;
2. Frameworks and/or models that were used to inform their ratings, categories, and criteria;
3. Process that determined the number of categories utilized;
4. Incorporation of a health equity lens;
5. Process of project submissions and review process;
6. Implementation challenges;
7. Evaluation and continuous improvement of the framework;
8. Challenges and lessons learned;
9. Next steps; and
10. Permission to adopt tools and resources.

Several best frameworks were identified through the literature search and additional frameworks were discovered as a result of the consultation process. The consultation process identified multiple best practice frameworks for programs and services, a framework for public health policies (Barbero et al., 2015), and a framework for Aboriginal-specific public health initiatives (PHAC, 2015). The identified best

practice frameworks were created specifically for the prevention of specific diseases (e.g., cardiovascular disease; CDC, 2017) and public health issues (e.g., violence prevention; Puddy & Wilkins, 2011).

The following includes the additional frameworks that were discovered through the consultation process:

1. HQO Innovative Practices: This framework was adopted from the Health Council of Canada Innovative Practices Evaluation Framework (Health Council of Canada, 2012).
2. PHAC: Canadian Best Practices Portal:
    a. Aboriginal Ways Tried and True framework for Aboriginal-specific public health initiatives (PHAC, 2015); and
    b. Promising and best framework for public health initiatives (that are not Aboriginal-specific; Fazal et al., 2017).
3. CDC: Their five best practice frameworks include the
    a. Conceptual Framework for public health programs and strategies (Spencer et al., 2013);
    b. Community Guide for assessing public health practices across 22 topics (Truman et al., 2020);
    c. Policy Evidence Assessment Reports framework for heart disease & stroke prevention (Barbero et al., 2015);
    d. Framework for the Best Practices for Cardiovascular Disease Prevention Programs (CDC, 2017); and
    e. Continuum of Evidence of Effectiveness framework to facilitate a common understanding of how the "best available research evidence" is defined in the field of violence prevention (Puddy & Wilkins, 2011).

Overall, the consultation sessions were very positive and an important networking opportunity for BP-Net. Most of the organizations were willing to share tools that were not available in the public domain and granted the Network permission to adopt or adapt these materials. All of the organizations were interested in learning about BP-Net and potential future collaborations were discussed, including additional consultations, educational webinars, potential membership on the advisory committee, as well as the potential for a best practices symposium where the organizations would come together for a networking session and host workshops with campuses who were interested in showcasing and consulting on their projects.

Findings

The environmental scan revealed a number of organizations that have well-established frameworks for categorizing practices along a dichotomy or continuum of best practice. Overall, there was significant consistency across the frameworks at a conceptual level, with differences relating mainly to levels of categorization and the methodology of the project review process. This section outlines the commonalities and differences in terms of the methodology used to develop the frameworks, the theoretical approaches used to inform the categories and criteria, a breakdown of the categories used and the rationale, the incorporation of health equity criteria, and the submission and review process (see Appendix C for a summary).

Development Process

The organizations, for the most part, followed a similar methodology and were informed by or adopted common theoretical approaches in the development of their best practice framework. Their

development phase included a review of literature, an environmental scan, the adoption or extension of several streams of research, input from subject matter experts, and pilot testing. Most of the frameworks were informed by RE-AIM (e.g., Gaglio, Shoup & Glasgow, 2013) while fewer frameworks were informed by Swinburn's "Promise Table" (Swinburn, Gill & Kumanyika, 2005).

In general, the American best practice frameworks tended to be specific to disease models or health topics, while Canadian best practice frameworks tended to be more general and applied to various topics. Most of the frameworks are intended primarily for evaluating or rating programs and services and at times for policies and strategies. AMCHP's framework is used primarily for programs and they are expanding to develop evaluation tracks for policy and data quality. CDC has a separate framework for assessing policies. Lastly, the PHAC Ways Tried and True framework is used for identifying Aboriginal-specific public health practices.

For most organizations, quality improvement is integrated into their project and their best practice framework is constantly evolving. For instance, some have removed evaluation categories and others are working on adding categories. Most organizations collect feedback from project applicants and reviewers to fine-tune their tools and processes along the way. In most cases, the practices themselves are iterative and their best practice framework serves as a learning tool to help practices move along the best practice continuum over time, which enables other stakeholders to learn from them throughout their program development and evaluation journey.

Health equity was embedded into best practice frameworks in three main ways. Some organizations included equity criteria in their pre-screening phase, some weaved equity throughout the evaluation criteria, and others have separate criteria for practices that demonstrate a positive impact on health equity through action on the social determinants of health. As one example, the PHAC Canadian Best Practices Portal identifies practices that have a focus on health equity through the assignment of an equity-sensitive icon.

Best Practice Categories

The best practice frameworks varied in the specificity of categories utilized. Some frameworks adopted a dichotomous or "in or out" approach, others identified three or four (for public health policy & programs) categories, while others utilized up to eight (for disease models). For those with more than one category, ratings could range from cutting-edge (or up-and-coming), emerging, promising, and leading or best practice. Some organizations categorized practices retrospectively and created a portal or library of rated resources, while other organizations evaluated current practices and their development moving forward. Some organizations have a cutting-edge or an "insufficient evidence" category to showcase new and innovative practices that need more time for implementation and evaluation and a few organizations have an "ineffective" or "recommended against" category to highlight and learn from ineffective practices for quality improvement purposes.

Overall, these organizations attempted to balance rigour with inclusivity in their best practice categories. While it might be appealing to adopt an "in or out" approach, this would result in fewer practices meeting criteria for inclusion as leading or best practice. Within the post-secondary mental health sector, it is anticipated that most practices will fall on the emerging or promising end of the evaluation continuum because they would have early or anecdotal evidence, are not well researched, or have not evaluated the various components of public health impact (e.g., they have outcome measures

but have not measured cost-effectiveness or vice versa; M. Schooley, personal communication, June 9, 2020). Organizations reported on challenges with having multiple categories, as reviewer subjectivity was relied upon in order to determine a project rating, particularly for the middle categories of "emerging" and "promising". Organizations overcame these challenges by having clear evaluation criteria, multiple reviewers, clear and comprehensive submission forms, assessment tools, and transparency in decision making.

Best Practice Criteria

Pre-screening

Some organizations employed pre-screening practices before moving submissions forward into the project review process in order to determine eligibility for a category rating. Examples of pre-screening criteria include project age (e.g., less than 10 years old), credibility of the information source (i.e., peer-reviewed journal or grey literature that includes details about the objectives and the evaluation design, methods, and outcomes), non-clinical intervention, addressing a need or gap for the primary population domain or focus of the practice, incorporation of the social determinants of health, and the promotion of health equity (AMCHP, 2020a; Health Council of Canada, 2012; PHAC, 2016a). For these organizations, practices must fulfil all the pre-screening criteria before proceeding to the review process.

Public Health Impact and Quality of Evidence

While most best practice frameworks were informed by both the public health impact and quality of evidence components, rather than developing distinct criteria for each "axis", these components were often blended and criteria that fell under impact were sometimes considered data quality criteria and vice versa. The following outlines common criteria and how each criterion is operationalized to evaluate a practice. While the criteria are grouped according to impact, quality of evidence, and other components, some criteria are sometimes blended.

Quality of Evidence. This component refers to the extent to which the evaluation of the practice has produced strong and reliable evidence (Puddy & Wilkins, 2011; HQO, 2016).

Common criteria for evaluating quality of evidence are:

1. Evaluation or research design: A practice is evaluated according to the type of research or evaluation methodology used, where field-based summaries, expert opinion, or evaluations in progress are rated lower and peer-reviewed articles and systemic reviews are rated higher (e.g., Spencer, 2016; Fazal et al., 2017).
2. Theory and evidence-based grounding: A practice must be grounded in theory or evidence-based research ("in or out" approach, e.g., PHAC, 2016a; AMCHP, 2020a) or is evaluated based on the amount of practice or theory-based evidence and research-based evidence (e.g., Barbero et al., 2015). This includes practice-based research and program evaluation in real-life settings. The acceptance of theory or practice-based evidence as suitable sources of evidence ensures the inclusion of public health practices implemented in real-life settings versus a controlled research setting (Barbero et al., 2015; Ng & De Colombani, 2015).

Public Health Impact. While criteria for rating the quality of evidence have been extensively examined, there is a lack of consensus on criteria for evaluating public health impact (Ng & De Colombani, 2015). This was evidenced by the range of public health impact evaluation criteria identified through the environmental scan and the utilization of multiple terms for the same public health impact criteria.

Common criteria for evaluating public health impact are:

1. Effectiveness (Impact): A practice is evaluated based on the extent to which it achieved the desired and positive outcomes as demonstrated by consistency in producing results, the magnitude and significance of the effect, and the achievement of short, medium and long-term outcomes (e.g., HQO, 2016; PHAC, 2016b; Spencer et al., 2013).
2. Applicability (Adaptability): A practice is evaluated based on the extent to which it has been applied to or adapted for various contexts (e.g., Fazal et al., 2017; Health Council of Canada, 2012; Health Standards Organization, 2018).
3. Transferability (Replicability or Spread): A practice is evaluated based on the extent to which it achieved its desired outcomes when replicated across different settings or with different populations (e.g., Barbero et al., 2015; Health Council of Canada, 2012; Spencer et al., 2013).
4. Sustainability: A practice is evaluated based on the extent to which the practice can be maintained and achieved desired outcomes over time (Spencer et al., 2013).

Other common criteria that are fundamental principles of public health include:

1. Equity: A practice is evaluated based on the degree of evidence of improved outcomes for people living in conditions of disadvantage (e.g., Barbero et al., 2015; PHAC, n.d.b).
2. Community participation and stakeholder engagement: A practice is evaluated based on the degree to which an active engagement approach was employed to involve community members and stakeholders throughout the various stages (i.e., development, implementation, evaluation) of the practice (e.g., AMCHP, 2020a; Ng & De Colombani, 2015; PHAC, 2016b).

Operationalizing Evaluation Criteria

The best practice frameworks varied in the level of detail, related tools, and methods used to operationalize the public health impact and quality of evidence criteria for designated categories. Most of the tools and resources are partly available or unavailable in the public domain. That is, guidebooks, scoring rubrics, or other tools may be referenced in the public domain but the specific materials are either available, in part or whole, by request or are unavailable.

In general, there were three methods used to determine a practice's category rating:

1. Overall Score: A practice is rated on various criteria, but the practice is given a final score that falls under a best practice category. For example, in the PHAC Aboriginal Ways Tried and True framework (PHAC, 2016b) a score of one to four is assigned to each of the six criteria and an overall score of 16 or more out of 24 is required.
2. Phased Scoring: A program is reviewed and advanced through stages, as in progressive movement through increasingly rigorous categories. An example of this is the AMCHP model where a practice must meet expectations (a minimum of two on a three points scale) on every criterion within a practice category to satisfy that category (AMCHP, 2020a). Another example is the HQO framework where a practice is assigned to an overall category if they meet two of the three criteria (HQO, 2016). Here, a practice is re-assessed on an annual basis to determine if it progressed to the next category (S. Bar-Ziv, consultation session, June 8, 2020).

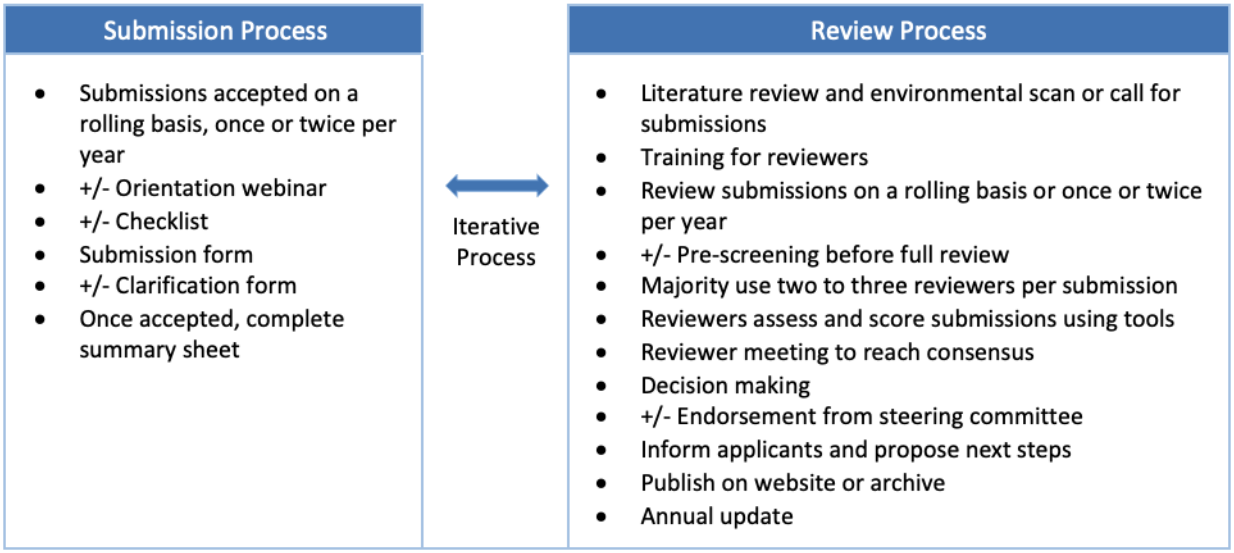
3. The intersection of impact and quality of evidence: A practice is rated based on the interaction of public health impact and quality of evidence. An example of this is the CDC's Quality and Impact of Component (QuIC) Evidence Assessment Method (Barbero et al., 2015) for rating public health policies. For this quadrant model, four criteria each for quality of evidence (study type, source, practice or theory-based evidence, and research-based evidence) and public health impact (health, equity, efficiency, and transferability) are evaluated. Quality of evidence and impact are each scored on a 40-point scale and their respective criteria are evenly weighted at 10 points each. A quality or impact score of over 20 moves a practice into the adjacent quadrant/category.

Submission and Review Process

There was significant variation in the submission and review process across the organizations. It was apparent that all organizations were steadfast in their efforts to engage project applicants and reviewers (e.g., creating annual awards, providing support to applicants and reviewers). Figure 3 displays a comprehensive list of possible steps involved in the submission and review process.

Figure 3

Best Practice Frameworks Submission and Review Process



Note. This figure displays a comprehensive list of steps involved in the submission and review process to assign practices to best practice categories. The steps vary across the organizations interviewed by the BP-Net project team from May to June 2020 as part of the project consultation phase.

Highlights of the submission and review process

Based on the literature review and, to a greater extent, informant interviews, the following highlights lessons learned and conclusions:

1. Organizations that selected practices through a submission process accepted project submissions on a rolling basis and reviewed them either at the time of the submission, annually, or twice per year. Other organizations conducted environmental scans and literature reviews to select practices and gather evidence for the review process.
2. The minimum duration to complete the review process was approximately one month while the maximum review period was three or more months depending on various circumstances.

3. The review process involved several steps, including gathering evidence or submissions, independent reviewer assessment and scoring, reviewer group meetings to discuss discrepancies, and decision making.
4. Organizations had a pool of reviewers with different content expertise and backgrounds to match them to the submitted program. Reviewers included subject matter experts such as researchers, clinicians, epidemiologists, program evaluators, public health practitioners, staff, students, and other stakeholders.
5. Most organizations assigned two to three (or more) reviewers per submission, with two as a minimum and three being ideal. For all organizations, staff from the organization were reviewers. One of CDC's best practice frameworks originally used applicant self-assessment to determine their own category rating and discontinued this practice as it was not feasible due to time, experience, and training; CDC moved to use trained subject matter experts to review submissions using their rating tools.
6. The organizations reported that a minority of submitted or archived projects met criteria for a best practice rating. For AMCHP, 18 out of 127 projects were categorized as best (AMCHP, 2020b). Out of 200 innovative projects evaluated by HQO, one to five projects within each of their three tracks (Coordinated Care Management, Transitions Hospital to Home, and Mental Health and Addictions) were categorized as recommended (out of emerging, promising, or recommended; S. Bar-Ziv, personal communication, June 9, 2020). Additionally, the most challenging projects to rate were those falling within the emerging and promising practice categories, where rater subjectivity had the most impact. For this reason, some organizations opted to reduce the number of evaluation categories or moved towards an "in or out" model.
7. For all frameworks, reviewer consensus determined the final program category designation.
8. Some organizations had criteria for archiving programs (via a portal or library). Some organizations permitted practices to remain in a category for a specified duration of time (ranging from one to five years), while others removed or archived practices unless they transitioned into another category rating within a specified period of time. The assumption was that most practices rated as cutting-edge or emerging would work on ongoing evaluation and continuous improvement to progress through the categories, while some practices would evolve into a best practice over time with the use of more rigorous evaluation or research designs.
9. Each organization had submission tools (e.g., forms, checklists) and review tools (e.g., guidebooks, assessment rubrics, clarification forms) with varying levels of detail and several provided training to the reviewers. See Appendix D for a list of tools for each organization.
10. The submission and review processes were iterative in nature. For instance, additional information or clarity was requested from applicants as needed throughout the process, instead of definitive categorization when responses were unclear or if they needed more information. Additionally, some organizations provided feedback for excluded practices and encouraged applicants to re-apply, proposed next steps for each practice to advance their project along the continuum, and re-evaluated projects at a later date or on an annual basis.

In summary, the more the review process was operationalized (i.e., more tools for applicants and reviewers), the briefer the duration of the review process. Comprehensive review and dissemination processes (i.e., more steps in the process) can be cumbersome, can extend the overall review process, and add burden to reviewers. Overall, most organizations report a desire to reduce the length of time for the review process and some are exploring rapid assessment tools to build capacity, assessing a larger number of practices in a shorter amount of time.

Spotlight: AMCHP Best Practices Framework

Of the best practice frameworks reviewed, the AMCHP Best Practices model appears to be the best fit for BP-Net's goals and objectives, despite the model being developed for maternal and child health programs.

The benefits of the AMCHP model include:

1. The model was comprised of four categories, including the cutting-edge rating for "tried and true", or new or innovative practices. Many campus mental health programs would likely fall into this category and would position the framework as accessible and non-threatening, (i.e., "meeting our audience where they are at") with respect to program evaluation rigour. The term "cutting edge" is also positively valenced, lending credibility and value to the practice.
2. The model included a two-year time limit on the cutting-edge category to encourage movement to a higher category rating on the continuum. This time limit sets the expectation that program developers and evaluators of new and innovative practices should work towards evaluating and improving their practice, based on feedback during the review process, and to resubmit the practice for a higher best practice category at a later point in time.
3. Submissions were accepted on a volunteer basis, rather than retrospectively through an environmental scan or literature review.
4. Submissions were accepted on a rolling basis and reviewed twice a year in the spring and fall. This has the benefit of not relying on periodic callouts for submissions, while limiting the burden on reviewers.
5. The review process was the shortest in duration, taking a month to complete. Specifically, the completion and collection of reviewers' assessments of a number of submissions required approximately two weeks: (a) individual reviews of one practice require about one hour), (b) discussion of discrepancies amongst reviewers required one week of consultations (one brief group phone meeting with every individual reviewer for each submission), and (c) a brief follow-up with applicants required a few days, if needed, to arrive at a final decision.
6. Two to three reviewers were assigned to each program submission, from a larger pool of about 40 reviewers. Reviewers' areas of expertise and background were matched to practices to prevent conflicts of interest. AMCHP only recently expanded their pool from 10 to about 40 to include reviewers with a variety of backgrounds including epidemiologists, clinicians, program evaluators, public health practitioners, and students.
7. AMCHP had the clearest and most accessible tools for each step for the submission and review stages, training for reviewers, and an orientation webinar for potential practice applicants.

Recommendations

Based on BP-Net's goals, values, and the findings from this environmental scan and consultation process, the following recommendations are offered for developing and implementing a post-secondary mental health and well-being best practice framework (see Figure 4 for a visual representation of the proposed submission and review process):

1. Adopt three separate frameworks:
    a. Programs and Services: Adapt the AMCHP Best Practices model, using four categories: cutting-edge (or up-and-coming), emerging, promising, and leading or best. The inclusion of the cutting-edge and emerging categories acknowledges the current state of program evaluation in the post-secondary mental health programming sector (i.e.,

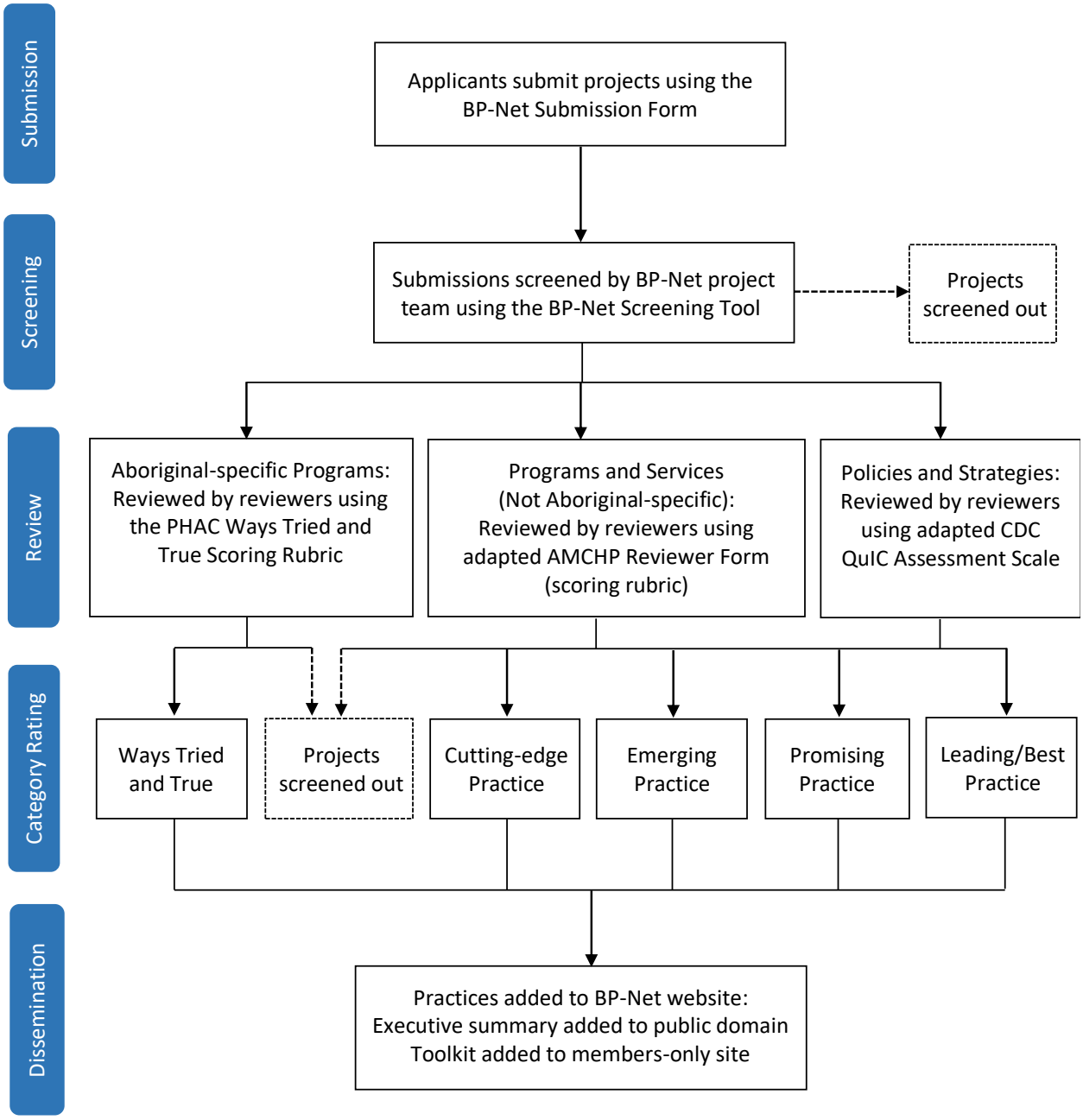
limited evaluation resources and expertise, access to evaluation resources, high student demands for services and therefore high workloads and competing demands on time) and having a continuum of categories allow programs to improve over time. Adaptations would include incorporation of the post-secondary mental health context, including guiding documents, such as the National Standard of Canada of Mental Health and Well-Being for Post-Secondary Students (Canadian Standards Association, 2020).

   b. Policies and Strategies: Adapt or adopt the CDC Evidence Assessment Reports Framework in light of many post-secondary institutions having developed mental health strategies and policies; campuses may also implement the National Standard of Canada of Mental Health and Well-Being for Post-Secondary Students (Canadian Standards Association, 2020) in years to come.
   c. Aboriginal-Specific Practices: Adopt the PHAC Ways Tried and True evaluation framework, which has a clear and comprehensive guidebook and scoring rubric for evaluating Aboriginal public health practices rather than using Western criteria.

2. Adopt a pre-screen practice before projects are advanced to the review process in order to ensure the efficient and best use of BP-Net resources.
3. Accept project submissions on a rolling basis and conduct reviews twice a year in an effort to increase the number of project submissions and to reduce the burden on reviewers.
4. Adapt AMCHP easy-to-use tools for applicants and reviewers that allow for a broad range of evidence to be considered, including new and innovative (cutting-edge or up-and-coming) practices. Criteria and tools from other best practices frameworks, including the PHAC frameworks, will also be adapted to strengthen or to add clarity to criteria.
5. Adopt the PHAC equity icon to gain traction for practices that promote health equity.
6. Create programming to maintain engagement with potential campus project applicants and reviewers. This could include recognition awards at national post-secondary conferences, certificates, “spotlight” features on the BP-Net website, stipends to support program evaluation, learning opportunities via workshops, webinars, and consultation related to program evaluation and quality improvement, and stipends for reviewers.

Figure 4

BP-Net Best Practice Guidelines: Submission and Review Process



Note. This figure depicts the recommended steps and tools for submitting and reviewing project submissions as part of the BP-Net best practice guidelines and is based on the findings of the environmental scan completed in 2020.

Consultation with Advisory Committee

In September 2020, the Best Practice Guidelines Project Team consulted with the BP-Net Advisory Committee for their input and feedback on the environmental scan, the proposed framework for the BP-Net best practice guideline, and the development and implementation steps and timelines. The Advisory Committee recognized the thorough and comprehensive approach adopted for the environmental scan and proposed recommendations. However, the committee highlighted knowledge translation considerations, including the potential for the cutting-edge category to be misinterpreted as better than the best practice category and therefore, to ensure that rating categories are clearly defined to applicants. The Committee also inquired about motivational factors that would lead to project submissions and stressed the importance of reducing barriers for projects that lack a strong evidence-base. Additionally, one member speculated that some projects could be evaluated by more than one framework. Specifically, Indigenous programs could be evaluated by the Ways Tried and True framework, as well as the general programs and services framework. It was suggested that program applicants could submit their project to a specific evaluation track or a combined evaluation framework could be considered. These issues will be taken into account during the development and implementation phase of the project.

Next Steps

The following outlines the next steps for the development phase of the BP-Net best practice guidelines project (see Figure 4 as a guide):

1. Manual Development: A manual will be created and will outline each framework and will include associated submission and review tools. The content of the manual will rely primarily on the AMCHP framework, but will also draw from the CDC and PHAC models.
2. Program Development: Training and resources will be developed for the applicants and reviewers. Program components will be developed to engage stakeholders.
3. Review and Consultation Process: The tools will go through a review and consultation process with support from the Advisory Committee.
4. Pilot Implementation: A callout for pilot projects and reviewers will be conducted. Two to four pilot projects will undergo the submission and review process in order to demonstrate proof of concept.
5. Quality Improvement: Feedback from the applicants and reviewers will be collected to fine-tune tools and processes along the way.

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Appendix A: Definitions of Best Practice Categories

Tried and True. Practices successfully implemented in First Nations, Inuit and Métis contexts to address local challenges. Success is measured "not only by effectiveness, but also by how the intervention was designed and carried out" (PHAC, n.d.a).

Cutting-Edge. Practices assessed through field-based summaries or evaluations in progress and are generally new or innovative with a "plausible theoretical basis and preliminary evidence of impact" (adapted from Spencer et al., 2013).

Emerging. Practices that have an evaluation plan in place to measure program outcomes, but do not yet have evaluation data available to demonstrate evidence of effectiveness and require more time for implementation and further evaluation (AMCHP, n.d.; Spencer et al., 2013).

Promising. Practices "assessed through unpublished intervention evaluations that have not yet been peer-reviewed" (Spencer et al., 2013). They "have strong quantitative and qualitative data showing positive outcomes, but does not yet have enough research or replication to support generalizable positive public health outcomes" (AMCHP, n.d.).

Leading. Practices evaluated through "peer-reviewed studies or through non-systematic review of published intervention evaluations that show growing evidence of effectiveness and some combination of evidence of reach, feasibility, sustainability, and transferability" (Spencer et al., 2013).

Best. Established practices supported by a rigorous process of peer review and evaluation, which was derived from practice or theory and research, and that are consistently proven to be effective in improving health outcomes, which may be demonstrated through systemic reviews. Best practices are replicable across many types of settings and can be adapted with success in other contexts (AMCHP, n.d.; Barbero et al.; Canadian Observatory on Homelessness, 2019; 2015; Spencer et al., 2013).

Appendix B: Guiding Questions for Consultation Sessions

1. What informed the development and selection of your categories and criteria?
    a. What methodology did you use to develop your framework?
    b. Which frameworks or models were used to inform your categories and criteria?
    c. How did you determine the number of categories to use?
    d. How did you incorporate an equity lens?
2. Can you tell us about your submission and review process, including:
    a. How often do you accept and review project submissions?
    b. How long does it take to complete your review process?
    c. How did you operationalize the categories and criteria for your review process?
    d. Who are the reviewers and how many reviewers were allocated to each project submission?
    e. Is the review an iterative process and do practices move between categories?
    f. What is the proportion of practices per category? What percentage of projects met criteria for a best practice?
    g. What motivates your applicants to submit their projects? Are there incentives or a recognition strategy in place for the applicants?
    h. How do you keep the reviewers engaged?
3. What are some of the challenges that you encountered when implementing your framework and how did you overcome these challenges?
4. How do you evaluate your framework and ensure continuous improvement of your best practice program?
5. What are some lessons learned and next steps?
6. Do we have permission to adopt or adapt your tools and resources?

Appendix C: Summary Table

Organization and Program or Framework	Types of Practice	Content Focus	Health Equity	Cutting-Edge	Emerging	Promising	Leading	Recommended	Best	Other Categories
AMCHP: Best Practices Program	Public Health Programs	Maternal and child health programs and policies	In cutting-edge and incorporated throughout	✓	✓	✓			✓	Creating evidence-based policy and data quality tracks
Canadian Public Health Association: Promising Practices in Canada	Public Health Programs	Programs supporting children's access to unstructured play				✓				
CDC: Best Practices Guide for Cardiovascular Disease (CVD) Prevention Programs	Public Health Programs	CVD prevention programs							✓ Eight "best" categories	Adding "promising" and does not endorse "emerging"
CDC: Community Guide	Public Health Programs	Public health interventions across 22 topics	One of 22 topics					✓ Sufficient ✓ evidence Strong evidence		"Recommended against" and "insufficient evidence"
CDC: Conceptual Framework for Planning and Improving Evidence-Based Practices	Public Health Programs	Public health programs and strategies	Included in examples of questions for criteria		✓	✓	✓		✓	
PHAC: Canadian Best Practices Portal	Public Health Programs	Public health programs and policies	Icon for equity-sensitive interventions			✓			✓	
Health Council of Canada: Health Innovation Portal	Health Services & Programs	Health services and programs			✓	✓	✓			
HQO: Innovative Practices	Health Services & Programs	Health services and programs	One of six Quality Dimensions		✓	✓		✓	✓ Need to adopt	Added "ineffective"
HSO: Leading Practices Library	Health Services & Programs	Health services and programs					✓			Removed "commendable"

CDC: Policy Evidence Assessment Reports	Policies	Heart disease and stroke policies and prevention efforts	One of four criteria for assessing impact		✓	✓ Impact ✓ Quality			✓	
PHAC: Aboriginal Ways Tried and True	Aboriginal-Specific Initiatives	PH programs and processes in Aboriginal communities	Icon for equity-sensitive interventions							Ways Tried and True

Appendix D: Tools and Resources for the Submission and Review Process

Organization and Best Practice Program	Submission Process	Review Process	Other
AMCHP: Best Practices Program	– Minimum Criteria Checklist – Submission Form	– *Scoring Rubric	
Health Council of Canada: Health Innovation Portal		– Matrix	– Innovative Practices Evaluation Framework
HQO: Innovative Practices		– Evaluation Framework – Summary Recommendations Worksheet	– Evaluation of Innovative Practices Process and Methods Guide
HSO: Leading Practices Library		– *Criteria and Decision Guidelines – *Assessment Methodology and Rating Scale	
CDC: Policy Evidence Assessment Reports		– Steps of QuIC Evidence Assessment – *Evidence Quality Assessment Scale – *Evidence of Public Health Impact Assessment Scale	– Appraising the Evidence for Public Health Policy Components Using the Quality and Impact of Component Evidence Assessment
PHAC: Aboriginal Ways Tried and True		– *Flow Chart Review: Annotation Process – *Guidebook on the Implementation of the Aboriginal Ways Tried and True Criteria and Assessment Rubric	
PHAC: Canadian Best Practices Portal		– *Flow Chart Review: Annotation Process – *Guidebook for Reviewers & Annotators – *Intervention Assessment Tool	

**The resource is not available in the public domain and the BP-Net project team obtained it by request.*