



CENTRE FOR INNOVATION IN
Campus Mental Health

*Environmental Scan of Promising
Practices and Indicators Relevant to
Campus Mental Health*

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Table of Contents

Acronyms	3
I. Executive Summary.....	4
II. Introduction	6
III. Methodology.....	8
IV. Results.....	8
A. Potentially Promising Practices	8
1. Institutional Structure: Organization, Planning and Policy	10
2. Supportive, Inclusive Campus Climate and Environment	17
3. Mental Health Awareness.....	18
4. Community Capacity to Respond to Early Indicators of Student Concern	21
5. Self-Management Competencies and Coping Skills.....	24
6. Accessible Mental Health Services.....	27
7. Crisis Management	30
B. Campus Mental Health Indicators	34
Proposed Campus Mental Health Indicators for Consideration.....	35
C. Data Framework	40
V. Summary.....	43
Appendix A – Scientific Literature Search Methodology	46
Appendix B – Key Informants.....	53
Appendix C – Key Informant Interview Guide	54
Appendix D - Post-Secondary Student Mental Health: Assessment and Planning.....	55
Appendix E – Some Examples of Indicators from the Literature	57
Appendix F - School-Based Promising Practices	59
Appendix G – Evaluation Primer	62
References	65

Acronyms

CACUSS	Canadian Association of College and University Student Services
CAMH	Centre for Addiction and Mental Health
CASA	Canadian Alliance of Student Associations
CICMH	Centre for Innovation in Campus Mental Health
CMHA	Canadian Mental Health Association
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders Text Revision
GPA	Grade Point Average
MHCC	Mental Health Commission of Canada
NCHA	National College Health Assessment
NSSE	National Survey of Student Engagement
RA	Resident Advisor
RCSP	Resource Centre for Suicide Prevention
SAMHSA	Substance Abuse and Mental Health Services Administration
SPRC	Suicide Prevention Resource Centre
UK	United Kingdom
WHO	World Health Organization

I. Executive Summary

The project was commissioned by the Centre for Innovation in Campus Mental Health (CICMH). The purpose of the project was to conduct an environmental scan to identify provincial, national and international promising practices and indicators that would be useful for publicly assisted colleges and universities to facilitate the development and evaluation of campus-based mental health programs and services. Key informant interviews were conducted with experts within and outside the post-secondary sector. The final component of the project was to propose a framework for post-secondary institutions to gather and compile data on student mental health services.

Although best and promising practices are reported in the grey literature, there is little evidence that the programs have been evaluated. Key informants reinforced that the mental health interventions implemented on campuses have typically not been evaluated in the post-secondary setting. Promising practices that are reported are consensus-based at best. The CACUSS framework includes seven tiers: institutional structure; supportive, inclusive campus climate; mental health awareness; community capacity to respond to early indicators of student concern; self-management competencies and coping skills; accessible mental health programs; and crisis management. The literature and key informant interviews supported the following as some of the consensus-driven promising practices for campus mental health:

- Supporting students with psychosocial disabilities through counselling, health and disability services
- Comprehensive policy development
- Leadership at multiple levels (including at the top)
- The development of a variety of on campus supports for students e.g. support networks and peer-to-peer
- Staff and faculty development and support e.g. gatekeeper training
- Proactive communication strategies
- Appropriate funding and resourcing, and
- The development of an inclusive environment for all.

It is important that campus mental health strategies include formal evaluation plans to assess the return on investment in order to translate into optimal outcomes for students.

Despite the fact that national indicators are being developed for mental health, there is little in the scientific or grey literature about indicators specifically related to campus mental health. Indicators are proposed according to the seven tiers of the CACUSS framework. Examples of proposed indicators

include: retention rate for students with mental health issues, implementation of a communication campaign related to a mental health strategy, implementation of a screening process for early detection of mental health issues, number of training sessions for faculty/staff, implementation of student-led supports, wait time to access campus-based services, and suicide rate. A data framework to support indicator development is also proposed in this report.

II. Introduction

The World Health Organization (WHO) has stated “there is no health without mental health”.¹ WHO reported it is important to expand services to those who currently receive none; prevent mental disorders; and promote healthy behaviours to decrease the burden of mental illness in order to facilitate people achieving their full potential. The Ontario Ministry of Health and Long-Term Care (2009) released *Every Door is the Right Door – Towards a 10-Year Mental Health and Addictions Strategy: A discussion paper* which reinforced the importance of prevention and early identification of mental illness, a system that reaches out to the whole population, collaborative programs and providers and integration of services.² The recommendations of the strategy included: identifying mental health and addiction problems early and intervening appropriately; developing a range of evidence-based, person-directed services; providing access to a seamless system of comprehensive, effective, efficient, proactive and population-based services and supports by reevaluating current resources; ensuring the right people with the right skills are in the right places; stopping stigma; creating healthy communities; and building community resilience by taking a strengths-based approach to protect people from mental illness. Youth was identified as a key target for interventions to improve population mental health.³ It is important to promote mental health for all students by enhancing campus programs and policies to improve student learning outcomes and success.⁴

Why is Campus Mental Health Important?

According to the grey and scientific literature:

- Post-secondary students are in the highest risk age group for mental illness.³ above
- More students with mental illness are attending college/university.⁴
- University and college students tend to be easier to treat because they are often earlier in the course of the illness.³
- More students are seeking help for mental health problems.⁴
- There has been an increase in the complexity of mental health issues on campuses.
- More students are taking psychotropic medications.
- In a study of Ontario colleges by The Higher Education Quality Council of Canada, 61% of all students accessing college counselling and disability services reported having a DSM-IV-TR mental illness diagnosis.⁵
- An increase in student mental health needs exerts increasing pressure on available services and stretches limited resources at post-secondary institutions.⁶

- Twenty years ago, Kessler et al. reported that 5% of college students end their education prematurely because of a mental illness and that disorders of anxiety, mood and conduct are strong predictors of academic failure.⁷
- According to Cairns et al., students reported that counselling helped them maintain or improve their academic performance.⁸ Porter reported that first-year students who engaged in personal counselling had a 7.6% higher retention rate compared to the first-year student population as a whole.⁹
- Studies show that depression is a significant predictor of a lower GPA and a higher probability of dropping out.¹⁰
- Targeting post-secondary students has a significant impact on improving mental health and results in significant financial and social cost savings.³

Although most campuses have the services to serve as a safety net for students with mental health issues, mental health resources can vary greatly across campuses depending on the resources available. Some of the issues that Canadian post-secondary institutions may face when dealing with student mental health issues are fragmented services e.g. lack of coordination and collaboration, a reactive response, piecemeal funding and high resource needs. As universities and colleges face ongoing financial constraints, counselling services are subjected to budget cuts in spite of a constant, if not growing, need for counselling. This may result in longer wait lists, shorter treatment time, fewer sessions, limited sessions per student and a need to prioritize service to more urgent cases first. Few universities and colleges have the resources to provide longer term psychotherapy to resolve more complicated mental health issues. With increasing awareness of the need for mental health services and limited resources, it is becoming more difficult to provide services on campus. CICMH commissioned this report to provide colleges and universities with the tools they need by identifying promising practices and indicators to improve the student experience.

Project Objectives

According to the RFP, the objectives of this project were to:

- Conduct an environmental scan to identify provincial, national and international promising practices and indicators that would be useful for the development and evaluation of campus-based mental health programs and services;
- Conduct key informant interviews with stakeholders including student leaders, service providers, administrators, community partners and researchers; and
- Write a report that:
 - Identifies promising practices and indicators for campus-based mental health programs;
 - Proposes a framework for post-secondary institutions to gather/compile data; and

- Includes suggestions for data collection tools and best practice approaches in areas such as intake, assessment and referrals.

III. Methodology

An environmental scan of best and promising practices and indicators used to develop and assess campus-based mental health programs was conducted. Numerous background documents were provided by CICMH. This was not a systematic review of the scientific literature. The environmental scan included searches of provincial, national and international grey literature using Google and a review of the bibliographies of relevant articles and reports. Key words for the grey literature search included: mental health, mental well-being, post-secondary institutions, colleges, universities, school-based, mental health strategy, Mental Health Commission of Canada, Ontario Ministry of Health and Long-Term Care, Ontario, provincial, international, Canada, United Kingdom, Australia, and Ireland. A review of the scientific literature including Medline, Medline In-Process, Embase, PsycINFO, ERIC was conducted by a librarian (Appendix A).

Key informant interviews (Appendix B) were conducted to provide context and confirm results of the literature review and to identify additional promising practices or indicators. Stakeholders were also asked about data collection tools that may currently be used or the availability of frameworks for data collection or evaluation. Interviews lasting 30-60 minutes were conducted with 16 stakeholders. The interview guide can be found in Appendix C.

The results of the literature searches and key informant interviews are summarized in this report.

IV. Results

A. Potentially Promising Practices

Best practices terminology is used in both the health and post-secondary sectors but not always with a common understanding of what it means.¹¹ Best practices are considered evidence-based or research-based programs. A best practice is an intervention or activity that has been studied and the data collected and analyzed shows positive, health-related outcomes resulted. Promising practice may be used to differentiate between activities that have shown effectiveness in achieving intended outcomes in one study or with one type of population, and best practices where effectiveness has been shown in multiple, replicated studies. Best practices are not necessarily the most popular, most frequently implemented, or most creative/innovative. They are strategies that can move institutions to a higher level of achievement in attaining health promotion outcomes in their student populations.

The Ministry of Health and Long-Term Care strategy recommended that data and measurement be used to improve services² and the Mental Health Commission of Canada recommended that interventions be informed by the best evidence, that outcomes be measured and research advanced.¹² It is critical that research evidence be translated into effective programs and effective practice is evaluated so that evidence can be published in the peer reviewed literature.¹

Locke et al. (2012) reported that available information about student mental health has largely been anecdotal or based on information drawn from a single institution.¹³ The authors report that, although studies using data from one institution are useful and illuminating, results have limited generalizability and utility. Conducting research across multiple campuses increases the generalizability of findings but this research is labour intensive so few studies have been published in the last 20 years. Furthermore, the results from these studies are mixed which limits definitive, clinically meaningful conclusions.

There is a paucity of comprehensive evaluation data attached to campus services and programs that would quantify best or promising practices so there is little hard core scientific evidence to assess the effectiveness of interventions.¹⁴ Eisenberg reported that practice is far ahead of research.¹⁵ Programs are highly varied and lack standardization given the limited research evidence on best practice. The interventions reported as best or promising practices in the post-secondary sector are typically consensus driven and could best be described as good practices.

The search of the scientific literature yielded 414 articles. The abstracts of the articles were reviewed to assess their usefulness for the project. Only a few articles were useful in terms of discussing best or promising practices in post-secondary institutions. Based on this literature review, there was one publication in the grey literature from Quebec that reported level of evidence but it was not conducted in the post-secondary sector. There were no articles in the peer reviewed journals that identified best practices. The majority of the work regarding promising practices is published in the grey literature rather than the scientific literature and are based on consensus rather than scientific evaluation.

Stakeholders that participated in key informant interviews consistently reported that the post-secondary education sector has not evaluated programs and services to scientifically assess best and promising practices. Some colleges and universities are in the process of measuring the impact of a number of the interventions.

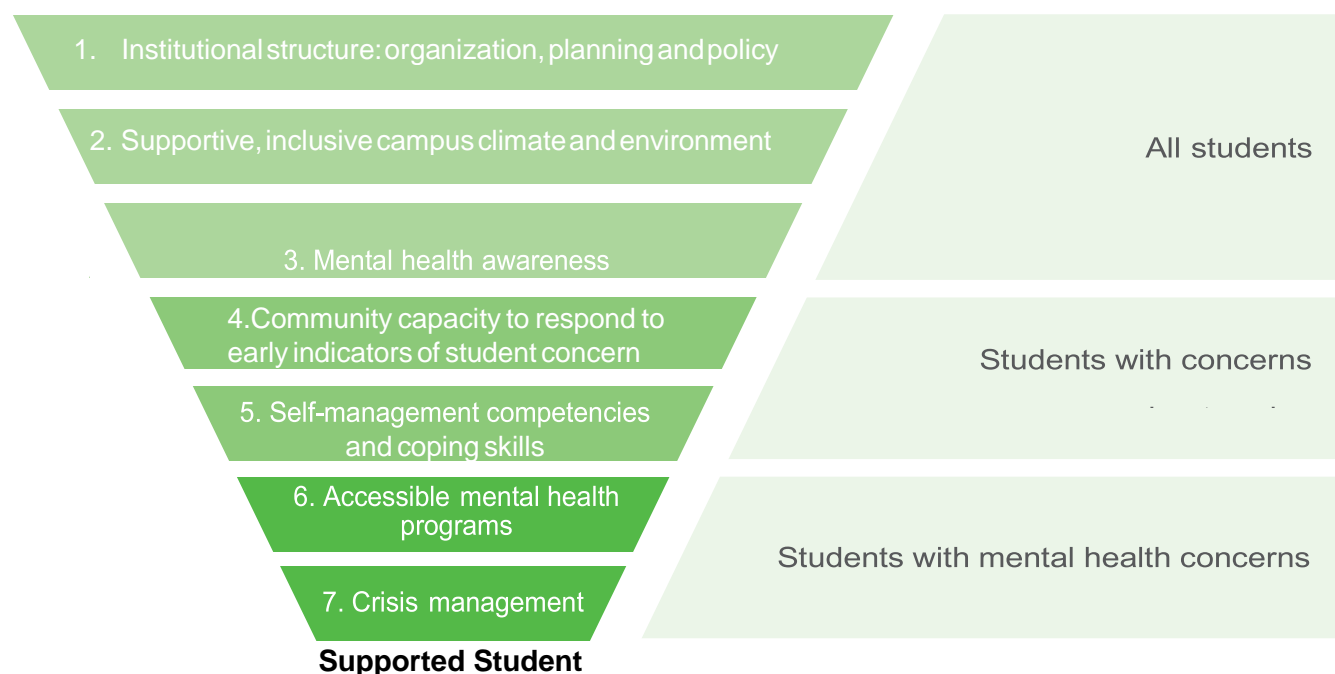
According to a report by the Canadian Association of College and University Student Services (CACUSS) and the Canadian Mental Health Association (CMHA), the key components for student mental health strategy development¹⁶ are outlined in a seven tier framework that can be used as a tool to support a systemic approach to student mental health in colleges and universities in Canada (Figure 1). The

framework also outlines the student population (all students, students with concerns, students with mental health concerns) that are targeted for each of the tiers.

The summary of consensus-based promising practices from the grey literature in this report is presented to align with the CACUSS framework because it addresses the broad recommendations from WHO and the Ministry of Health and Long-Term Care in terms of utilizing multiple approaches geared to different target audiences across the spectrum of mental health wellbeing and illness. There are inherent overlaps across tiers e.g. training may increase early identification of students at risk but also increases awareness.

Figure 1 CACUSS Framework for Post-Secondary Student Mental Health

Framework for Post-Secondary Student Mental Health



Summary of Promising Practices According to the CACUSS Framework

1. Institutional Structure: Organization, Planning and Policy

According to CACUSS, the broader organizational context has an impact on the wellness of those within it. The structure of a post-secondary institution and its policies and practices can positively impact student mental health.

Promising Practices for Institutional Structure

Health Promotion Approach

WHO suggests that a public health framework be used to promote mental health.¹ The health promotion/public health approach contributes to the prevention of mental health problems by focusing on health education, social marketing and creating social supports through peer mentorship and community development.³ The Resource Centre for Suicide Prevention states “A key assumption in the public health approach is that a combination of activities, policies and interventions working together at the individual, interpersonal and campus levels is more likely to produce results.”¹⁷

As can be seen in Figure 1, promoting mental health focuses on enhancing the mental health of all in the community including those not experiencing mental illness.⁴ Appendix D includes a framework based on Figure 1 that can assist colleges and universities develop a systemic approach to campus mental health.¹⁶ According to MacKean, the systemic approach and the adoption of health promotion principles is a good fit with the flourishing concept and the recovery model.⁴ The post-secondary community is considered a single entity, creating supportive and inclusive conditions for students to flourish.

Leadership

Leadership at multiple levels plays a critical role in increasing mental health awareness and the appropriate development of mental health programs and services in post-secondary institutions.¹⁸ Leadership from senior management is considered an essential driver in the implementation of a successful campus mental health strategy.

Mainstreaming Mental Health

Including student mental health as a priority in a post-secondary institution’s vision, mission and strategic goals is considered a promising practice.⁴

Development of a Campus Mental Health Strategy

Development of a strategy guides the implementation of a systems approach to mental health.³ The creation of a successful campus mental health strategy requires policies, mental health promotion and integrated care for students with mental illness.

The Jed Foundation recommends the following principles for designing effective campus mental health efforts:¹⁸

- Prevention-focused;
- Comprehensive;
- Planned and evaluated;
- Strategic and targeted;
- Research-based;
- Multi-component;
- Coordinated and synergistic;
- Multi-sectoral and collaborative; and
- Supported by infrastructure, institutional commitment and systems.

The development of a comprehensive mental health strategy for colleges and universities requires the following components:¹⁸

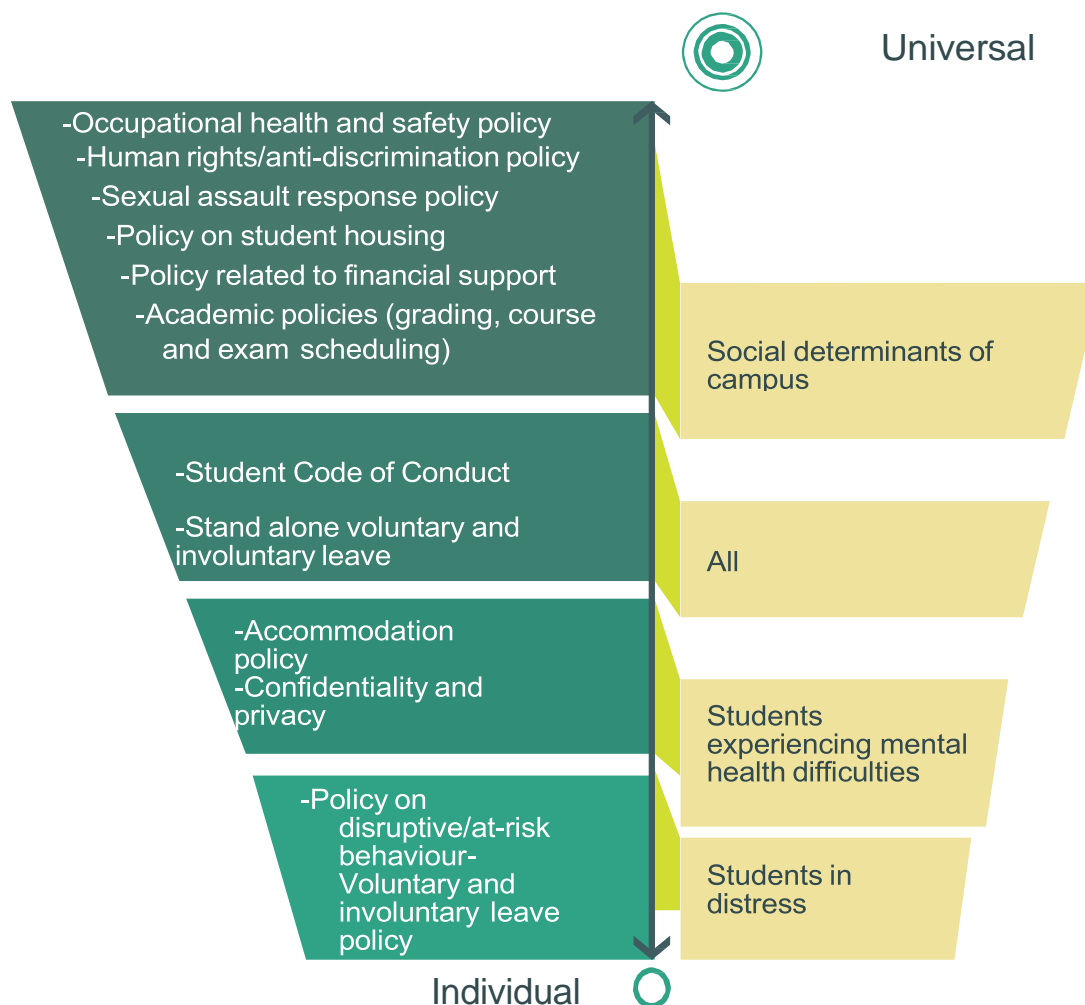
- **Build momentum and infrastructure**
 - Obtain senior administrator support (president, student affairs administrators, counselling center directors, campus staff and students)
 - Engage key stakeholders in a mental health task force
 - Establish mandate and timelines
 - Establish leadership
 - Establish a communication strategy
 - Build capacity e.g. familiarity with best practices and data
- **Engage in a strategic planning process**
 - Describe the problem and its context (surveys, focus groups, one-to-one interviews with faculty, staff and students)
 - Assess existing resources
 - Assess the climate for campus-wide change
 - Identify priority problems and set long-range goals (What will change? For whom? By how much? When will the change occur? How will it be measured?)
 - Select or develop interventions e.g. activities, policies, practices or services)
 - Develop an evaluation plan
 - Create an action plan
 - Establish a dedicated office or staff person to coordinate programs, policies and services
 - Implement interventions/evaluate/make improvements

It is recognized that efforts focused on increasing available mental health services need to be supplemented by programs and policies to create a safety net for students who may not seek help at campus counselling centers.¹⁸

Establishment of Policies

Policies related to mental health can enable learning within a post-secondary institution¹⁹ and should be established as part of a mental health strategy.²⁰ Figure 2 outlines the spectrum of campus mental health policies.¹⁹ The tiers in the policy framework align with the CACUSS framework in terms of identifying the student population to which the policies apply (all students, students with mental health difficulties and students in crisis). This framework reinforces the broad spectrum of policies that are critical to the success of mental health strategies.

Figure 2: Spectrum of Campus Mental Health Policies¹⁹



Academic Policies/Consolidated Policy

International

A study from the UK identified the development of local campus policies as key contributing factors to improving student mental health.²⁰ They recommended including mental health policies within campus policies as a core way to tie the mental health strategy to the campus strategic objectives.

Embedding a mental health lens into existing policies through a mainstreamed approach is considered an effective way to achieve meaningful engagement across the campus.^{6,19} A few promising examples that may be relevant to the Canadian context include those that recognize a commitment to promoting mental health and supporting students experiencing mental health difficulties and outlines roles and responsibilities, fitness to practice, accommodation, the referral process, confidentiality, crisis response procedure intervention, and data protection issues. Examples of consolidated policies are:

- University of Brighton Student Mental Health Policy
<http://staffcentral.brighton.ac.uk/xpedio/groups/Public/documents/staffcentral/doc006978.pdf>
- Lancaster University <http://www.studentmentalhealth.org.uk/index.htm>
- Healthy Universities UK
http://www.healthyuniversities.ac.uk/toolkit/uploads/files/developing_an_holistic_and_joined_up_approach_to_mental_wellbeing.pdf and
http://www.healthyuniversities.ac.uk/toolkit/uploads/files/policy_and_planning_guidance_package_new.pdf
- Bazelon Centre for Mental Health Law http://www.sprc.org/library_resources/items/supporting-students-model-policy-colleges-and-universities

Examples of Promising Policy Practices Reported in Canada

A report by OCAD and Ryerson Universities reviewed current practices in Canada and the UK. The examples provided are by the authors.¹⁹

Support at Pre-Entry and Admission

This policy includes encouragement of disclosure during the application process in order to make an assessment about support options early on; creating non-discriminatory admissions practices; providing information about fitness-to-practice requirements for professional degrees, and ensuring that institutional materials are sent out to enrollees to outline available supports.

Procedures for Students during Crisis

Policies should include procedures for responding to emergency and non-emergency situations where a student is in emotional distress or crisis.

Accommodation Policy

This policy sets out guidelines for reasonable academic accommodation of students with mental health issues⁶ to provide more equitable ways for students with disabilities to meet program requirements without compromising academic requirements. Some colleges and universities provide interim accommodations to students while mental health assessments are conducted. Queen's University and St. Lawrence College partnered on a project funded by the Ontario Ministry of Training, Colleges and Universities to review documentation standards and guidelines for academic accommodation of

students with mental health issues. The project developed a Student Mental Health Handbook to provide information for students on student rights and responsibilities, the accommodation process and available resources including training modules.

Leave of Absence Policy

A policy related to voluntary leave sets out the conditions under which a student may temporarily take a leave of absence from education e.g. the procedures for requesting a leave of absence, specifies the permissible length of leave and outlines which services students may or may not have access to while on their leave. Re-entry policies should also be established.

Concordia University's Policy on Student Involuntary Leave of Absence identifies 'students of concern' whose perceived physical and/or mental state or related conduct has become a threat to themselves, the education process or others in the campus community is considered a promising practice. A multidisciplinary team uses criteria to assess threat level and determine the appropriate actions. Voluntary leave or referral to support services is attempted before proceeding to an involuntary leave process. The policy also outlines the procedures for the students to return to campus including development of a return-to-campus management plan that outlines the conditions by which a student may return as well as support services that will assist the student upon return.

Student Code of Conduct¹⁹

A Student Code of Conduct identifies expectations for student behaviour and the corresponding disciplinary actions. The Code of Conduct describes students' rights and appeals, procedures for reporting, investigating and assessing cases of misconduct. McMaster University introduced revisions to its Student Code of Conduct that created new processes for students that enables flexible and supportive responses for students whose mental health issues have led to a breach of the Code of Conduct. The student attends a review meeting rather than a formal hearing. The University commits to making reasonable efforts to enable the student to continue their studies including provision of accommodations.

Confidentiality and Privacy

This policy outlines the circumstances in which information may be disclosed. In 2009, Carleton University released a guide for supporting students in distress entitled the *Student Mental Health Framework*. The framework establishes protocols for:

- Creating and maintaining confidential files about students of concern;
- Ensuring security of files; and
- Guidelines regarding retaining records.

The framework sets out roles, responsibilities and procedures for reporting a concern about a student and identifies the procedure by which staff and faculty may submit an online care report (rather than an incident report) to Student Affairs.

2. Supportive, Inclusive Campus Climate and Environment

Creating a post-secondary-wide culture that encourages inclusiveness and support to augment campus mental health services has been recommended to improve outcomes for students.¹⁶ There is an increasing realization in the post-secondary sector that focusing exclusively on treating students experiencing mental health issues may not be the most effective approach nor is it sustainable in the long term.⁴ There is an increased emphasis on promoting positive mental health at a population level which includes focusing on environmental factors and creating an inclusive society that fosters the self-esteem and coping abilities of individuals. Building a supportive campus requires a comprehensive approach that includes awareness and education, training, support programs, and supportive policies and procedures.²¹

Promising Practices for Supportive, Inclusive Campus Climate and Environment

According to MacKean, the promising practices for a supportive campus include:⁴

Individual	Group or Interpersonal	Campus	Community and Society
Areas of Intervention			
A campus environment is nurtured that supports and promotes student mental health		-healthy physical settings created	-physical settings (e.g., accessible fitness facilities; lots of light; green spaces; access to healthy food, safety)
		-healthy learning and work environments created	
		-student services are central to academic missions	-ensure community service programs / placements are supportive of student mental health
		-social/cultural environment with social justice inclusion	

The climate of the school environment has been identified as a key contributing factor to student success in terms of academic performance.^{16,22} A supportive campus environment encourages student

engagement which has a positive impact on mental health. By increasing conditions for meaningful participation on campus, students can feel connected which facilitates holistic, integrated learning and development.¹⁶ For students, the environment (including the classroom, campus and relationships with faculty) has a significant impact on student mental health. Examples of a supportive environment include: <http://healthycampuses.ca/take-action/supportive-environments/>

- Warm, welcoming, and safe spaces for students to gather, socialize, and connect. Information about and access to spiritual communities.
- Mentorship and student life programs that encourage multiple ways for students to connect within the community.
- Academic programs that integrate opportunities for meaningful engagement and learning both in and outside the classroom.
- A resource for educators to ensure their curriculum does not perpetuate mental health stigma, prejudice, and discrimination.
- Processes that recognize and mitigate barriers for students with mental health disabilities, such as informing students about their rights against prejudice and discrimination and choice of mental health resources and supports.
- Developing and implementing universal design concepts for accessibility so there is less need for individual accommodations.
- Resources for students, staff and faculty to address systemic barriers to participation (i.e. offices with responsibility for addressing issues such as equity, discrimination and harassment).
- A shift in culture that recognizes that the entire post-secondary community is responsible for the mental health of its members and that mental health affects learning.

3. Mental Health Awareness

Campus mental health awareness plays a key role in preventing and minimizing the harms that result from mental health disorders through health education, community building and advocating for healthy policy changes.³ Mental health awareness can be enhanced by increasing knowledge and understanding of the determinants, nature, impact, prevention and management of mental health issues.¹⁶

The literature indicates that it is imperative to raise student awareness of the impact of anxiety and depression on their ability to learn, function and succeed.¹⁰ Depression is a significant predictor of not only GPA but also the likelihood of withdrawing from the university. With increased knowledge of the impact of mental health issues on their academic performance and campus experience, it is anticipated that students are more likely to seek help.

Promising Practices for Mental Health Awareness

According to MacKean, promising practices for mental health awareness include:⁴

	Individual	Group or Interpersonal	Campus	Community and Society
Areas of Intervention				
Increase mental health awareness (to increase awareness of signs and symptoms, when to seek help, available resources & reduce stigma)	-improve student's knowledge & attitudes & help-seeking	-education programs for faculty & staff	-campus wide awareness program using a variety of vehicles e.g. web resources, workshops	-outreach to admitted students regarding maintaining wellness and available resources

Increase Resilience

Increased knowledge and understanding builds resilience and capacity to maintain well-being.¹⁶

Resilience factors such as awareness of signs of stress, knowledge of coping strategies and belief in the ability to cope have been found to be associated with decreased symptoms of depression among university students. Evidence shows that excessive academic stress is negatively associated with academic performance and adversely impacts students' mental and physical health¹⁰ but stress can be moderated by resilience. The goals of mental health strategies should be to increase resilience and protective factors and decrease risk factors.²³ Mental health promotion aims to strengthen the ability of individuals to cope with stressful events by:

- Increasing individual or community resilience;
- Increasing coping skills;
- Improving quality of life and feelings of satisfaction;
- Enhancing self-esteem;
- Enhancing a sense of well-being and belonging;
- Strengthening social supports;
- Strengthening the balance of physical, social, emotional, spiritual and psychological health.

According to CAMH, best practice guidelines for mental health awareness for children and youth include the following:

- Addressing and modifying risk and protective factors, including determinants of health, that indicate possible mental health concerns;
- Intervening in multiple settings;
- Focusing on skill building, empowerment, self-efficacy and resilience;
- Training non-professionals to establish caring and trusting relationships;
- Involving multiple stakeholders;

- Helping develop comprehensive support systems;
- Adopting multiple interventions;
- Addressing opportunities for organizational change, policy development and advocacy;
- Demonstrating a long-term commitment to program planning, development and evaluation;
- Ensuring that information and services provided are culturally appropriate, equitable and holistic.

Additional promising practices for mental health awareness include:²⁴

- Education and information about mental health resources available on campus, how to access those resources and what to expect from them;
- Education and information that help students understand the continuum of mental health and how to recognize when they should seek help for a mental health issue e.g. signs and symptoms;
- Education and training for staff and faculty on academic accommodation and other supports for students who may be struggling with a mental health issue; and
- Education and information that reduces the stigma associated with mental health issues.

Support Mental Health Education and Training

Best practices in mental health education and training promotes a community that is aware, knowledgeable and skilled which builds community capacity.²⁴ Raising mental health awareness helps encourage the commitment to take action to promote student mental health at the campus level.

Communication Campaigns

The Science Advisory Report on Effective Interventions in Mental Health Promotion and Mental Disorder Prevention identified interventions to improve mental health literacy as a Level 2 evidence-based practice.²⁵ This includes communication campaigns based on the development, adjustment and social integration for mental health. Although this was the only study that reported level of evidence in the grey or scientific literature, this work was not conducted in a post-secondary setting.

Universities UK reports that information disseminated to the entire institution may include:²⁶

- Guidance for those who may encounter students who are distressed:
 - How to identify that there may be a mental health issue;
 - Identification of whether a situation is urgent or non-urgent and what actions to undertake in both cases;
 - How to respond inside and outside office hours;
 - How to react if the student or staff member refuses to help;
 - A list of all the support services offered in the institution;

- Handling critical incidents regarding mental ill health;
- A list of emergency numbers including policy and local hospitals;
- A brief on confidentiality and data protection procedures;
- Awareness-raising information for new staff and students;
- Mental wellbeing information on institutional websites and academic and student services intranets;
- Use of online computer-based educational and preventive programs;
- Healthy university initiatives, awareness raising and anti-stigma campaigns;
- Generic training for staff or students such as Mental Health First Aid;
- General pamphlets, posters, web-based videos;
- Student handbooks and support group networks.

Online resources such as Feeling Better Now (<http://www.feelingbetternow.com/en/home.asp#>) and Student Health 101 (<http://www.studenthealth101.com/>) are considered promising practices.²¹
<http://blog.students.ubc.ca/earlyalert/how-does-early-alert-work/>

4. Community Capacity to Respond to Early Indicators of Student Concern

Early identification of a mental health issue usually predicts better treatment outcomes and prevents exacerbation of the problem, reducing demand on limited resources.²⁷ Because college and university students are a vulnerable high risk population, the Ontario College Health Association stated that a comprehensive mental health strategy for assessment and early intervention of the student population would have a significant impact on student health and wellness and a significant return on investment in decreasing the social and economic costs of mental illness in society.³

Promising Practices for Responding to Early Indicators of Student Concern

According to MacKean, promising practices to increase the identification of at-risk students include:⁴

	Individual	Group or Interpersonal	Campus	Community and Society
Areas of Intervention				
Identify at-risk students (refers to screening and training staff to identify, reach out and refer at-risk	-individual consultation provided to faculty and staff upon request	-education programs for faculty, staff and student leaders -mental health	-early alert systems	-outreach to admitted students who self-identify with pre-existing mental health problems or illness to

Individual	Group or Interpersonal	Campus	Community and Society
students	-on-line screening	promotion screen events	establish connection to resources

The Science Advisory Report on Effective Interventions in Mental Health Promotion and Mental Disorder Prevention in Quebec reported that systematic screening for depression among adults and referral to diagnostic, treatment and follow up services is best practice (evidence level 1).²⁵ This was not validated in the post-secondary environment.

Campuses are using a variety of methods to identify students at risk including:¹⁸

- Asking questions about mental health on medical history forms completed by incoming first year students. The College Student Alliance of Ontario indicated that institutions “must develop a mechanism that allows student the option to identify themselves as needing additional support for mental health in the early application stage of their college career;”²⁸
- Screening when students seek primary care services;
- Creating an interface between the disciplinary process and mental health services.

The programs are consensus-based because they have not been evaluated. According to the literature and key informants, promising practices for screening and early detection programs for student mental health include:

- **The Jack Project** collaborates with Kids Help Phone which provides free, anonymous and confidential bilingual phone and on-line counselling service for those aged 5-20 years.²⁸
<http://www.jack.org/> (Canada)
- Participating in screening activities such as **Screening for Mental Health’s College Response** program¹⁸ <https://mentalhealthscreening.org/programs/college> (U.S.)
- The Interactive Screening Program was developed by the American Foundation for Suicide Prevention which targets students who may be reluctant to seek traditional psychological services but who may respond to anonymous assessment and counselling via the internet e.g. www.Ulifeline.org.¹⁸ Ulifeline is an anonymous, confidential, online resource center, where students can be comfortable searching for the information they need regarding emotional health. (U.S.)
- **TeenScreen®** was developed in the United States and is being used by colleges and universities to identify and refer for treatment those who are at risk for suicide or suffer from an untreated mental illness. This program is included on both the RCSP and SAMHSA best practice lists.

http://www2.nami.org/Template.cfm?Section=New_Freedom_Commission&Template=/ContentManagement/ContentDisplay.cfm&ContentID=28330 (U.S.)

Training for Early Detection

Research has shown that when faculty and staff are trained to recognize symptoms of depression, students may increase treatment-seeking behaviours. Gatekeeper training involves training to develop the knowledge, attitudes and skills to identify students at risk and make referrals when necessary.²¹ Gatekeeper training programs target people who are in frequent contact with students. Eisenberg, Hunt and Speer (2012) report that, as with other intervention strategies, the use of gatekeeper training in college settings has advanced more rapidly than the research.

- **Applied Suicide Intervention Skills Training** (ASIST training) is a two day intensive, interactive program designed to help individuals recognize the risk of suicide and learn how to intervene. The program is geared toward professional staff members.
https://toronto.cmha.ca/programs_services/suicide-prevention-trainings/ (Canada)
- **Mental Health First Aid** is a two day program which teaches people to recognize the signs and symptoms of mental health programs; provide initial help and guide a person to professional help. This program is offered in partnership with the Canadian Mental Health Association and the Mental Health Commission of Canada. Gatekeepers trained outside campus settings when compared to control groups reported decreased stigma, increased knowledge and an increased likelihood of assisting individuals showing symptoms of mental illness.¹⁵ Eisenberg reported that in a 33-campus, randomized, controlled trial of the Mental Health First Aid program's effectiveness on campuses, the preliminary results indicate that the training increased resident advisers' self-perceived knowledge about mental health and their confidence to identify and help students but that the training did not affect use of services by the general population of students in residence. <http://www.mentalhealthfirstaid.ca/EN/course/Pages/default.aspx> (Canada)
- **SafeTALK** is a three hour training program for students and staff that prepares anyone over the age of 15 to identify persons with thoughts of suicide and connect them to suicide first aid resources. http://ottawa.cmha.ca/programs_services/safetalk/#.VThnfyHBzGc (Canada)
- **Kognito At-Risk: Identifying and Referring Students in Mental Distress** is a 45-minute interactive web-based simulation of a classroom where users assume the role of a faculty member who is concerned student mental health. (SPRC Best Practice Registry)
<http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=303> (U.S.)

- Syracuse University's **Campus Connect** gatekeeper training is a three-hour experientially-based crisis intervention and suicide prevention training program for Resident Assistants.¹⁸ Students need to be able to access a trained staff person, such as a Resident Advisor (RA) who is on call in case of emergencies.²⁹ ASIST and safeTALK are some of the most utilized training programs and many housing departments are incorporating these programs into staff training.³⁰ A number of Canadian campuses (e.g. Queen's University, the University of Ottawa, the University of Waterloo and Western University) are introducing a counsellor-in-residence position which is a collaborative between a housing operation and health/counselling centre.
http://counselingcenter.syr.edu/campus_connect/connect_overview.html (U.S.)

Specific Canadian examples of promising practices have been reported to include²¹:

- Queen's University's efforts to have all faculty and staff take mental health first aid training.
- George Brown College's suicide prevention training by ASIST (Applied Suicide Intervention Skills Training) for Student Affairs staff.
- The University of Guelph's Mental Health Awareness website.
<https://www.uoguelph.ca/counselling/awareness/>
- The University of British Columbia's Early Alert identification and intervention program which helps faculty, staff and teaching assistants provide better support for students who are facing difficulties that put their academic success at risk. <http://blog.students.ubc.ca/earlyalert/how-does-early-alert-work/>

5. Self-Management Competencies and Coping Skills

Students are challenged on a number of fronts: building relationships, living independently, understanding themselves and planning their future while balancing academic requirements.¹⁶ Student-run mental health initiatives, such as advocacy groups or peer-led education and support, programming that increases the capacity of students to cope with stress, and identifying cross-departmental approaches to build more cohesive supports for students are important components of suicide prevention and mental health promotion.

Promising Practices for Self-Management Competencies and Coping Skills

According to MacKean, promising practices for self-management competencies and coping skills for campus mental health are summarized here:⁴

Individual	Group or Interpersonal	Campus	Community and Society
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	Individual	Group or Interpersonal	Campus	Community and Society
Areas of Intervention				
Life skill development (refers to increasing student's capacity to self-manage)	-improved self-management & coping strategies	-workshops, classes, tutoring, coaching programs	-skills development resources embedded into faculty resources and seen as integral to success in the academic program	-transitions programs for high school students -transition programs for first year students
Social network creation (refers to the development of small communities to facilitate connection and engagement with the campus community)	-information on opportunities to become involved made readily available through web	-promote a variety of peer support programs developed to support different groups of students -develop a variety of social networks	-create first year undergraduate groups of students who share several classes to help students feel connected, encourage engagement in activities etc.	-

Social Support

According to the Healthy Minds study conducted at the University of Michigan, experiencing a higher quality of social support is more important than having a large number of contacts.¹⁸ Campuses are increasing social connection with more frequent contact with other students, faculty and staff. Examples of promising practices for social support include:

- SAMHSA's Campaign for Mental Health Recovery called ***What a Difference a Friend Makes: Social Acceptance is Key to Mental Health Recovery*** aims to decrease negative attitudes surrounding mental illness by encouraging young people to support friends with mental health issues. Many schools have instituted peer counseling or peer education programs to take advantage of students' willingness to talk to their peers.¹⁶ The format includes videos https://www.youtube.com/watch?v=4IP_vvwmWsc and free brochures <http://store.samhsa.gov/product/What-a-Difference-a-Friend-Makes/SMA07-4265>
- ***Active Minds***, a national peer-to-peer organization dedicated to raising awareness about mental health among students and encouraging students to get help when needed and has chapters on hundreds of campuses. Approaching someone experiencing mental health issues one-on-one is considered best practice. <http://www.activeminds.org/issues-a-resources/get-help/how-to-help-a-friend> Operating in conjunction with treatment, student mental health interest groups

contribute to an atmosphere of inclusion and empowerment for mentally ill students.¹⁹

Research suggests that when students become involved with student-run campus mental health awareness and/or advocacy groups, such as Active Minds, their attitudes of stigma toward mental illness decrease. Interpersonal contact between those with mental illness and those without is an effective strategy in reducing stigmatizing views of people with mental health issues.

- Student led initiatives in BC include:⁴
 - Student Mental Health Awareness Club <http://ubcmhac.sites.olt.ubc.ca/>
 - Kaleidoscope - a student-led mental health group that supports students with mental health and addictions problems <http://the-kaleidoscope.com/about/>
- **Healthy Minds** at UBC <http://blogs.ubc.ca/ubcmhac/>
- **Student Mental Wellness** at Simon Fraser University has an active student led peer support initiative: <http://www.sfu.ca/students/health/resources/for-parents/supporting-your-students-mental-wellness.html>

Coping Strategies

According to SBMHSA, the following programs are promising programs to enhance coping strategies:

- **Choosing Healthy Actions and Thoughts (CHAT)** is a depression prevention program whose main goal is to develop coping skills in youth. The program teaches cognitive and behavioral skills in order to show students how to react when stressed. Stigma reduction is an important outcome of this program.
<http://www.excellenceforchildandyouth.ca/sites/scandb/?listing=choosing-healthy-actions-and-thou>
- **Teen Mental Health Online** aims to provide comprehensive, reliable and understandable information presented with the end user (students, parents, educators and health service providers) in mind. Ultimately it aims to build the capacity of those in the school and health sectors to respond to the mental health needs of youth.
<http://www.excellenceforchildandyouth.ca/sites/scandb/?listing=teen-mental-health-online-www-teenmentalhealth-org>
- **Transitions Student Reality Check** includes a booklet of information related to first-year students. Post-secondary institutions purchase the license for Transitions and then distribute it to counseling centers and student service centers on campus as well as making it directly

available to students. Transitions topics include stress management and learning strategies, depression, anxiety, psychosis, building resilience, coping strategies and suicide. It also provides information on further resources, treatment centers and emergency contacts tailored to each particular school. A pocket sized booklet is distributed to all students in frosh packs and online. <http://www.excellenceforchildandyouth.ca/sites/scandb/?listing=transitions-student-reality-check>

- The main objectives of the **Youth Outreach Service** are to provide youth, parents and professionals with education on substance use and related mental health issues. To assist in the prevention of substance use and mental health problems in youth, and to promote capacity building in the community by providing information and training to other professionals. <http://www.excellenceforchildandyouth.ca/sites/scandb/?listing=youth-outreach-service-camh>

Mowbray et al (2006) reports that self-help and mutual support mental health programs, actively supported by resources and professional assistance have been proven to be effective in the community context.³⁰

6. Accessible Mental Health Services

Mental health services are a critical part of a systematic approach to supporting student mental health.

Promising Practices for Accessible Mental Health Services

According to MacKean, promising practices for campus mental health services include:⁴

	Individual	Group or Interpersonal	Campus	Community and Society
Areas of Intervention				
Adequate, accessible, mental health services rooted in a recovery and student-centred philosophy	<ul style="list-style-type: none"> -individuals have timely access to appropriate services -students with psychosocial disabilities accommodated in a responsive manner 	<ul style="list-style-type: none"> -students with psychosocial disabilities supported to engage in peer support activities 	<ul style="list-style-type: none"> -resources provided for seamless continuum of high quality counselling, medical and accommodations services -accommodation policies support a rights-based approach 	<ul style="list-style-type: none"> -develop good linkages and communication with both community and hospital-based mental health services in the surrounding community

Disability, Health and Counselling Services

Evidence shows that access to high quality student services including disability, health and counselling can help youth improve their learning and academic performance, stay in school and complete their degree or diploma.⁴ MacKean reported that a survey by the U.S. College Counselling Association showed that 59% of clients indicated that their counselling experience helped them remain in school and improve their academic performance. Martin (2010) demonstrated that students who received appropriate support had improved outcomes.³¹ Students' mental health can be supported by accessible, confidential and well-integrated student support services including counselling that can be complemented by partnerships with external mental health agencies, as required.²⁰

Ensuring that a campus counselling service is culturally competent to accommodate the needs of a diverse student population is also important.¹⁶ New models advocate for a culturally sensitive continuity of care which tailors mental health outreach and services to diverse groups of people.

Service Environment

There is little in the published, peer-reviewed literature about the specifics of effective organization and delivery of student services.⁴ It is recognized that the configuration of services is likely to be different across colleges and universities.

The location, accessibility, layout, provision of resources and comfort of furnishings is reported to contribute significantly to students' perception of how professional, accessible, private, confidential and safe the counselling service is perceived to be. Issues to consider include:³²

- **Discrete location:** A service that is physically separated from the institution's administrative, security and educational areas enhances student perception of confidentiality and the separation of functions.
- **Number of rooms:** It is preferable if counsellors can work in the same room on an ongoing basis.
- **Room design:** Rooms dedicated for the purpose of counselling are designed so that they are safe from the possibility of interruption, are private and adequately soundproofed.
- **Furnishings:** Furnishings should create an atmosphere conducive to counselling.
- **Reception and waiting areas:** Privacy is important to maintain confidentiality.
- **Records:** Professional standards require that client files are kept in a secure central location, easily accessed by all counsellors.
- **Other rooms:** A room dedicated to psychological testing, skills building workshops and psycho-educational seminars is recommended and an information resource area for students is recommended.

Physical distance between health services, counselling and disability prevents spontaneous communication that could occur if people work in the same space. Reporting structures and cultures may keep departments apart.³ It is widely believed that collaborative mental health teams are a promising practice for serving students with mental illness.³³

Training and Staffing/Student Ratio

- The number and training of staff working in disability services have been identified as key contributing factors to student success.³⁴
- One counsellor per one thousand student population per campus has been regarded internationally as the minimum for educational institutions that require their counselling practitioners to provide a range of counselling.³² When separate academic and career counselling service is offered, a minimum of one counsellor per 3000 student population per campus is considered acceptable for most student/staff populations.
- The efficient and effective functioning of a Counselling Service requires support staff for reception and administrative duties and relief when permanent staff are absent or on leave.

According to Lees and Dietsche, in a review of counsellor characteristics in Ontario colleges, counsellors identified the following as the most important promising practices for the success of mental health programs:³⁵

- Prompt access to services e.g. established walk-in hours, a triage system, providing immediate access to students in crisis, having a walk-in counsellor designated each day
- Close collaboration with peers e.g. regular meetings, team work and regular consultation with peers
- Quality of counselling offered: counsellor competency, use of a certain modality; partnering with students, focus on skill/dedication of counsellors;
- Proactive approach, involvement in orientation, effective advertisement/marketing services
- Student-focused approach
- Clinical supervision and early intervention with at-risk students.

On-line Services

There is growing evidence for the efficacy and effectiveness of services provided with the aid of on-line technologies for mild to moderate depression and for various forms of anxiety, provided there is counsellor support in conjunction with the internet intervention.³² Examples include:

- A comprehensive counselling service web page including a clear description of the services provided
- On-line resources e.g. tip sheets, podcasts
- On-line self-directed assessment tools, and

- Psycho-educational programs.

Other evidence-based on-line services include:

- Psychological counselling services either one-to-one or involving sending a counsellor a problem which can be responded to in a question/answer format for a wider audience
- On-line support groups
- Synchronous chat rooms or chat groups
- Access to therapeutic materials e.g. relaxation tapes and books and downloadable versions of self-help software
- Psychological testing products and services.

The provision of internet-based psychological and counselling services should adhere to the relevant professional guidelines, ethical considerations and codes of practice with warnings for users that clearly identify the likely context for usefulness and limitations of that service such as:

Error! Bookmark not defined.

- Confidentiality limitations of using on-line technologies
- Motivation requirements required to effect change using on-line self-help resources
- Efficacy of on-line treatment programs
- Level of severity at which contact with a doctor or mental health professional is urgently advised
- Possible time delays in on-line response
- Clear guidelines for the use of all services
- How crisis situations will be managed and limitations of the medium for crisis interventions
- What to do if the client or counsellor should have an internet disruption or phone or computer failure during an on-line interaction
- Guidelines for net-etiquette and managing the absence of non-verbal communication
- Counsellor training requirements for adaptation of skills to the medium
- Availability of technical support for users

Recommendations from the Higher Education Quality Council of Ontario included an annual review of the qualifications and professional development requirements for counselling and disability staff to ensure they are prepared to provide optimal and safe service to their students; training for counselling staff on the treatment of anxiety and mood disorders; and ongoing training to promote understanding of medications.⁵

7. Crisis Management

Acute distress and imminent risk of self-harm have a significant impact on students and their success in an academic setting and the campus community and requires a well-coordinated response.^{16,36} Staff and faculty must be aware their responsibilities in terms of the protocols to enable the campus community to respond effectively to crisis situations.

Promising Practices for Crisis Management

The following are key elements of a crisis management plan:

- Campus-wide dissemination of city and provincial crisis hotlines as well as the National Suicide Hotline.¹⁸
- Faculty and staff awareness of crisis management protocols e.g. the types of situations and circumstances that require crisis management, what the protocols are, and what their role is within these. This involves understanding how an institution's policies, provincial legislation and professional guidelines inform decisions regarding the information that can be shared and when to notify authorities when the safety of the individual or others is involved. Effective communication and coordination processes to support students with serious ongoing mental health concerns, including options available for mental health leave as well as re-entry processes to support transition back to academic programs. Similar components for employees should likewise be provided.
- Postvention programming to support students, faculty and staff following the death of a campus member (e.g. by suicide, violence, alcohol-related injury).

MacKean identified the following as potentially promising practices.⁴

- Fanshawe College partnered with mind your mind, a not-for-profit, award-winning youth mental health program, to implement a new web-based resource for college students called icopeU <http://icopeu.com/fanshawe>
- Comosun College in Victoria developed a program for students with mental illnesses who want to integrate back to school. With support and guidance of their nursing student coaches, students gained confidence, developed a social support network and learned skills necessary to navigate the college system.³⁷
- Nova Scotia offers numerous resources for students and health professionals <http://www.teenmentalhealth.org>
- Jed Foundation on Suicide Prevention (US) <http://www.jedfoundation.org/>
- Stanford University's Student Mental Health and Well-Being Task Force (U.S.) <https://wellness.stanford.edu/about-wellness-network-stanford>
- Keeling and Associates – the centrality of student health to the learning experience (U.S.) <http://www.keelingassociates.com/about-da/core-ideas-that-guide-our-work/>

- Headspace is the National Youth Mental Health Foundation (Australia) for young people 12-25 years of age are looking for health advice, support or information including mental health and counselling <http://www.headspace.org.au/>
- Carleton University has instituted Intention to Access (FIT: Action) which is a student support and retention program for students who are not meeting the program requirements they need to graduate. Carleton began developing the program after longitudinal research revealed that 91% of learning-disabled students who received academic support graduated from post-secondary programs. FIT: Action was designed to see if students who struggled academically could benefit from similar attention. Preliminary results demonstrated that students who participated in the pilot felt more successful due to the concrete help they received from the program, having a 'go-to' person when over-challenged and acquiring a new awareness of their strengths and weaknesses. Test/re-test measures showed significant improvements in students' time-management skills, study habits, motivation, concentration and test-writing strategies.²¹ Carleton has experienced a year-by-year increase in its National Student Survey of Engagement results for a supportive campus environment.
<http://carleton.ca/studentsupport/2014/feeling-overwhelmed-fit-action-can-help/>

Summary of Consensus-Based Promising Practices

Building a supportive campus requires a comprehensive approach that includes awareness and education, training, support programs, and supportive policies and procedures.²¹ MacKean reported that the screening and early detection; help-seeking; and supporting students with chronic mental illness or psychosocial disabilities received the most attention in the literature.⁴

It is important that services, policies and procedures and institutional commitment are in place before training, screening and social marketing interventions begin to increase the number of students asking for help.¹⁸

According to a study from the U.K., the key success factors to promoting mental health include:²⁰

- Supporting students with psychosocial disabilities in counselling, health and disability services
- Comprehensive policy development
- Leadership at multiple levels (including at the top)
- The development of a variety of campus supports for students
- Staff and faculty development and support
- Appropriate funding and resourcing, and
- The development of inclusive environments for all.

Examples of Integrated Campus Mental Health Approaches:²¹

- The University of Victoria, Centre for Addictions Research and the Canadian Mental Health Association, B.C. Division have collaborated to create Community of Practice – Healthy Minds/Healthy Campuses, a province-wide initiative to promote wellness on campus. This initiative features a community of students, faculty, campus professionals, administrators, government, researchers and local citizen. Communities of practice are self-governed, harness the expertise and energies of individuals with a shared passion and a shared interest in challenges, thrive on regular interaction and involve members learning from and with each other. With the participation of more than 20 colleges, universities and other institutions, the community of practice has helped B.C. keep up with the pace of change in the field of mental health at post-secondary institutions. As part of this initiative, faculty members now meet new students and build a personal relationship with them as part of an early-alert system to detect signs of mental health problems. Faculty members and administrators devise policies to promote mental health, such as spreading out dates to complete assignments and write tests in order to reduce stress. Three Healthy Minds/Healthy Campuses provincial summits have been held to date, and quarterly webinars and ongoing online discussions also take place. Funds have also been distributed to increase capacity on campuses to address mental health and substance abuse.
- Carleton University transformed an ad-hoc, compartmentalized approach to mental health for students at risk into a systematic approach which began by identifying a champion within senior management and hiring a health executive to lead the process. A pan-university committee was established with the associate vice-president leading regular meetings and ongoing communication to the broader university community. The core elements of the plan included an overall Student and Mental Health Framework; a communications strategy aimed at all faculty, staff and students; a comprehensive multi-year training strategy; and a range of outreach, support and upstream initiatives. Complementary initiatives to support students with mental health challenges included a university-led orientation program, a student alliance for mental health, 24-hour access to urgent counselling and various mentor programs.

B. Campus Mental Health Indicators

Strengthening the evidence base to inform best practice and policy is an international challenge.¹ It is important to translate research evidence into effective programs and translate effective practice into research so that evidence can be published in the peer reviewed literature. There must be research available to measure and evaluate mental health and support services on campuses across Ontario.²⁹ There is a lack of data across Canada resulting in a lack of clear measures and evaluation. There is a considerable body of practice that informs the development and use of indicators in mental health and mental health promotion.¹

Indicators will assist post-secondary institutions measure the impact of policies and programs related to mental health. Indicators are specific, observable and measurable changes that identify whether an outcome has been achieved. Indicators should reflect the information needs of diverse decision-makers. Senior organization staff frequently require information on long-term outcomes (and, in some cases, inputs) while program and provider staff require details on inputs, processes, and outputs as well as outcomes. System level measures should provide information about whether the system as a whole is operating with respect to policy, evaluation, governance and funding and human resource planning. Program indicators should document the critical processes related to client outcomes e.g. case management, crisis response/emergency service, vocational/educational supports. Individual level indicators relate to information on clinical and functional conditions, client satisfaction and quality of life to measure the effectiveness of programs and services.

Some work has been done to develop indicators for mental health but they are not specific to post-secondary institutions. In 2012, the Mental Health Commission of Canada released *Changing Directions, Changing Lives: The Mental Health Strategy for Canada*.³⁸ The Strategy identified the need for better data collection through “agreement on a comprehensive set of indicators to allow each jurisdiction to measure its progress in transforming the system and improving outcomes over time.” To help accomplish this goal, the MHCC launched *Informing the Future: Mental Health Indicators for Canada* in 2015 in partnership with the Centre for Applied Research in Mental Health and Addiction at Simon Fraser University. The objective of this project was to create a national set of mental health and mental illness indicators. These indicators are intended to identify gaps in service, allow stakeholders to gauge progress, and strengthen efforts to address the recommendations outlined in the Strategy. The proposed indicators were drawn from a wide variety of sources, including national surveys and administrative databases. These national indicators were selected with consideration of the following criteria:

- Meaningfulness — Relevant to the strategy
- Validity — Scientifically sound
- Feasibility — Readily available data

- Replicability — Data may continue to be available over time
- Actionability — Amenable to improvement

The first thirteen national mental health and mental illness indicators (out of 63) were identified as the foundation for evidence-informed mental health policy and practice in Canada. One of the indicators was: the percentage of Canadian college and university students in 2013 that reported having intentionally cut, burned, bruised, or otherwise injured themselves over the past 12 months. Intentional self-harm in the last 12 months was reported by 6.6% of students. Eighty percent indicated they had never intentionally harmed themselves, revealing that close to 20% had engaged in self-harm at some point in the past year.

This first phase of the project report included the following indicators that may be relevant to campus mental health:

- Unmet need for mental health care among people with mental disorder
- Anxiety and/or mood disorders – Youth
- Intentional self harm among students

Proposed Campus Mental Health Indicators for Consideration

Examples of indicators found in the grey literature can be found in Appendix E. Any indicators that are relevant to post-secondary institutions have been included in the proposed indicators. There were no indicators reported specifically for campus mental health in the grey or scientific literature. Key informants reported that:

- Post-secondary institutions need to understand why development and reporting of indicators is important
- There needs to be a clear need to report data and leadership is critical for this to be successful
- Indicators should be measured at the campus level and aligned with the context of the objectives of their mental health strategy
- Indicators need to be useful to a broad range of stakeholders e.g. from the President or VP to program managers to be useful.

A proposed list of indicators, based on the literature and key informant interviews, is presented according to the CACUSS framework (Figure 1) as per the promising practices section. It is suggested that post-secondary institutions consider selecting indicators across the seven tiers of the framework. Once confirmed, each indicator should have a time frame articulated e.g. within the last academic school year. Indicators that are rates or percentages should have an appropriate denominator identified e.g. total campus student population or number of counselling visits. The proposed indicators are intended to provide examples of indicators that may be useful to post-secondary institutions but are

suggestions for consideration only. Identifying potential indicators is the first step. The Modified Delphi Approach is one process often used to develop consensus on a set of indicators.³⁹ This process was beyond the scope of this project.

1. Institutional structure

- Existence and distribution of a comprehensive mental health strategy
- Existence of a Steering Committee/Task Force to develop a mental health strategy
- Establishment of a mental health leader/champion
- Existence of a designated staff person to manage/implement the mental health strategy
- Existence of policies for students with mental health issues
- Existence of a core set of identified and agreed mental health indicators routinely collected and reported annually
- % of students with mental health issues
- % of students with mental health issues achieving academic requirements
- % of students with diagnosed mental health diagnosis e.g. depression/anxiety
- Retention rate for students with mental health issues
- Change in GPA for students with mental health issues
- % of students with reduced course load as a result of mental health issues
- % of students on academic probation as a result of mental health issues
- % of student Code of Conduct cases related to mental health
- # functioning programs of multi-sectoral mental health promotion and prevention in existence
- % of student population with mental health issues that utilize accommodation policies
- % of students who dropped courses as a result of mental health issues
- % of students who take voluntary leave of absence as a result of mental health issues
- % of students who take involuntary leave of absence as a result of mental health issues
- % of student population with mental health issues who returned to school after voluntary leave
- % of student population with mental health issues who returned to school after involuntary leave
- Return on investment of retention rate for students with mental health issues e.g. tuition dollars lost as a result of mental health-related medical leaves
- Graduation rate for students with mental health issues
- Employment rate after graduation for students with mental health issues
- Evidence that a post-secondary institution is addressing needs identified by students
- Participation in national survey(s) e.g. NCHA, NSSE
- Student satisfaction rates

2. Supportive inclusive campus climate

- Documented commitment to provide a supportive, inclusive campus climate in a campus mental health strategic plan
- Measure of student connectedness
- Establishment of healthy learning environments

3. Mental health awareness

- Increase in student awareness regarding mental health
- Availability of education and information about mental health resources available on campus
- # education/training sessions for students/# students trained
- # education/training sessions for faculty and staff/# faculty and staff trained
- # education/training sessions for RAs
- # education/training sessions for campus security
- Implementation of communication campaign related to the mental health strategy
- Availability of online education/training
- Availability of education material to increase awareness e.g. pamphlets, posters, videos, website

4. Community capacity to respond to early indicators of student concern

- Establishment of an At-Risk Committee
- # education/training sessions for staff and faculty related to early detection
- Implementation of a depression screening process in counselling, health services and disability services
- Availability of online screening process for early detection of mental health issues
- Implementation of a training program for Resident Assistants and security department
- Availability of protocols for students identified as high risk
- # health promotion screening events/# participants at screening events
- Number of incidents reported by campus security related to students with mental health issues
- Number of incidents reported by Resident Assistants related to students with mental health issues
- Number of referrals to health services/counselling/disability from faculty

5. Self-management competencies and coping skills

- Availability of student-led initiatives to improve life skills e.g. coping skills
- Availability of student handbooks including information about stress and coping
- Availability of support group networks
- Availability of peer-to-peer programs
- Availability of a transition program for high school students

6. Accessible mental health

- Number of relationships or partnerships established with community to benefit student mental health
- % of referrals to community services related to mental health
- % of students who seek mental health treatment on campus
- % of visits to Counselling Services that are mental health related
- % of students with mental health issues seen in Counselling Services
- % of visits to Health Services that are mental health related
- % of students with mental health issues seen in Health Services
- % of visits to Disability Services that are mental health related
- % of students with mental health issues seen in Disability Services
- Average number of visits per student
- Wait time to access counselling services
- Wait time to access health services
- Wait time to access community services
- Wait time to access psychiatry (on campus and community)
- Number of psychiatry hours
- Number of counselling hours
- Proportion of persons with a severe mental disorder (psychosis, bipolar affective disorder, moderate-severe depression) who are using services
- Indication of whether diversity in counselling reflects the diversity of the campus
- Student satisfaction with mental health services on campus (for counselling, health and disability services)

7. Crisis Management

- % of students referred to hospital as a result of a mental health crisis

- % of students who report self-harm
- Student suicide rate
- % of students with suicide ideation
- % of students who attempt suicide
- Mean and median wait time for treatment for students in crisis
- % of students referred to At-Risk /Students in Difficulty Committee

C. Data Framework

According to an Irish publication, there are gaps in information, needs assessments for programming, funder support and partner collaboration.²¹ CASA states that there have been considerable efforts over the last decade to gather data on mental health issues but there is a lack of comprehensive measurement tools and common indicators to make use of the data in a consistent manner.⁴⁰ There is no standard data collection process. “Agreement on a comprehensive set of indicators would allow each jurisdiction to measure its progress in transforming the system and improving outcomes over time”.³⁸ Accurate data on the demand for various mental health services, their use and their effectiveness are needed in order to improve the quality of mental health services, treatments and supports.

The Irish Universities Quality Board recommends the following good practices:⁴¹

- Systematic tracking of the numbers and key characteristics of users of the various Student Services in order to identify resource requirements and to monitor trends is in place.
- Systematic tracking of waiting lists and mechanisms to monitor the source of student referrals and the extent to which students avail of external agencies or services are in place.
- Monitor student satisfaction with services received.
- Establish key performance indicators to assist in decision-making and planning processes for each of the services.
- Investigate student retention and the role of Student Services in relation to completion, retention and skills acquisition including the establishment of mechanisms to track student retention/dropout rates and student employment rates upon graduation.

Varlotta recommends the following data be collected to enable data driven decisions:⁴²

- **Service and staffing**
What is the overall service model and the modes of delivering those services? What type of and how many mental health professionals are employed to provide these services?
- **Utilization and access**
What percentage of the overall student body utilizes the center? How many intake, individual/group and urgent care sessions are offered each week/month? How many unique clients are seen in each of those sessions?
- **Clients**
With what diagnoses or symptoms do clients most often present and to what severity? How many students present in crisis and how quickly are they seen? How many clients need voluntary or involuntary hospitalization?

- **Clinician workload**

What types of professional tasks e.g. direct clinical services, outreach, and consultation are counsellors expected to perform and what percentage of their time should be allocated to each one?

- **Assessment**

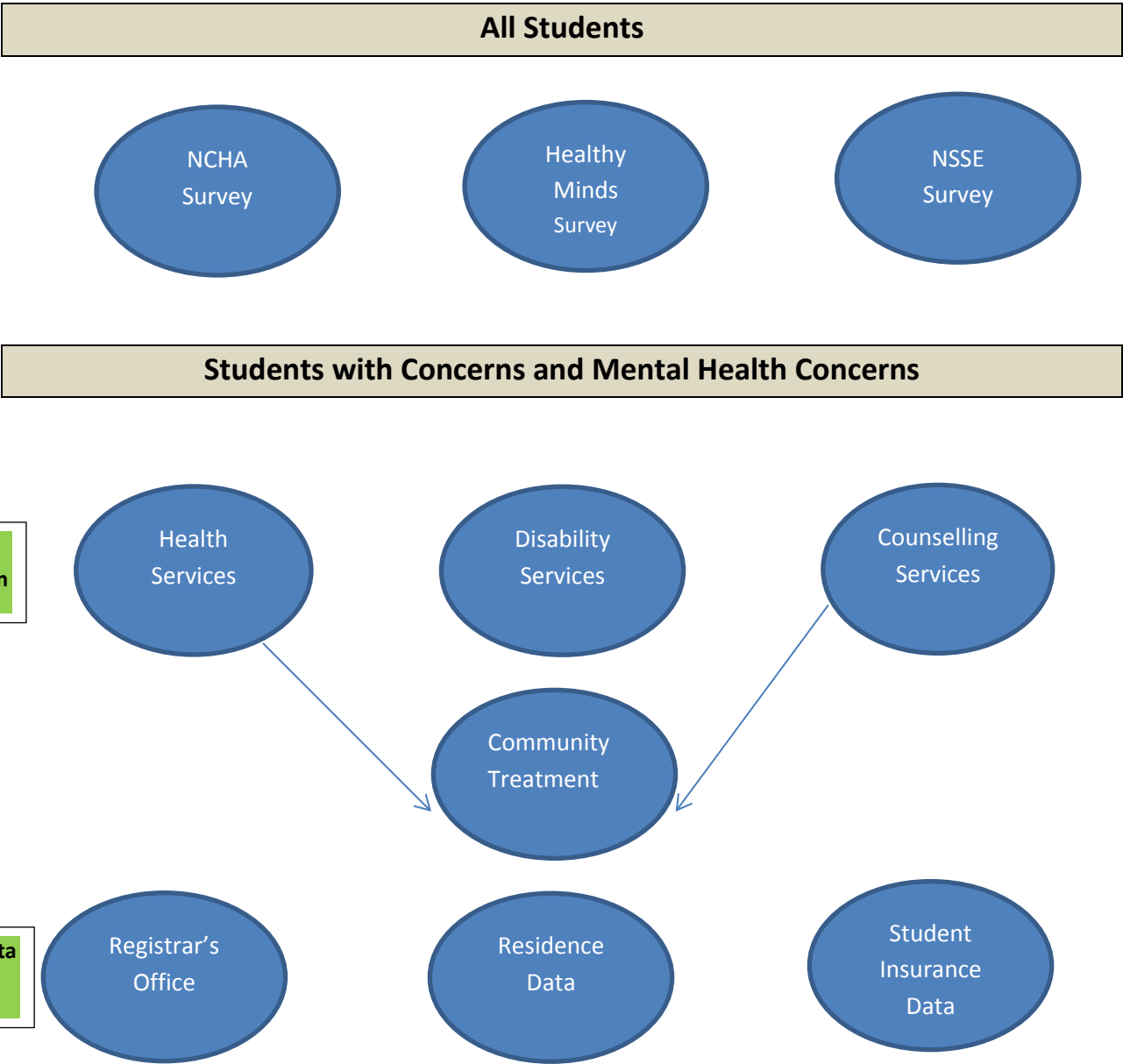
What types of client satisfaction and outcome data are collected and utilized? What type of accreditation or external peer review process is in place?

Data Sources

Indicators cannot be developed and evidence-based evaluation cannot be conducted without appropriate, relevant and timely data. Figure 3 outlines preliminary potential sources of data for campus mental health. At the campus level, surveys such as the National College Health Assessment Survey (NCHA) and the National Survey of Student Engagement (NSSE) could provide valuable data to post-secondary institutions. Post-secondary institutions could take advantage of adding questions to existing surveys such as NCHA or NSSE to provide insight on the impact that the components of a mental health strategy is having on students. Raw data can be requested from survey such as NCHA which would offer a rich source of data for campuses. Key informants reported that NCHA can be used for resource allocation and health service planning. According to a number of the key informants, NSSE is considered best practice.

Service utilization data can be collected and collated from health services, counselling services and disability services. Demographic, intake, diagnosis, number of sessions, type of providers, time to first contact, time to initiation of first contact, volume of students, severity; outcome measures in terms of satisfaction and severity measures could be collected to provide overall metrics of successes for campus mental health programs. Data should be collected on the nature, intensity and frequency of treatment. Data should be available on the number of students transferred to the community for service. Data from residences and security may help quantify the number of students at risk. The Registrar's Office could provide data on voluntary and involuntary leaves and returns to campus in addition to students who drop courses or experience declines in GPA. Residence data could be made available to quantify timely referral processes regarding number of students in crisis. Student health insurance data may augment the richness of information available to post-secondary institutions. All data would be available in an anonymous or encrypted format to ensure that students' confidentiality is protected.

Figure 3 Proposed Data Framework for Post-Secondary Education



Data Summary

According to key informants, data collection could be expedited if colleges and universities agreed on a minimum number of indicators to be collected. Once indicators are identified, data would be collected to measure indicators at the campus level.

The reality of the data collection and indicator development, according to key informants, is that post-secondary institutions are constrained by a number of factors including institutional willingness to report data, lack of data availability, lack of data quality and lack of time. Key informants reported that some programs are so underfunded that additional data collection or analysis is untenable. Universities and colleges may feel that data collection/analysis takes away from clinical care. Data, however, needs to be considered an advocacy tool to showcase successes. Interventions cannot be evaluated without appropriate data. Data collection requires a number of things to be successful: resources in terms of funding and staff, a job description including dedicated deliverables related to data collection and analysis and infrastructure in terms of hardware and software. The closer that data collection is tied to existing standard practice, the easier it will be to implement. Data should be electronic and, whenever possible, indicators should be developed from existing data.

Key informants reported that evaluators are needed to assess mental health programs within and across campuses. This requires capacity building e.g. a central unit that specializes in evaluation. Evaluation results should be published in peer reviewed literature.

Key informants reported that they use the following measures for student mental health:

- PHQ9 (Patient Health Questionnaire) to screen depression e.g. McMaster
- OQ45 (Outcome Questionnaire) measures symptomatic distress used at UT Scarborough College
- K10 (Kessler Psychological Distress Scale) to identify risk behaviours
- Global Assessment of Function

V. Summary

Although best and promising practices are reported in the grey literature, there is little evidence that the programs have been evaluated. Key informants reinforced that the mental health interventions implemented on campuses have typically not been evaluated in the post-secondary setting. Promising practices that are reported are consensus-based at best. The CACUSS framework includes seven tiers: institutional structure; supportive, inclusive campus climate; mental health awareness; community capacity to respond to early indicators of student concern; self-management competencies and coping skills; accessible mental health programs; and crisis management. The literature and key informant

interviews supported the following as some of the consensus-driven promising practices for campus mental health:

- Supporting students with psychosocial disabilities through counselling, health and disability services
- Comprehensive policy development
- Leadership at multiple levels (including at the top)
- The development of a variety of on campus supports for students e.g. support networks and peer-to-peer
- Staff and faculty development and support e.g. gatekeeper training
- Proactive communication strategies
- Appropriate funding and resourcing, and
- The development of an inclusive environment for all.

The literature also reports that government commitment and resources as one of the key ingredients for success.²¹

Many colleges and universities are developing mental health strategies that align with the CACUSS framework. It is important to recognize that increased mental health awareness will increase demand on already limited services so services, policies and procedures and institutional commitment should be established before training, screening and social marketing interventions increase the number of students asking for help.¹⁸

Campus mental health strategies should include formal evaluation plans to assess their return on investment e.g. whether it translates into optimal outcomes for students. Because there is little published in the grey or scientific literature assessing the evidence of interventions for campus mental health, it would be useful for universities and colleges to evaluate their programs to ensure they are evidence- rather than consensus-based and publish the results in the peer reviewed literature.

It is also important that post-secondary institutions align programs and services in their campus mental health strategies with what students report they need. Student satisfaction data would provide data to post-secondary institutions to target services and programs where it will provide the largest impact on student success.

Key informants for this project were eager to share documents and insights and keen to collaborate to improve provincial uptake in the confirmation of best and promising practices and the development of indicators.

Key informants reported a number of emerging approaches/issues:

- Shared care or collaborative care
- Use of telemedicine or tele-psychiatry
- Use of case managers or navigators to help students reduce silos by bring together practitioners for planning and resolution as it relates to crisis or complex needs, bridging to community care, and communication with faculty and staff
- Increase in concurrent disorders e.g. mental health and substance misuse
- Expansion of the delivery of service to groups
- An increased focus on programs to build resilience e.g. peer-to-peer; drop-in; building in wellness support across campus
- Integration of services/elimination of silos
- Partnerships with communities
- Use of technology (e.g. tablets) to collect outcome data (e.g. OQ45)

Appendix A – Scientific Literature Search Methodology

HealthSearch Request: Daria Parsons, Thursday, April 16, 2015

Search topic: identify best or promising practices for mental health in post-secondary institutions (colleges or universities); limited to English language.

Database	Coverage	Date Searched	Citations	Duplicates Removed	Remaining	Notes
Medline (Ovid)	1946- April Week 2, 2015	April 16, 2015	98	0	98	
Medline In- Process (Ovid)	April 15, 2015	April 16, 2015	42	0	42	
Embase (Ovid)	1947 – April 15, 2015	April 16, 2015	137	-15	122	Embase records only; conference materials removed
PsycINFO (Ovid)	1806-present	April 16, 2015	63	-1	62	Includes some books, chapters, etc.
ERIC (EbscoHost)	1966 - present	April 16, 2015	91	-1	90	
Totals:			431	-17	414	

Results to be provided in compressed EndNote library

Databases:

Medline: 2015-04-16 -DP- Best or promising practices for mental health in post-secondary institutions - Medline

Ovid MEDLINE(R) 1946 to April Week 2 2015			
#	Searches	Results	Search Type
1	Mental Health/	22893	Advanced
2	exp Mental Disorders/	978788	Advanced
3	exp Mental Health Services/	76185	Advanced

4	or/1-3	1038494	Advanced
5	Universities/	26521	Advanced
6	4 and 5	3311	Advanced
7	quality assurance, health care/ or benchmarking/ or guidelines as topic/ or practice guidelines as topic/ or total quality management/	180252	Advanced
8	(benchmark* or bench-mark*).mp,kw.	23523	Advanced
9	(best adj2 practi#e?).mp,kw.	11771	Advanced
10	exp Evidence-Based Practice/	64819	Advanced
11	"diffusion of innovation"/	14462	Advanced
12	promising practi#e*.mp,kw.	141	Advanced
13	evidence base?.mp,kw.	100746	Advanced
14	consensus/	5530	Advanced
15	guideline?.mp,kw.	275605	Advanced
16	or/7-15	439470	Advanced
17	6 and 16	103	Advanced
18	limit 17 to english language	103	Advanced
19	remove duplicates from 18	98	Advanced

Medline In-Process

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations April 15, 2015			
#	Searches	Results	Search Type
1	mental health*.mp,kw.	9461	Advanced
2	(mental* adj ill*).mp,kw.	2381	Advanced
3	(mental?? adj disease?).mp,kw.	169	Advanced
4	or/1-3	11014	Advanced
5	((university or universities) and student?).mp,kw.	4051	Advanced
6	(college? and student?).mp,kw.	2475	Advanced
7	or/5-6	5829	Advanced
8	4 and 7	252	Advanced
9	quality.mp,kw.	74716	Advanced
10	(benchmark* or bench-mark*).mp,kw.	4185	Advanced
11	(best adj2 practi#e?).mp,kw.	1954	Advanced
12	promising practi#e*.mp,kw.	26	Advanced

13	evidence base?.mp,kw.	9638	Advanced
14	promising approach*.mp,kw.	1445	Advanced
15	consensus.mp,kw.	9250	Advanced
16	guideline?.mp,kw.	22279	Advanced
17	or/9-16	111857	Advanced
18	8 and 17	42	Advanced
19	limit 18 to english language	42	Advanced
20	remove duplicates from 19	42	Advanced

Embase

Embase Classic+Embase 1947 to 2015 April 14			
#	Searches	Results	Search Type
1	exp mental health/	95159	Advanced
2	exp mental disease/	1705722	Advanced
3	exp mental health care/ or exp mental health care personnel/ or mental health center/ or mental health organization/	118894	Advanced
4	or/1-3	1805256	Advanced
5	university/	84167	Advanced
6	university student/	4855	Advanced
7	college/	82406	Advanced
8	college student/	11005	Advanced
9	community college/	116	Advanced
10	or/5-9	175421	Advanced
11	4 and 10	26402	Advanced
12	quality control/ or quality circle/ or total quality management/	155087	Advanced
13	practice guideline/ or consensus development/ or good clinical practice/	263320	Advanced
14	(benchmark* or bench-mark*).mp,kw.	24589	Advanced
15	(best adj2 practi#e?).mp,kw.	20253	Advanced
16	evidence based medicine/ or evidence based practice/ or evidence based emergency medicine/ or evidence based nursing/ or evidence based practice center/	121830	Advanced
17	(diffus* adj1 innovat*).mp,kw.	131	Advanced
18	evidence base?.mp,kw.	162180	Advanced
19	guideline?.mp,kw.	448076	Advanced

20	promising practi#e*.mp,kw.	206	Advanced
21	promising approach*.mp,kw.	13106	Advanced
22	consensus/	34452	Advanced
23	or/12-22	776237	Advanced
24	11 and 23	1523	Advanced
25	limit 24 to embase	1432	Advanced
26	limit 25 to english language	1422	Advanced
27	limit 26 to (book or book series or conference abstract or conference proceeding or "conference review")	1285	Advanced
28	26 not 27	137	Advanced
29	remove duplicates from 28	137	Advanced

PsycINFO

PsycINFO 1806 to April Week 2 2015			
#	Searches	Results	Search Type
1	exp mental health/	45163	Advanced
2	community mental health services/ or mental health programs/ or mental health services/	37611	Advanced
3	exp mental disorders/	465167	Advanced
4	mental health personnel/	9976	Advanced
5	or/1-4	530043	Advanced
6	higher education/ or exp colleges/	22074	Advanced
7	colleges/ or college environment/	12791	Advanced
8	campuses/	1516	Advanced
9	or/6-8	24568	Advanced
10	5 and 9	844	Advanced
11	quality control/ or organizational effectiveness/ or exp "quality of services"/ or "quality of care"/	24534	Advanced
12	treatment guidelines/ or best practices/ or professional standards/	13811	Advanced
13	evidence based practice/	12017	Advanced
14	(benchmark* or bench-mark*).mp,id.	5342	Advanced
15	(best adj2 practi#e?).mp,id.	10363	Advanced
16	(diffus* adj1 innovat*).mp,id.	233	Advanced
17	evidence base?.mp,id.	32048	Advanced

18	guideline?.mp,id.	46390	Advanced
19	promising practice*.mp,id.	400	Advanced
20	promising approach*.mp,id.	1434	Advanced
21	or/11-20	116145	Advanced
22	10 and 21	65	Advanced
23	limit 22 to english language	64	Advanced
24	remove duplicates from 23	63	Advanced

ERIC via EbscoHost



Thursday, April 16, 2015 4:17:40 PM

#	Query	Limiters/Expanders	Last Run Via	Results
S19	S8 AND S17	Limiters - Peer Reviewed Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	91
S18	S8 AND S17	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	241
S17	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	160,358
S16	guideline*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	50,528
S15	consensus	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	6,765
S14	promising approach*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	450

S13	promising practice* OR promising practise*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	1,159
S12	evidence base*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	4,341
S11	best practice* OR best practise*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	7,296
S10	benchmark* OR bench mark*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	4,652
S9	quality	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	95,542
S8	S4 AND S7	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	2,156
S7	S5 OR S6	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	257,254
S6	(college OR colleges) AND student*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	196,180
S5	(university OR universities) AND student*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	136,200
S4	S1 OR S2 OR S3	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	20,911
S3	mental* N1 disease?	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	22

S2	(mental* N1 ill*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	1,849
S1	mental health	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - ERIC	19,874

Appendix B – Key Informants

Dr. Nathan J. Cooper, Department of Psychiatry and Behavioural Neurosciences, McMaster University
Angela Hildyard, Vice-President Human Resources & Equity, University of Toronto
Dr. Andrea Levinson, Psychiatrist in Chief, University of Toronto
Dr. Glenda MacQueen, Department of Psychiatry, University of Calgary
Dr. Tayyab Rashid, Counsellor, University of Toronto Scarborough College
Dr. Heather Stuart, Mental Health Commission of Canada/Queen's University
Dr. Su-Ting Teo, Director of Student Wellness, Ryerson University

Colleges:

Meg Houghton, Director of Counselling and Accessibility, Humber College
Wayne Poirier, VP, Mohawk College
Jim Lees, Counsellor, Confederation College

Other:

Dr. Simon Davidson, Chair of the Child and Youth Advisory Committee for the Mental Health
Commission of Canada, Centre for Excellence in Child and Youth Mental Health
Allison Drew-Hassling, MacMaster University .
Dr. Elizabeth Lin, Scientist, ICES, Mental Health and Addictions Program
Jonny Morris/Shaylyn Streach, CMHA BC- Healthy Minds Healthy Campuses
Dr. Nance Roy, Jed Foundation
Dr. Kathy Short, School Mental Health Assist

Appendix C – Key Informant Interview Guide

Questions were tailored to the expertise of the key informant.

1. Are there any key documents that may not be readily available in the grey literature?
2. Based on your expertise, are there best practices for mental health programs in post-secondary institutions?
3. What are the most important promising practices for mental health in post-secondary institutions?
4. Are you aware of any campus strategies with indicators included to evaluate success?
5. Have logic models or evaluation frameworks been developed for campus mental health strategies?
6. What indicators do you think would be useful for campuses to evaluate mental health programs and policies?
7. What data currently collected by universities/colleges on mental health programs and policies that will help operationalize or evaluate mental health strategies? To who are the data reported?
8. Do you have any suggestions on the collection or compilation of data from the perspective of universities/colleges that would be useful in the development of a framework for this project?
9. What data collection tools are campuses currently using for intake, assessment and referrals for students in the area of mental health?
10. Do you have any other insights that would be helpful for this project?

Appendix D - Post-Secondary Student Mental Health: Assessment and Planning

Focus	Key Components	Strengths	In Development	Gaps/Areas for Growth	Outcomes/ Evaluation
All Students	1) Institutional Structure: Organization, Planning and Policy				
	2) Supportive, Inclusive Campus Climate and Environment				
	3) Mental Health				
Students with Concerns about Coping	4) Community Capacity to Respond to Early identifications of Individual Student Concerns				
	5) Self-Management Competencies and Coping Skills				

Students with Mental Health Concerns	6) Accessible Mental Health				
	7) Crisis Management				

<http://healthycampuses.ca/wp-content/uploads/2015/01/AppendixC-form.pdf>

Appendix E – Some Examples of Indicators from the Literature

Examples of mental health indicators based on administrative data that were identified from the grey literature are outlined here.

Indicator	Source
<ul style="list-style-type: none"> Capacity building indicators in mental health promotion (coalition building, networking, partnerships, delivery and evaluation of programs) 	WHO ¹
<ul style="list-style-type: none"> Student retention Post-graduate employment rate 	OCHA ³
<ul style="list-style-type: none"> Intentional self-harm among college students Increase percentage of people who report positive mental health (CCHS) Increase in the proportion of people with mood or anxiety disorders in the past year who consult a professional (CCHS Annual Survey) 	MHCC Changing Directions, Changing Lives ³⁸
<ul style="list-style-type: none"> Mental health care visit in past year Sought counselling over phone or internet in the past year Unmet need for mental health support Used tranquillizers/sedatives medically in the past year Prescribed medication for depression/anxiety/both Fair/poor self-rated mental health Low self esteem Psychological distress in the past month Suicide ideation in the past year Suicide attempt in the past year 	CAMH http://www.camh.ca/en/research/news_and_publications/Population%20Health%20Bulletin/eBulletins%20for%202014/ebv15_n2_MHReport-Highlights_2013OSDUHS.pdf
<ul style="list-style-type: none"> % of people receiving clinical mental health care % clients who are new clients within the last 12 months Completed self-assessment by clients (in development) 	Australian Public Health Services https://mhsa.aihw.gov.au/indicators/nkpi/ Key Performance Indicators for Australian Public Mental Health Services
<ul style="list-style-type: none"> Scores on self-perceived health and happiness (outcome indicator) Number of people who attended training sessions (process indicator) 	CAMH Knowledge Exchange http://knowledgex.camh.net/policy_health/mhpromotion/mhp_older_adults/Pages/out_pro_indicators.aspx

Indicator	Source
<ul style="list-style-type: none"> Participants' satisfaction rating of your training session (process indicator) Client satisfaction 	
<ul style="list-style-type: none"> Proportion of persons with a severe mental disorder (psychosis, bipolar affective disorder, moderate-severe depression) who are using services Functioning programs of multi-sectoral mental health promotion and prevention in existence (yes/no) Number of suicide deaths per year per 100,000 population Core set of identified and agreed mental health indicators routinely collected and reported every two years (yes/no) 	<p>WHO Mental Health Action Plan 2013-2020 http://www.who.int/mental_health/publications/action_plan/en/</p>
<ul style="list-style-type: none"> Life Satisfaction (STC General Social Survey) Mental Health (STC General Social Survey) 	<p>Indicators from Canadian Post-Secondary Performance: IMPACT 2015 (Higher Education Quality Council of Ontario http://www.heqco.ca/SiteCollectionDocuments/HEQCO_Canadian_Postsecondary_Performance_Impact2015.pdf</p>

Appendix F - School-Based Promising Practices

The K-12 sector reported that they have focused on a health promotion framework including evidence-based programs to teach skills to increase well-being, improve attitudes e.g. optimism, knowledge and help-seeking and enhance habits to improve mindfulness and coping (Appendix F). They are routinely collecting data at the board level twice a year. The Institute for Clinical Evaluative Sciences (ICES) has developed a scorecard of indicators based on a logic model. The Ministry of Education has provided funding for full time, clinical mental health leaders who meet 6-8 times per year. In addition, 12 implementation coaches have been hired and they meet every 4-6 weeks. Reports are compared to provincial benchmarks. Reporting is voluntary but all boards have participated. They have developed implementation briefs so that boards can report to the board of trustees.

According to SBMHSA, there are numerous programs that have been developed and are considered promising practices for school-based (K-12) programs.

Classroom Teachers Mental Health Literacy Training Program

Mental health training and resource material for junior high and high school teachers. Workshops are day-long and are delivered by a psychiatrist and a PhD social worker and cover multiple aspects of mental health literacy. All training is contextualized for the school setting.

Education, Mental Health & Addictions Action Committee

The Education, Mental Health & Addictions Action Committee aims to increase knowledge of mental illness & addictions, to increase the ability of schools, families and students to recognize early signs and symptoms, to increase the capacity to provide initial help and to provide information on appropriate professional help (e.g., development of informational bookmark)

FRIENDS: AHS Mental Health Screening and Early Identification

The program aims to reduce anxiety in children and to enhance socio-emotional resiliency. The program uses mental health literacy for educators, students and parents, universal mental health promotion and skill building in order to teach children about their feelings and to develop relaxation and stress management techniques.

Gatekeeper Training Program

The Gatekeeper Training Program aims to increase mental health literacy, case identification and triage skills in teachers, student services providers and school based health service providers who are positioned as the first line of help “go-to” people with whom students feel comfortable) for students in need.

Healthy Mind. Healthy Body

Healthy Mind, Healthy Body is a supplement to Nova Scotia curriculum that aims to increase student mental health literacy in areas from self-esteem and understanding feelings, to mental wellness, types of mental illness, healthy choices, body image, as well as diet and exercise. Modules are developed to fit each grade level.

[Healthy Minds/Healthy Children Outreach Services](#)

Through Healthy Minds/Healthy Children Outreach Services, frontline workers are provided with information and tools to bring evidence-based services closer to home. The program is accessed online, where a variety of professional development modules are available. Modules are available for one month each and consist of PowerPoint presentations with voice-over instruction.

[Making a Difference: An Educator's Guide to Child and Youth Mental Health Problems](#)

The Making a Difference guide is a 92 page resource that consists of 4-8 page sections on different of mental health issues (i.e., anxiety, attention problems, mood disorders, behaviour problems, eating disorders, self-harm, psychosis and substance use issues).

[Mental Health and High School Curriculum Guide and Companion Curriculum Training Program for Teachers](#)

The Mental Health and High School Curriculum Guide aims to increase student mental health literacy by providing easy access to mental health information, tools and learning strategies in the classroom. It also aims to equip teachers to address student's mental health concerns, and provide appropriate resources when necessary.

[Mental Health Capacity Building in Schools Initiative](#)

The purpose of the initiative is to establish Mental Health Capacity Building (MHCB) projects that provide the staffing and support required to implement an integrated, school-based community mental health promotion, prevention and early intervention program. The initiative addresses stigma and promotes awareness of healthy behaviors in children, youth and parents.

[Mindyourmind – School-based Mental Health Learning Modules](#)

mindyourmind is a non-profit mental health youth engagement program. The School-Based Mental Health Learning Modules are web-based lessons focused on stigma reduction, managing stress, and topics of mental illness and wellness. Learning modules are comprised of four interactive lessons that meet Ministry of Education learning expectations with web-based interactive games, quizzes and tools, personal stories etc.

[School-Based Learning Assistance Coaches](#)

The program aims to build the capacity of school staff to provide support for students identified with severe emotional and/or behavioural disorders. Training in positive behaviour supports and functional behaviour assessment is provided by the school district through a five-day intensive Behavior Academy, behaviour consultants, mental health coordinator and follow-up support.

School-Based Mental Health Capacity Building Project

The project aims to build teachers' capacity to be able to recognize and address mental health issues in classroom and to give children more accessibility to trained therapists. In addition the project aims to decrease teacher stress levels and provide them with classrooms management skills when confronted with difficult behaviors or problematic issues.

School-Based Mental Health Learning Forum

The Learning Forum aims to increase educator mental health literacy through knowledge of evidence-based practice towards better recognition of, and response to, the mental health needs of students. Teachers and school staff bring up issues to discuss, while scientists respond and invite further dialogue.

Signals of Suicide

All Grade 9 students in the class/school receive the program, which is delivered in 75-minute sessions in class once per year by trained SOS facilitators. Interactive learning, a DVD and discussions in a safe and open environment make up each session. SOS sessions cover causes of stress/distress/crisis and for some and suicide.

Signs of Suicide

SOS is part of Reclaiming Hope: Manitoba's Youth Suicide Prevention Strategy, a provincial multi-departmental strategy for suicide and gang prevention. Grade 9 students are shown a video over two classes with different scenarios. A teacher trained in SOS and mental health first aid plays the video and leads the discussion.

Student Health Partnership – School-Based Mental Health Capacity Building Initiative

The program aims to both build the capacity of schools to provide mental health services and provide teachers with the tools to recognize and respond to mental health needs in the classroom. The target audience can access this program by being referred by teachers to a school specialist.

Teen Mental Health Online (www.teenmentalhealth.org)

Teen Mental Health Online aims to provide comprehensive, reliable and understandable information, organized and presented with the end user (students, parents, educators and health service providers) in mind. Ultimately it aims to build the capacity of those in the school and health sectors to respond to the mental health needs of youth.

Understanding Depression and Suicide in Adolescents Training Program for Educators

This program aims to help educators develop the skills to better understand the complex issues of teen depression and suicide and to better identify young people who may be suffering from depression or be at high risk for suicide, and how to link them to services. It also aims to debunk existing myths and misinformation/disinformation.

Appendix G – Evaluation Primer

It is necessary to evaluate whether objectives in campus mental health promotion are successfully realized in implemented programs and whether expected outcomes are achieved (Ref DP 14A ref 18). The Jed Foundation recommends that campuses conduct a pre- and post- study for their mental health strategy to see if there is a change in attitude in terms of access to services, utilization and dropout rate. Stakeholders reported that campuses do not have the support to conduct evaluations so institutions require additional capacity e.g. a central unit that specializes in evaluation

Evaluation plans are the road map for conducting an evaluation. (skillsonline.ca PHAC) They identify the questions that will be answered in the evaluation, the data that needs to be collected and the time and resources available. Components of a comprehensive evaluation plan are: program description; needs or rationale, logic model, stakeholder engagement strategy, evaluation framework, literature review, budget, work plan and communication plan.

The Jed Foundation in the Campus Mental Health Action Planning suggests developing a logic model which demonstrates how each planned activity will contribute to long term goals.¹⁸ The model includes inputs, activities and outputs as they relate to short-term, intermediate and long-term outcomes. Inputs refer to the investment of resources in terms of staff and budgets. Activities are the programs to be implemented. Outputs refer to the activities achieved. The outcomes are the attitudes, knowledge, skills and behaviours that are expected to change as a result of inputs, activities and outputs. A logic model is the basis for developing an evaluation plan which will show that programs are achieving their intended outcomes and that resources are being used wisely. An evaluation can also show whether a program was implemented as planned and provide information to improve the quality of the program.

MacQueen recommends that systematic evaluation of various campus initiatives be conducted and publically reported to confirm that campuses are optimizing mental health for students.⁶

Programs require monitoring of process and outcomes to ensure they achieve the desired results or require modification for the local context. Successful implementation requires dedicated leadership, proper preparation of the organization and ongoing support for implement, treatment integrity and evaluation of program outcomes.

What is evaluation?

<http://www.healthyuniversities.ac.uk/planning-an-evaluation-.php?s=203&subs=63&id=15>

Evaluation is a judgement or appraisal about the worth of an initiative or programme. This judgement can be:

- About the outcome – what short-term impacts and/or longer-term outcomes you achieved and whether you were effective in achieving your aims and objectives

- About the efficiency – linked to outcome evaluation, whether the approach taken and methods used were the most cost-effective and/or whether the benefits justified the costs
- About the process – whether the way that you implemented the initiative or programme was appropriate for the particular circumstances (gaining a fuller understanding of why something worked or didn't work in a particular context at a particular time).

Why Evaluate?

Evaluation should be an integral part of all planned activities and programmes for the following reasons:



It is important to plan an evaluation to ensure that it is as productive and useful as possible. The UK framework that follows sets out a flexible eight step process:

Step 1

Determine whether the evaluation will be conducted internally or externally and how you will engage different stakeholders in the evaluation process.

Step 2

Clarify aims and objectives, making sure the objectives are SMART –Specific, Measurable, Achievable, Realistic and Time-Bound.

Step 3

Identify expected impacts and outcomes that align with the objectives, making sure that they relate to the core business of the university.

Step 4

Choose process and outcome indicators that can help to track progress and measure overall success.

Step 5

Decide what quantitative and/or qualitative data needs to be collected to enable the evaluation to take place – paying attention not only to outcome (and if appropriate, efficiency) data but also to the information required in order to carry out process evaluation.

Step 6

Agree on the methodology to collect the data, being pragmatic about what is possible within resource constraints and where possible combining a range of methods in order to strengthen evidence generation.

Step 7

Set up data collection systems, considering what data is routinely available, identifying who will collect what data and agreeing a timetable (e.g. baseline, ongoing, mid-point, end).

Step 8

Collate, analyse and interpret the data in order to identify key findings and generate learning and evidence.

New ref numbers

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