Critical Challenges and Opportunities for Enhancing Campus Health and Well-being at Dalhousie University

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Executive Summary

Context
Health is a human right, inseparable from other human rights like the right to food, housing, work and education. When people can achieve and maintain optimal health and well-being, there are benefits realised across all levels of society. The importance of health and well-being has been starkly illuminated through the immediate threat posed by a global pandemic, a reminder that our health continues to be challenged by both communicable and non-communicable diseases.

Many aspects of our current physical, social, economic and political environments are not conducive to good health and well-being. There are social and structural determinants that support unhealthy behaviours as the default, and systemic barriers, like poverty and racism, that have created inequities across different populations, meaning that health is impacted for some groups of the population more than others. As environments that are both workplaces and institutions of higher learning, universities and colleges represent a unique environment where health and well-being can be impacted in a way that also impacts academic performance and future employment opportunities.

Layered onto this are several social, economic, technological and demographic changes occurring globally that impact campus communities. The student population is changing, and campuses need to adapt to these shifting demographics to meet the needs of a diverse population of students, faculty and staff. An increasing number of students report concerns around their mental health, and faculty and staff on Canadian campuses are increasingly experiencing stress and burnout. It is increasingly clear that now is the right time for Dalhousie to elevate support for campus health and well-being.

Scope of Work of the Self-Study Team
The Campus Health and Well-being Self-Study Team was convened in the Fall semester of 2019 to understand the current environment across Dalhousie campuses related to health and well-being and identify critical challenges in relation to this theme. The team focused on addressing two objectives:

1. To assess the current campus environment as it relates to health and well-being; and
2. To make recommendations to support a holistic approach to campus health and well-being.

Our key questions were:

- What does it mean to be a healthy, thriving campus?
- What are the most critical needs for Dalhousie to address in order to meet the challenges ahead?
- What are the greatest opportunities we have to move us forward as a place to work and learn, a regional driver or a global presence?
- What would make the biggest difference for Dalhousie (short-term and long-term)?
We used multiple sources of data to identify the critical challenges for campus health and well-being at Dalhousie, including a previously completed literature review from 2017, supplemented with more recent literature survey data from a variety of international, national and international sources and a series of consultations with key stakeholders. We framed our findings within the socio-ecological model, a theory-based framework used to understand how individual behaviour is influenced by and influences multiple and interconnected elements of the social system, like policy, community and institutional characteristics. This framing allowed us to see what aspects of campus health and well-being had the greatest capacity for impact.

We identified six critical challenges that impact campus health and well-being and thus should inform the upcoming strategic planning process:

1. Absence of a holistic campus health and well-being strategy

Dalhousie’s operations related to health and well-being have historically operated in silos with limited collaboration. As an example, Student Health and Wellness operates out of Student Affairs while Workplace Wellness is housed within the Human Resources department. We heard and saw that there is a gap in what is said and what is done to support campus health and well-being. This was expressed as a lack of trust in leadership around failures to follow through on promises made to support individual and collective health and well-being, and an absence of leadership commitment to health and well-being as a campus priority. In other words, Dalhousie was viewed as “talking the talk, but not walking the walk” of health and well-being on Dalhousie Campuses. The need for a dedicated holistic campus health and well-being strategy, that allows for documented commitments, accountabilities, timelines and measurements was seen as an essential component of the new strategic plan.

2. Lack of adherence to policies promoting health and well-being

The lack of strategic focus on campus health and well-being was evident through a lack of adherence to policies that promote health and well-being. Examples offered by those we consulted included inconsistency between and within Faculties in support for the student accommodation policy in classrooms, a lack of consistency and accountability surrounding the use of the student declaration of absence form (or a similar faculty-specific version of this process), or a lack of enforcement of the no smoking policy across campuses. These examples illustrate that, alongside a clear strategic plan that explicitly states a commitment to the health and well-being of campus constituents, there also needs to be a
clearly articulated strategy for communication and greater accountability to ensure that policies are adhered to across all levels of the institution.

3. Pervasive poverty and financial stress

Throughout our consultations, we consistently heard the need to build capacity for those experiencing financial hardships such as poverty, debt, and wage variability across employee groups, and among the student population. Financial stress was apparent across students, staff and faculty, and food insecurity was one of the ways in which this stress was expressed. The challenge for the institution is to recognize and respond to opportunities to intervene in the experience of those who may be marginalized due to inadequate levels of income. Our goal should be to take a proactive approach to promoting financial and food security on campus and asking hard questions about who the institution recognizes, celebrates and awards funding or financial aid to. Dalhousie can become a community leader by using the power of the institution to be an example by promoting health and well-being through removing low-income barriers and ensuring all members of the community receive a living wage, have access to leisure and physical activity spaces, access to childcare, access to a family physician and access to sick leave benefits.

4. An environment that undermines health and well-being

The intricate environment of Dalhousie and the surrounding community is inseparable from the experiences of health and illness for students, staff and faculty. The historic setting of the Dalhousie community creates a challenge to the development of spaces that promote and improve health and well-being. Examples of how our built environment does not support health include lack of sidewalks and buildings that do not meet standards of accessibility for all, and classrooms or buildings that lack natural light, appropriate furniture and fixtures, or good ventilation. Our consultations also revealed a pervasive undercurrent of racism and colonial structures that threaten progress in embedding EDI principles across the institution. This was expressed as a sense of disconnect between the articulated importance of EDI and what is happening “on the ground.” It was clear that there needs to be additional investment in this critical issue, given the known impact of inequities on health and well-being. We must look to design well-being initiatives that address health disparities, particularly among underrepresented or marginalized groups if we wish to champion equity, diversity and inclusion. There was also clear alignment with the work of the campus culture and climate self-study team, reinforcing the need for changes in the social as well as the physical environments on campuses.

5. Lack of health literacy, collaborative programming and support for individuals

Achieving and maintaining optimal health requires knowledge of health promoting behaviours, awareness of available programs and supports, value placed on choosing those behaviours and an environment that encourages health-promoting choices. However, our consultations revealed a patchwork of initiatives that were variably and disjointedly available or accessible to campus constituents. Increasing health knowledge and self-management skills will improve the engagement, success and connection of our community members and the health of our campus. These could be strengthened by embedding health
and well-being more explicitly in onboarding experiences for students as well as for faculty and staff. Well-being significantly derives from a sense of belonging and community. Particular attention is required for students of our diverse campus population who may not perceive that safe options exist for them. Opportunities to carefully understand and assess their needs and to identify supports to encourage their help-seeking behaviors are essential. Underscoring the diversity across campuses is a need for better data on the health and well-being of different constituent groups at Dalhousie to ensure that diverse population needs are considered in planning and embedded in the direction of the institution moving forward. Dalhousie must remain intentional in ensuring appropriate disaggregation of data related to health indicators. Programs, services and supports designed from aggregate data and evidence that are focused on the quantitative majority in our community may serve to widen health equity gaps. Disaggregation may also allow for more efficient use of our resources. Greater resourcing for campus health and well-being would allow for the addition of culturally safe and relevant supports and enhanced intentional collaboration in program design and delivery. Investing in centralized communication and marketing strategies to effectively disseminate these to the campus community would bring greater awareness to and reduce duplication of what is offered across the campus.

6. Missing links between research and practice

As an institution that trains a large number of future health professions, hosts the only Faculty of Medicine in the Maritimes, and conducts cutting edge, globally renowned health and medical research, our consultations revealed a knowledge-to-action gap between the research happening internally, and what happens in practice. Our researchers influence national and international policy and practice, but this wealth of knowledge and evidence does not necessarily influence practice within our own institution, and in some cases, flies under the radar with minimal, if any, institutional support for knowledge translation to effectively happen. Dalhousie’s challenge is to remove the silos between research, knowledge uptake and service provision to make an accessible and convenient way to apply evidence-informed research into practice on our own doorstep. Having health and well-being embedded in the strategic priorities of the institution will support an environment in which students flourish. Dalhousie is in a position to be a leader in the upstream support for the ever-changing and diverse student, staff and faculty populations we have invited into the institution. Making the connection to upstream approaches for promoting health will also empower the front-line staff, who directly impact the student experience, to apply this progressive research for the development of programs and services. There is also room to incorporate health behaviour literacy and skill development into course curriculum to support students to become healthy learners. Consultations revealed a desire for a cross-cutting curriculum of wellness skills embedded into a variety of first year courses that form foundational experiences for the Dalhousie undergraduate student. The opportunities to enlist faculty and graduate students from health profession training programs to contribute to this well-being curriculum could serve to strengthen models of interprofessional education (IPE). Opportunities to use the research expertise of faculty could fuel knowledge translation activities of their work.
Conclusions
These six critical challenges represent the current situation at Dalhousie with regards to campus health and well-being, as determined by the available data and the expertise and experience of a diverse cross-section of students, staff and faculty who participated in the Campus Health and Well-Being Self-Study Team. Focused efforts on the outer rings of the socio-ecological model will have the most impact on the health and well-being of campus constituents, while also addressing pressing concerns such as campus culture, equity, diversity and inclusion, and the disturbing mental health challenges that are being observed on campuses across Canada. A campus that establishes supports for healthy behaviours also makes it easier for members to choose behaviours that lead to a healthy body, mind and life. While ultimately individuals will make their own daily choices, creating the conditions for healthy behaviours to be adopted and sustained sends a powerful message that health and well-being are valued across the institution.

In enhancing support for campus health and well-being, we are not starting from ground zero. The Okanagan Charter exists to embed health into all aspects of campus culture, across administration, operations and academic mandate and to lead health promotion action and collaboration locally and globally. A “quick win” would be to sign the charter and acknowledge its aspirations as a goal-defined starting point for Dalhousie campus health and well-being. But signing the charter isn’t only symbolic; if we adopt it as an institution, we must also commit to implementing it fully, and to attach adequate resources for any impact to be realized.

Structures, systems and policies firmly rooted in a culture of care and connection and fostering an environment of well-being should be a differentiator for Dalhousie. Let us demonstrate our commitment to taking care of our greatest asset, our people, and let our actions related to health and well-being transcend our cohorts, communities and campuses, showing support for our students and ourselves.
Background

"...I believe, and I've believed for a long time, that the most important asset in any organization, any institution, is its people. Everything we do, it's driven through our people. People are the primary interface through which we connect with the world. They are the interface between our core mission and what we have to deliver to our community, to any stakeholder. And that's the key thing that people can expect from me: I will be very people-focused and we will drive this university to its next step on the journey through our focus on our people.” Dr. Deep Saini, Dalhousie University’s 12th president, January 15, 2020 (1)

Health is a human right, inseparable from other human rights like the right to food, housing, work and education (2). The health and well-being of individuals, communities and populations are both interconnected and interdependent. This interconnectedness is starkly illustrated in events unfolding even as we compile this report; we are experiencing an extraordinary point in history where the health and way of life of the entire global population is threatened by a pandemic of a novel coronavirus spreading exponentially around the planet (3). Given the rapid spread globally, this coronavirus disease (COVID-19) outbreak is focusing attention on the prevalence and population impact of communicable diseases, estimated to cost Canada around $8.3 billion in 2008 (4). The challenges posed by this global pandemic have led to widespread closures of businesses, campuses and schools as a necessary measure to protect public health, by mitigating the harms of the virus and the threat to health systems that will be unable to cope with the impacts of widespread infection.

While COVID-19 is a significant and immediate threat to be addressed, for decades we have seen rates of non-communicable (or chronic) diseases like heart disease, cancer and mental illness rising by about 14% per year, and an increasing number of people living with more than one type of chronic disease (5). The cost of chronic disease in Canada is not just borne by the health care system, although at $68 billion per year, this cost is significant and represents 67% of the health care budget (5).

Yet, when people can achieve and maintain optimal health and well-being, there are benefits realized at the level of the individual, family, community and society. Promoting optimal health and well-being is not a novel concept – it has long been recognized that the health and well-being of individuals is a major resource for social, economic and personal development and an important dimension of quality of life (6). Indeed, Canada has a long and proud history in health promotion, exemplified by being the birthplace of the Ottawa Charter in 1986 (6). A central tenet of the Ottawa Charter is the creation of supportive environments, which includes generating living and working conditions that are safe, stimulating, satisfying and enjoyable. Collectively known as the Determinants of Health, we know that there are a range of personal, social, economic and environmental factors that determine the health status of individuals or populations (7). More recently, good health

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1 Please see appendix 1 for definitions of health and well-being, as well as of other terms used in this report.
and well-being and quality education are explicitly named as two of the 17 Sustainable Development Goals (SDG) published in 2016 by the United Nations (8). Embedded within these and other SDGs are the principles and values of equity, diversity and inclusion (EDI) (9).

Unfortunately, many aspects of our current physical, social, economic and political environments are not conducive to good health and well-being. In fact, in many cases they are health-disrupting. There are social and structural determinants that support unhealthy behaviours as the default, and systemic barriers, like poverty and racism, that have created inequities across different populations, meaning that health is impacted for some groups of the population more than others (10). It also impacts other sectors, including workplaces, schools and academic institutions. According to data from Sun Life, for example, 59% of employees with benefits coverage live with at least one chronic disease, employees with multiple chronic disease risk factors are absent for 50% more days than their colleagues, and the estimated cost to the economy of chronic disease is around $122 billion annually in lost productivity (11).

As environments that are both workplaces and institutions of higher learning, universities and colleges represent a unique environment where health and well-being can be impacted in a way that also impacts academic performance and future employment opportunities (12). Indeed, alongside good health and well-being and quality education, there are several other SDGs that align with the academic mission of institutions like Dalhousie, including gender equality (SDG5), decent work and economic growth (SDG8), reduced inequalities (SDG10) and sustainable cities and communities (SDG11) (8).

There are several social, economic, technological and demographic changes occurring globally that impact campus communities (13). The student population is changing, and campuses need to adapt to these shifting demographics to meet the needs of a diverse population of students, faculty and staff. For example, the proportion of international students enrolled at Dalhousie has been steadily increasing, from 11% in 2010 to 24% in 2019 (14,15). The number of self-identified Aboriginal and Indigenous students and African Nova Scotian students has also increased, as shown in Table 1 (16). However, students from these population groups remain under-represented within the Dalhousie community (17). Diversity among students is, to some extent, accompanied by greater diversity among faculty and staff, with increases in hiring across designated groups in some, but not all, levels of the institution (18). The four designated groups, as outlined in the Federal Contractor’s Program that Dalhousie is a member of, are women, racially visible persons, Aboriginal persons and persons with a disability (see Table 1). Representation of people

“*If the frogs in a pond started behaving strangely, our first reaction would not be to punish them or even to treat them. Instinctively, we’d wonder what was going on in the pond.*”

Dan Reist, University of Victoria

(https://blogs.ubc.ca/teachingandwellbeing/2016/09/07/frogs-in-a-pond/)
identifying as Aboriginal, racially-visible or persons with a disability all remain lower than expected (18). An understanding of the diversity among our campus community is essential because, as noted above, it is well-established that when inequities exist among different population groups it impacts their health and well-being (10).

Table 1. Dalhousie Be Counted Census Trends (2015-2019)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Faculty</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>42%</td>
<td>42%</td>
<td>44%</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Racially visible</td>
<td>14%</td>
<td>16%</td>
<td>15%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>0.4%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Disability</td>
<td>4.1%</td>
<td>5.3%</td>
<td>5.0%</td>
<td>5.2%</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>63%</td>
<td>64%</td>
<td>64%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Racially visible</td>
<td>7%</td>
<td>9%</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>1.9%</td>
<td>2.3%</td>
<td>2.6%</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Disability</td>
<td>5.3%</td>
<td>5.5%</td>
<td>6.1%</td>
<td>6.2%</td>
<td>7.9%</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td>Racially visible</td>
<td>7%</td>
<td>9%</td>
<td>11%</td>
<td>11%</td>
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</tr>
<tr>
<td>Aboriginal</td>
<td>2.8%</td>
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<td>3.5%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Disability</td>
<td>4.7%</td>
<td>5.1%</td>
<td>7.4%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

One concerning trend impacting the health and well-being of campus constituents is the increasing number of students reporting concerns around their mental health (see Figure 1) (13). Nearly three quarters of all lifetime mental disorders have their onset by mid-20s, illustrating the prevalence of mental health concerns for students in the university environment (19).

**Figure 1. Mental Health Trends for Canadian University Students**

Mental and physical health and well-being play a critical role in students’ success at university because healthy students are better learners (20). Furthermore, positive health behaviours in childhood and adolescence may contribute to the prevention of mental disorders (21), reinforcing that physical and mental health are inextricably linked.

Although much of the available national data focus on student health and well-being, faculty and staff on Canadian campuses also report concerns with their mental and physical health, although there is a dearth of research on this population in Canada. In a national survey of 1470 academic staff from 56 Canadian postsecondary institutions conducted in 2006, 13% of respondents reported signs of psychological stress and 22% reported high rates of physical health symptoms (22). The authors of this study also found that gender was the most consistent demographic predictor of work and health outcomes (22). This is unsurprising and further illustrates the need for greater attention to EDI on campuses (9).

**Now is the right time to support campus health and well-being at Dalhousie**
Recognizing the role that academic institutions can play in supporting positive health and well-being, the Okanagan Charter, an International Charter for Health Promoting Universities and Colleges, was released in 2015 (23). This charter, developed collaboratively with researchers, practitioners, administrators, students and policy makers from 45 countries, calls on post-secondary institutions to embed health into all aspects of campus culture and to lead health promotion action and collaboration locally and globally. The charter has been adopted by campuses across Canada as well as internationally. The University of British Columbia (UBC) for example is widely considered a leader in healthy campus initiatives, and well-being is articulated as a foundational component of the institution’s 2018-2028 strategic plan (24). As of March 2020, there are 21 institutions across Canada that have adopted the charter, but Dalhousie University is not one of them. Signing the charter and acknowledging its aspirations offers a goal-defined starting point for Dalhousie campus health and well-being. It provides common language framing and principles but does not precipitate specific outcomes. But signing the charter isn’t only symbolic; universities who adopt it must also commit to implement it fully, and to attach adequate resources for any impact to be realized.
In 2017, a team from Dalhousie University Student Affairs conducted a literature review to document best and emerging evidence in the area of healthy campuses and campus health promotion (see Appendix 2 for full draft report) (25). This review identified and incorporated findings from 16 peer reviewed journal articles and seven practice-related documents and focused on considerations for a healthy campus approach across five main categories:

- Evidence-informed models
- Coordination and implementation
- Organizational culture
- Physical environment
- Community involvement

The review concluded that Dalhousie University is “positioned to move towards a whole system approach to campus health” (p.12). A whole system approach involves identifying the various components of a system and assessing the nature of the links and relationships between each of them (26). In the context of campus health and well-being therefore, the system is the institution (i.e. Dalhousie University), and the scope of a whole system approach covers the people, buildings, operations, policies and practices that operate within it or around it. Importantly, it was also noted that “Implementing a ‘Healthy Campus’ initiative requires a high level of commitment and leadership, especially from senior administration of the institution, the steering committee established to guide the work and a range of other stakeholders from across the university” (p.8), and cautioned that “the work cannot be left to one area of the university community, and should instead be understood to be part of the university’s core business. This requires a top-down commitment from senior administration that is met with bottom-up action from the university community” (p.8). The report also noted that “health and wellbeing must be recognized as values that the institution commits to in strategic plans and linking to other core agendas” (p.8). Since the literature review was penned, an environmental scan of Canadian campus mental health strategies was released which also acknowledges the role of leadership and institutional commitment to the mental health of students, through mandating the development of University mental health strategies by senior level administration and accompanying policy review in support of a mentally healthy campus (27).

The work of the Campus Health and Well-being Self-Study Team builds upon this narrative review, considers research and best practice published subsequently, and assesses the critical challenges and opportunities for Dalhousie from 2020 onwards in relation to the health and well-being of its people – students, staff, faculty - and the communities that are served by the institution locally and globally.

**Aspirations of the Okanagan Charter:**

- Infuse health into everyday operations, business practices and academic mandates
- Enhance the success of our institutions
- Create campus cultures of compassion, well-being, equity and social justice
- Improve the health of the people who live, learn, work, play and love on our campuses
- Strengthen the ecological, social and economic sustainability of our communities and wider societies
Scope of Work of the Self-Study Team
The Campus Health and Well-being Self-Study Team was convened in November 2019 to understand the current environment across Dalhousie campuses related to health and well-being and identify critical challenges in relation to this theme. The team focused on addressing two objectives:

3. To assess the current campus environment as it relates to health and well-being; and
4. To make recommendations to support a holistic approach to campus health and well-being.

Our key questions were:

- What does it mean to be a healthy, thriving campus?
- What are the most critical needs for Dalhousie to address in order to meet the challenges ahead?
- What are the greatest opportunities we have to move us forward as a place to work and learn, a regional driver or a global presence?
- What would make the biggest difference for Dalhousie (short-term and long-term)?

Given the extensive evidence already available on campus health and well-being (and described in the previous section), the Self-Study Team co-leads proposed using the first two phases of the MAP-IT Framework from Healthy Campus 2020 (see Figure 2) (28). According the Healthy Campus 2020 framework, the five components of a Healthy Campus are:

1. A network of people working towards a common vision
2. Priority health needs of the campus
3. A plan with strategies and action steps
4. Community-based and individual-based interventions
5. Tracking progress

Healthy Campus 2020 goes on to describe five overarching goals of a Healthy Campus:

1. Create social and physical environments that promote good health for all
2. Support efforts to increase academic success, productivity, student and staff/faculty retention, and life-long learning
3. Attain high-quality, longer lives free of preventable disease, disability, injury and premature death
4. Achieve health equity, eliminate disparities and improve the health of the entire campus community
5. Promote quality of life, healthy development and positive health behaviours

Because these goals resonated with members of the Self-Study Team, we sought to follow a similar approach in our own assessment. MAP-IT stands for Mobilize, Assess, Plan, Implement, Track and is framed around the socioecological model (SEM). The SEM is a
theory-based framework used to understand how individual behaviour is influenced by and influences multiple and interconnected elements of the social system (29). The SEM includes five different environmental levels that influence human behaviour including the individual (intrapersonal), interpersonal, organizational, community, and policy level. Greater attention given to the outer levels of the SEM has been found to have the most impact on individual behaviour (30). The work of the Self-Study team centred around the first two phases of the MAP-IT framework, comprising MOBILIZE and ASSESS.

Figure 2: Healthy Campus 2020 MAP-IT Framework

To MOBILIZE, we built on the Provost learning circles that were established in the Summer of 2019. These learning circles brought together a diverse range of stakeholders across campus, including faculty, staff and students. Additionally, more than 150 faculty and staff attended the Phase III Strategic Planning Retreat in September 2019 and were invited to self-select to one of eight self-study teams. Those identifying an interest in campus health and well-being were invited to join the self-study team, to reach out to others that they felt might be able to contribute to the work, and we also received suggestions for potential members directly. Throughout the process we sought to incorporate the principles of EDI among our team members. Ultimately, around 40 people, representing students, faculty and staff contributed to the activities of the Campus Health and Well-being Self-Study Team. We held three kick-off meetings in November/December 2019, with team members invited to attend one of the three (see Appendix 3 for self-study team contributors). To further encourage participation from the campus community, we
also reached out to other groups and individuals who would be able to contribute to our understanding of campus health and well-being at Dalhousie (see Appendix 4 for a description of this outreach).

To ASSESS, we first adapted an audit tool from Healthy Universities UK (31) to identify aspects where we have focused efforts and resources related to health and well-being as well as those areas that require more time, attention and resources. Self-Study Team members were asked to complete this audit tool in December 2019.

The tool comprised a series of statements related to campus health and well-being, focusing on five key areas of campus activity:

(1) Leadership and Governance (18 statements), which covers the corporate commitment of the university in working towards becoming a Healthy University. An example of a statement in this section is “the university’s core plans and strategies address the health and well-being of students, staff/faculty and the wider community”.

(2) Facilities and Environment (18 statements), covering the facilities the university provides and the environment it creates to support the health and well-being of staff and students and the wider community. An example of a statement in this section is “The university has a strategy to ensure that the built environment is conducive to promoting good physical, mental and social well-being (e.g. access, natural light, good ventilation, appropriate furniture and fixtures, showers, social space)”.

(3) Service Provision (8 statements), identifying the level of service provision on and off site to support the health and wellbeing needs of staff and students. An example of a statement in this section is “The university has a range of appropriate and responsive health and well-being support services that recognize the diverse needs of its students”.

(4) Academic, Personal, Social and Professional Development (10 statements), covering how the university uses the opportunities presented by curricula, research, knowledge transfer and professional development to improve health and well-being and respond to the needs of its staff and students. An example of a statement in this section is “There are opportunities within the curriculum to address health, well-being and sustainable development issues with students”.

(5) Communication, Information and Marketing (10 statements), covering the processes involved in communicating health and well-being information and messages to staff and students and how the university markets health and well-being in its promotional materials. An example of a statement in this section is “There are aspects of the university communication strategy that address and promote the broader health and well-being agenda to students, staff/faculty and external stakeholders”.

For each statement, there were four possible response options: a) Yes, we are there, b) working on it currently, c) no, not at all and d) don’t know. For each of the five sections of the audit, there was also a space for respondents to provide comments. We distributed one version of the tool for completion by faculty and staff and another version for completion by
students. The faculty/staff version of the audit tool can be found in Appendix 5. The self-study team split into subcommittees based on the five areas of the Healthy Universities UK audit tool, allowing for greater discussion of the questions posed about each aspect of campus health and well-being.

Next, we explored disaggregated data sources to better understand our populations of students, faculty and staff and what we know about their perspectives as they relate to health and well-being. Data sources included:

- American College Health Association (ACHA) Surveys (2013, 2016, 2019; Dalhousie and Canadian Reference group data) (32–37)
- National Survey of Student Engagement (2017) (38)
- Morneau Shepell Quality of Life survey (2017; faculty and staff) (39, 40)
- Dalhousie Campus Climate Survey – 2019 Overview (41)
- Dalhousie Employee and Family Assistance Plan data (2019) (42)

We also identified and reviewed previous Dalhousie and other external reports and data sources to identify previous recommendations that might positively impact health and well-being. This included the Belong report (43), the Report from the Committee on Aboriginal and Black/African Canadian Student Access and Retention (17), and input from the Dalhousie Mental Health Forum.

Finally, we used these diverse sources of data and lived experiences shared through our consultations to determine the critical challenges related to campus health and well-being, according to the levels of the SEM. These were presented to members of the Self-Study Team, allowing team members to prioritize which critical challenges they considered to be the highest priorities to address. The outcome of this prioritization forms the basis of our recommendations described in the next section of this paper.

**What we found**

In this section of the paper, we present information on the current state of campus health and well-being at Dalhousie, the critical challenges that should be considered within the upcoming strategic planning process and recommendations for consideration.

**What we learned from the audit tool**

Statements on the audit tool received between 30-48 responses, depending on the statement. There was variability in responses to statements that reflected a range of understanding among respondents regarding activities and supports for health and well-being across the different campuses. In some instances, respondents provided sources or documented evidence for their response to a statement. The variability in responses is not surprising given the diverse perspectives across team members, and likely reflects a lack of clarity more broadly around how campus health and well-being shows up across the institution and its different constituents. There was also variability in responses according to campus location. Unfortunately, there was minimal input from student team members to the audit, but this may also reflect the timing for completion, which was around exam time
and over the holidays at the end of the Fall term, when students generally may be less available. While the audit tool provided an opportunity for team members to reflect on the various components of campus health and well-being, the small sample size and the variability in responses made it difficult to identify any clear trends and therefore its utility in this process is limited. However, what we can conclude from this tool is that campus health and well-being is not currently an identified priority of the university, nor is it clearly articulated within the academic mission. Attention specific to workplace health and well-being, focused on employees of the university, has been enhanced through the appointment of Janice MacInnis as the Manager of Organizational Health in 2009. It was clear from responses to the audit and throughout the consultation process that Janice MacInnis has been a highly respected champion for workplace health and well-being for well over a decade, but she is just one person who is leading the charge for the entire institution. From a student health and well-being perspective, Verity Turpin’s leadership, in her role as Assistant Vice-Provost, Student Affairs, has also driven the development of an interprofessional collaborative healthcare service delivery model connecting primary and mental health care, and an expansion of online resource programs, including a resilience training program and a plethora of health and wellness programming to serve the diverse needs of students. The work of these two champions is what positions Dalhousie to make big moves forward in overall campus health and well-being.

**What the data tell us about campus health and well-being at Dalhousie**

Data on student health and well-being mirrors national trends, with Dalhousie students reporting increasing rates of stress, anxiety and depression over recent years (see Figure 3). These data highlight higher rates of depression and anxiety for students who identify as sexual orientation or gender identity (SOGI) diverse. We do not know the reasons for this, but this should cause us to pause and consider how welcoming the campus is to students from diverse backgrounds. If Dalhousie is to adequately and authentically address EDI principles, we must ensure that all students feel welcomed and respected. These data highlight higher rates of stress, anxiety and depression for students who identify as sexual orientation or gender identity (SOGI) diverse. We do not know the reasons for this, but this should cause us to pause and consider how welcoming the campus is to students from diverse backgrounds. If Dalhousie is to adequately and authentically address EDI principles, we must ensure that all students feel welcomed and respected.
As rates of anxiety, depression and stress increase in our student population, so does the need for support. Data on access to mental health services confirms the increasing demand for Mental Health Services at Dalhousie (see Figure 4).
When we drill down, we can gain a better understanding of who is accessing these services. Figure 5 breaks down who accessed the services across different segments of the student population.

It is also important to understand who is not using the available services. This is shown in Figure 6, which illustrates that only around half of students on campus were aware of how to access mental health services on campus. This is consistent with the consultation findings from the Mental Health Commission of Canada and Canadian Standards Association (CSA) in the efforts to develop a Standard for Psychological Health and Safety for Post-secondary students (Verity Turpin, National Technical Committee Member, personal communication).
It is not just students that report mental health concerns. According to the 2019 “Your Voice” survey, around 70% of faculty and staff reported at risk or problem/strained levels of anxiety, stress and burnout (39). This high percentage of mental health concerns is borne out through data on use of the Employee and Family Assistance Plan (EFAP), with the majority of the employees (60-85%, depending on the quarter) who accessed EFAP making use of the counselling services (42). The most common topics for personal/emotional counselling were stress (18.5%), anxiety (11.3%) and depression (5.2%). With respect to psychological supports in the workplace, just over half (51%) of staff and only 35% of faculty agreed that Dalhousie is committed to ensuring their psychological safety (39). According to the 2019 Your Voice workplace survey results, still in draft format at timing of writing, there was some improvement in personal health behaviours among respondents, with over 50% of faculty and staff reporting that they accumulated over 30 minutes of physical activity most days of the week, and over 70% drinking over a litre of water most days of the week. However, 15% of faculty and 14% of staff expressed signs of low resilience and there remains a significant proportion of employees experiencing challenges to their health and well-being. For example, just over a quarter (26-28%) felt they were in control of their life seven days a week and only 13% of faculty and 11% of staff felt they had the energy they needed seven days a week (Janice MacInnis, personal communication).

**What are the critical challenges that we identified from this work?**

Below, we present six critical challenges that impact campus health and well-being and thus should inform the upcoming strategic planning process. Each critical challenge is presented with consideration of the corresponding levels of the SEM, where applicable, starting with the challenges that will have the most impact on health and well-being if addressed.

1. **Absence of a holistic campus health and well-being strategy**

Dalhousie’s operations related to health and well-being have historically operated in silos with limited collaboration. As an example, Student Health and Wellness operates out of Student Affairs while Workplace Wellness is housed within the Human Resources department. We heard and saw that there is a gap in what is said and what is done to support campus health and well-being. This was expressed as a lack of trust in leadership around failures to follow through on promises made to support individual and collective health and well-being, and an absence of leadership commitment to health and well-being as a campus priority. In other words, Dalhousie was viewed as “talking the talk, but not walking the walk” of health and well-being on Dalhousie Campuses (see also critical challenge 2 below). Additionally, concerns about workloads, perceived lack of support for taking breaks at work, and a lack of a sense of belonging, culture and inclusivity across and within campuses, were frequently expressed sentiments. These concerns showed up in the data as high levels of stress, anxiety and burnout experienced across all campus constituents. The issues related to health and well-being cut across all aspects of a campus community and deserve a unified and holistic strategy to maximize resources, expertise and impact. In addition, our faculty, staff and student populations each have unique needs, and sub-groups with unique needs, making for a complex campus community. We know that if
we plan for the needs of the most marginalized, we will support the needs of the majority, which is encapsulated in the principles of EDI (9).

While campus constituents understand that there are efforts being made to improve health and well-being across the campus, they may not all see or experience the impact, or understand how to implement new initiatives. A dedicated strategic plan allows for documented commitments, accountabilities, timelines and measurements. If we are serious about supporting the health and well-being of our campus community, then this needs to be clearly articulated within the strategic plan, adequately resourced and communicated to all stakeholders at all levels of the institution. Clear and appropriate accountability targets and measurement practices must be developed because we all know that what gets measured matters. If we are to foster an environment across campuses that encourages students, staff and faculty to seek and receive help without fear of judgement or repercussion, we need to create the conditions for this to happen.

As previously described, we have identified the literature review of the Student Affairs team in 2017 as an important jumping off point for future action to support campus health and well-being at Dalhousie (25). The central message of this review was that Dalhousie adopt a whole systems approach to embedding health and well-being into the core functions of the University. The challenge for Dalhousie is to commit to creating an environment on campus that embraces health and well-being, one that genuinely moves beyond talking about a healthy environment to actually implementing, resourcing and supporting models predicated on improving the health and well-being of our communities. We heard loud and clear that there is a lack of clear value placed on health and well-being at the University – the past strategic plans have paid little attention to this, messaging is focused around fixing a health problem (e.g., accessing health services, EFAP programs) for an individual rather than promoting an environment that supports health and well-being more holistically and in an upstream way. While there are pockets of activity to support health and well-being across the campus, there is no sense that there is comprehensive attention to health and well-being as a core function or explicit value of the University. One-in-four students report feeling like Dalhousie does not have a sincere interest in their wellbeing and one-third of students feel the campus does not support their mental health; students in marginalized groups feel even less supported (see Figure 7). Students, faculty and staff comment on their lack of awareness of available supports and resources, that messaging related to health and well-being is absent or sporadic. Repeatedly, Self-Study Team members referenced a need for greater investment in leadership, direction, programming and staffing levels to drive and support the campus health and well-being and facilitate change. Similarly, while Dalhousie promotes, for example, a work/life balance (as per job advertisements), the reality is quite different, with many in our collective communities experiencing high workloads and demands that detract from health and well-being. This is demonstrated through increasing rates of mental health concerns among students and employees, along with concerns over stress and burnout that we heard across all areas of the University, and that are noted in data points provided above.
2. Lack of adherence to policies promoting health and well-being

Related to the first critical challenge, the lack of strategic focus on campus health and well-being was evident through a lack of adherence to policies that promote health and well-being is the second critical challenge identified. Below are three examples of policies that have been introduced within Dalhousie that impact health and well-being but that were seen to have limited implementation or adherence:

a) Student accommodation policy in classrooms. There is inconsistency between and within Faculties in support for the student accommodation policy in classrooms. There is inconsistency between and within faculties in support of student privacy obligations. We heard concerns from students that some faculty do not adhere to these policies and openly state that if students require accommodations or leaves of absence, they may need to consider a different program of study. We also heard of some programs questioning students’ professional suitability due to their need for accommodation – a clear disconnect with an employer’s duty to accommodate. Perhaps it is a philosophical difference of whether accommodation is perceived to help or hinder, is equitable or gives the recipient of accommodation an unfair advantage. There are also the practical components and/or awareness of our respective obligations around how accommodation can work for the individual. Students and staff are often told they have the right to seek accommodations for
health-related challenges, but yet are not then supported; sometimes being ostracized for doing so. There are some faculty who embrace universal design principles but balk when accommodations are still required. Without universal design principles being applied alongside a formal accountability structure, the classroom experience is one where the mental health and well-being of students is impacted and increasing rates of anxiety are reported (44).

b) The Student Declaration of Absence form: This form was approved for use by Senate in September 2017 for implementation in January 2018 (45). Currently, only a limited number of faculty accept the student declaration of absence form (or a similar faculty-specific version of this process), and there is no accountability structure for those who do not. Students have shared in consultations that without universal adherence to using the declaration of absence forms to support short-term absences, there is a sense of confusion, misunderstanding and feelings of mistrust between students and faculty. In other words, a document that was released with the intention to support students in their experience is, in some cases, creating further stress for the student.

c) No smoking policy. Although Dalhousie was the first university in Canada to introduce a ‘No Smoking Policy’ on September 1, 2003, with support from more than 82% of campus community members that responded to a survey on this issue and to accolades from a number of organizations (46), there is no accountability structure in place to enforce it. Smoking (and more recently vaping), is evident across campus through the number of cigarette butts littering sidewalks, exemplifying the issue of policies to support health and well-being lacking total buy-in, and without enforcement, failing in their purpose.

Thus, alongside a clear strategic plan that explicitly states a commitment to the health and well-being of campus constituents, there also needs to be a clearly articulated strategy for communication and greater accountability to ensure that policies are adhered to across all levels of the institution.

3. Pervasive poverty and financial stress
The first of the United Nations SDGs is ‘no poverty’, the second is ‘zero hunger’, and the third is ‘good health and well-being’ (8). Throughout our consultations, we consistently heard the need to build capacity for those experiencing financial hardships such as poverty, debt, and wage variability across employee groups, and among the student population.

Our students are concerned about their financial situation with three-quarters of Dalhousie students reporting that financial pressures pose an obstacle to their academic progress (Figures 8 and 9). Financial pressures and work obligations was the most frequently cited obstacle to academic progress for first- and fourth-year Dalhousie students. Of those with debt, our graduating students report an average of $33,060 in debt, as compared to $26,702 for our Canadian comparators (C USC 2018).
We also heard financial concerns from staff and faculty. For example, 33% of staff and 14% of faculty reported living paycheck to paycheck, while 24% of staff reported feeling confident that their personal emergency funds were sufficient, compared with 48% of faculty feeling confident in their emergency funds (39,40).

We heard concerns around food insecurity across campus constituents, an issue that has been identified among students across Canadian campuses, including Dalhousie (47). In a 2016 cross-campus study, 46% of Dalhousie student respondents were considered food insecure; the highest rate of food insecurity out of the five surveyed universities (46). Averaging across all five universities, African, Aboriginal, and Hispanic student respondents experienced the highest rates of food insecurity. Furthermore, Nova Scotia has one of the highest rates of food insecurity in the country, with 13% of households experiencing food insecurity (48) and so it is likely to be an issue among staff, as well as faculty in precarious employment, borne out by the personal narratives we heard in our consultations. We also heard about long lines at the Dalhousie Student Union Food Bank (DSUFB), suggesting that Dalhousie community members are seeking help and that the DSUFB is a potential opportunity that could be leveraged to assist food insecure Dalhousie communities.

The challenge for the institution is to recognize and respond to opportunities to intervene in the experience of those who may be marginalized due to inadequate levels of income. Our goal should be to take a proactive approach to promoting financial and food security on campus and asking hard questions about who the institution recognizes, celebrates and awards funding or financial aid to. The COVID 19 pandemic highlights the importance of those employee groups that are essential to the everyday operations of Dalhousie, such as facilities staff, temporary and part-time workers and unionized employees. It is often these
employees who are paid the least and who may not have access to the same array or depth of employee benefits (an estimated two thirds of employees at Dalhousie). Dalhousie can become a community leader by using the power of the institution to be an example by promoting health and well-being through removing low-income barriers and ensuring all members of the community receive a living wage, have access to leisure and physical activity spaces, access to childcare, access to a family physician and access to sick leave benefits.

4. An environment that undermines health and well-being

The physical and social environments in which we spend the majority of our daily lives can impact health and well-being more than health behaviours, health care or genetics (49). The intricate environment of Dalhousie and the surrounding community is inseparable from the experiences of health and illness for students, staff and faculty. The historic setting of the Dalhousie community creates a challenge to the development of spaces that promote and improve health and well-being (50). Discussions emerged in our consultations that highlight the unique experience of staff, faculty and students with barriers to well-being that are perpetuated within physical and social environments. Examples of how our built environment does not support health include lack of sidewalks and buildings that do not meet standards of accessibility for all, and classrooms or buildings that lack natural light, appropriate furniture and fixtures, or good ventilation.
With respect to the social environment, our consultations revealed a pervasive undercurrent of racism and colonial structures that threaten progress in embedding EDI principles across the institution. This was expressed as a sense of disconnect between the articulated importance of EDI and what is happening “on the ground.” For example, faculty and staff from historically under-represented communities spoke of being “tapped out” by the need to continuously be the ones to represent the voices of underrepresented groups or of “trying to dodge a bullet” when racism and oppression was expressed towards them. There was recognition that changes had already taken place, such as the hiring of a dedicated Vice-Provost for equity and inclusion, Dr. Theresa Rajack-Talley. However, there was also a sense that, while this is an important step forward, there also needs to be additional investment in this critical issue, given the known impact of inequities on health and well-being (10). We must look to design well-being initiatives that address health disparities, particularly among underrepresented or marginalized groups if we wish to champion equity, diversity and inclusion (51).

Shifting colonial campus attitudes and culture to one of equity and inclusivity means designing culturally relevant and safe health and well-being programs and services that appropriately consider all segments of our population (e.g. international students, marginalized populations, students with accessibility considerations, graduate students, populations of faculty and staff by demographic or employee group) (see Figure 7). It also means recognizing that there is variability in access to supports based on employee group (e.g. non tri-council and international student access to parental leave, sessional positions and health benefits, etc.).

The goal would be to apply a settings approach to the development of the physical and social environments to ensure that the design of places and spaces promotes and facilitates health and well-being and that the campus culture and climate supports the community to thrive. With the current campus master plan document due for renewal in 2020, the time is therefore right to ensure key aspects of health and well-being, alongside sustainability, are embedded in the next version of the master plan to guide future investments in Dalhousie’s physical infrastructure (52). We anticipate that the work of the campus culture and climate self-study team will intersect with this critical challenge and reinforce the need for changes in the campus social environment.

5. Lack of health literacy, collaborative programming and support for individuals

Achieving and maintaining optimal health requires knowledge of health promoting behaviours, awareness of available programs and supports, value placed on choosing those behaviours and an environment that encourages health-promoting choices. However, our consultations revealed a patchwork of health-promoting initiatives that were variably and disjointedly available or accessible to campus constituents. Increasing health knowledge and self-management skills, elevating our community members’ ability to prevent and cope with health issues, and ensuring students, faculty and staff are supported in making positive choices will improve the engagement, success and connection of our community members and the health of our campus. The role of physical and mental health literacy, and the
awareness and availability of supports cannot be overstated in enhancing one’s ability to improve their individual health and the support for those around them.

Promoting behavioural change with respect to health and well-being does not necessarily require health services. Rather, programs and initiatives that faculty, staff and students are encouraged to participate in to strengthen their own health behaviours are needed. These could be strengthened by embedding health and well-being more explicitly in onboarding experiences for students as well as for faculty and staff. While health and mental health literacy offer important foundational content, initiatives to promote behavioural change through skill development are additionally necessary.

Beyond onboarding, Wellness/Well-being Committees require greater collaboration across the campus and enhanced presence and support on campus. Presently only 26% of faculty and 30% of staff report awareness of such committees in their departments and work areas (39,40). Opportunities for faculty to develop competencies in supporting students from a well-being perspective, both in their daily interactions as well as in their supervisory relationships and roles with students (especially with graduate students), are not systematically offered. These learning opportunities could be incentivized for faculty and could form part of graduate student certificate programs for their future post-graduate roles. Greater promotion of existing programs like Mental Health 101 (How to Respond to Students in Distress) along with other initiatives and online toolkits could assist faculty to strengthen competencies related to health and well-being so that they can integrate them into their courses and into their interactions with students. Developing and promoting clear protocols for responding to those needing support both during business hours and ‘after hours’/emergency situations are needed. Creating postvention protocols to deal with the aftermath of student death, suicide, or other campus disaster as well as crisis response protocols would be further helpful. Opportunities for debriefing and supports for individuals working on EDI, Mental Health, and sensitive subject matter are always beneficial. Making clear connections between faculty, staff and the students that are supported with these resources and services will demonstrate a holistic and collaborative approach to campus health and well-being.

One way to do this is to encourage employees to take part in health and well-being initiatives during work hours. However, from the data we reviewed, more than a third of faculty and staff report that there were health and well-being initiatives in the past year that interested them but that they were not able to attend (Janice MacInnis, personal communication). Additionally, the perception of support for well-being activities is particularly low for faculty, with just 27% agreeing that leadership in their Faculty/Department support well-being activities. It was also clear from the available data that many students and Dalhousie faculty and staff members would benefit from opportunities for improvement in their health behaviours. For example, levels of physical activity are sub-optimal for some campus constituents and our community is also not getting enough sleep, with 38% of staff and 28% of faculty report getting six hours or less of sleep per night (39). Students too are struggling with sleep; after stress (41.9%) and anxiety (34.6%), sleep is the third reported issue (29%) affecting Dalhousie students’ academic performance. In 2019 31.3% of Dalhousie students reported getting enough sleep to feel rested just once per week or less (32).
Well-being significantly derives from a sense of belonging and community. For students arriving from all corners of the globe and for new faculty and staff settling into careers here at Dalhousie, there are many ways that the University can foster a stronger sense of community and community caring and support. Inclusive experiences to engage our students, faculty and staff, to enhance collective gatherings and to add to a sense of identity could go far to contribute both to our community and to our well-being. Particular attention is required for students of our diverse campus population who may not perceive that safe options exist for them. Opportunities to carefully understand and assess their needs and to identify supports to encourage their help-seeking behaviours are essential.

There is also a need for better data on the health and well-being of different constituent groups at Dalhousie to ensure that the needs of diverse populations are considered in planning and embedded in the direction of the institution moving forward. Dalhousie must remain intentional in ensuring appropriate disaggregation of data related to health indicators. Programs, services and supports designed from aggregate data and evidence that are focused on the quantitative majority in our community may serve to widen health equity gaps. Disaggregation may also allow for more efficient use of our resources. Through enhancing our understanding of the health concerns across all our campus members, we can expect greater precision in advancing health outcomes.

Student Health and Wellness offers a significant host of student-focused services, supports and training programs that are delivered online and in-person to individuals and groups of students. Workplace Wellness continues to expand programming to support employee health and wellness. Athletics and Recreation offers facilities, programs and services that facilitate physical activity for our campus. Greater resourcing would allow for the addition of culturally safe and relevant supports and enhanced intentional collaboration in program design and delivery. Investing in centralized communication and marketing strategies to effectively disseminate these to the campus community would bring greater awareness to and reduce duplication of what is offered across the campus.

6. Missing links between research and practice

As an institution that trains a large number of future health professions, hosts the only Faculty of Medicine in the Maritimes, and conducts cutting edge, globally renowned health and medical research, our consultations revealed a knowledge-to-action gap between the research happening internally, and what happens in practice. For example, Dalhousie is home to several research centres and institutes that support the signature research cluster of Healthy People, Healthy Communities, Healthy Populations, and faculty conducting internationally renowned research that addresses pressing global challenges like Food Insecurity, and aspects of Culture, Society, Community Development. Examples include the Healthy Populations Institute (multi-faculty, regional scope), Beatrice Hunter Cancer Research Institute (multi-faculty, regional scope), Solutions for Kids in Pain (multi-faculty, national scope), Resilience Research Centre (Faculty of Health), to name just a few. Our researchers influence national and international policy and practice, but this wealth of knowledge and evidence does not necessarily influence practice within our own institution, and in some cases, flies under the radar with minimal, if any, institutional support for knowledge translation to effectively happen. Dalhousie’s challenge is to remove the silos
between research, knowledge uptake and service provision to make an accessible and convenient way to apply evidence-informed research into practice on our own doorstep. Building on the knowledge that exists within the institution on population health promotion guiding principles for Standards of Practice (Ethical Practice, Cultivating Well-Being and Student Success, and Community-Based Approach) will reduce the occurrence of population-level health-related issues and positively impact student retention, social safety net and academic success (53). Having health and well-being embedded in the strategic priorities of the institution will prove an apt tool to securing an environment in which students flourish. Cultivating a culture where we are proactive rather than reactive will positively impact the student experience, helping students to maintain a sense of well-being in every experience they have on campus (53). Dalhousie is in a position to be a leader in the upstream support for the ever-changing and diverse student, staff and faculty populations we have invited into the institution. All too often, there is much interest in building socio-ecological health promoting interventions into practice, yet lack of community participation leads to insufficient integration of these into practice and programming (54). Academic leadership is not only the responsibility of faculty; figure 10 illustrates a recently developed competency framework for population health that was created through a collaboration between faculty and staff from the Healthy Populations Institute (55), and there are likely a number of other similar examples that exist across campus.

Making the connection to upstream approaches for promoting health will also empower the front-line staff, who directly impact the student experience, to apply this progressive research for the development of programs and services. There is also room to incorporate health behaviour literacy and skill development into course curriculum to support students to become healthy learners. One could imagine a cross-cutting curriculum of wellness skills embedded into a variety of first year courses that form foundational experiences for the Dalhousie undergraduate student. The opportunities to enlist faculty and graduate students from health profession training programs to contribute to this well-being curriculum could serve to strengthen models of interprofessional education (IPE). Students could further develop both mental health literacy and resilience skills through greater promotion of programs like The Inquiring Mind-Post-Secondary, developed by the Mental Health Commission of Canada for which Dalhousie has certified trainers (56). Beyond general outreach offerings, this three-hour program could be integrated into every health profession training program. As well, opportunities to use the research expertise of faculty could fuel knowledge translation activities of their work.
Conclusions
The six critical challenges outlined above represent the current situation at Dalhousie with regards to campus health and well-being, as determined by the available data and the expertise and experience of a diverse cross-section of students, staff and faculty who participated in the Campus Health and Well-Being Self-Study Team. Although our mandate was to primarily to focus on generating these critical challenges, the team members also brainstormed a series of potential actions to address these challenges, representing the PLAN component of the MAP-IT framework. These suggested actions are presented in Appendix 5 and may be helpful to consider as the strategic planning process unfolds.

Based on our assessment, it is clear that focused efforts on the outer rings of the socio-ecological model will have the most impact on the health and well-being of campus constituents, while also addressing pressing concerns such as campus culture, EDI and the disturbing mental health challenges that are being observed on campuses across Canada. A campus that establishes supports for healthy behaviours also makes it easier for members to choose behaviours that lead to a healthy body, mind and life. While ultimately individuals will make their own daily choices, creating the conditions for healthy behaviours to be adopted and sustained sends a powerful message that health and well-being are valued across the institution. Addressing challenges from across the spectrum of the SEM will create the environment and conditions for a healthy campus through which we work, learn and thrive.

Reflecting back on the two calls to action of the Okanagan Charter - to embed health into all aspects of campus culture, across administration, operations and academic mandate and to lead health promotion action and collaboration locally and globally - it is evident that by planning, implementing and tracking efforts to address the identified challenges, we will show our commitment to creating and sustaining a truly healthy campus, joining the ranks of other institutions globally that have recognised this as a significant driver of student, staff and faculty well-being. Signing the charter and acknowledging its aspirations offers a goal-defined starting point for Dalhousie campus health and well-being. But signing the charter isn’t only symbolic; universities who adopt it must also commit to implement it fully, and to attach adequate resources for any impact to be realized.

Structures, systems and policies firmly rooted in a culture of care and connection, and fostering an environment of well-being should be a differentiator for Dalhousie, but instead we find ourselves falling behind the work of many Canadian campuses (57). To expand upon the words of the American College Health Association, “though staff [and, we would argue, students] may change, in a Healthy Campus Culture the institution continues operating with a systemic orientation to health and wellness” (58).

In order to collaboratively and effectively drive this critical work, it is imperative that the leadership, development, financial resources, implementation planning and measurement of a Healthy Campus strategy is identified as a priority in the next strategic plan for Dalhousie. Let us demonstrate our commitment to taking care of our greatest asset, our people, and let our actions related to health and well-being transcend our cohorts, communities and campuses, showing support for our students and ourselves.
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Appendix 1: Glossary of Terms

Adapted from: https://apps.who.int/iris/bitstream/handle/10665/64546/WHO_HPR_HEP_98.1.pdf?sequence=1

Campus: Represents the land and buildings of Dalhousie University, comprising the Agricultural Campus in Truro, and the Carleton, Sexton and Studley campuses in Halifax.

Determinants of Health: Represents the many factors that combine together to affect the health of individuals and communities. Includes factors such as income and social status, education, employment and working conditions, access to appropriate health services and physical environments.

Diversity: Consists of the conditions, expressions and experiences of different groups identified by age, education, sexual orientation, parental status/responsibility, immigration status, Indigenous status, religion, disability, language, race, place of origin, ethnicity, culture, socio-economic status and other attributes.

Equity: Means fairness; people of all identities being treated fairly. It means ensuring that the processes for allocating resources and decision-making are fair to all and do not discriminate on the basis of identity.

Gender: Refers to the socially constructed roles, behaviours, expressions and identities of girls, women, boys, men, and people with diverse gender identities. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society.

Health: Health is defined in the WHO constitution of 1948 as a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. It is a resource which permits people to lead an individually, socially and economically productive life and a positive concept emphasizing social and personal resources as well as physical capabilities.

Health promotion: The process of enabling people to increase control over, and to improve their health.

Inclusion: Creating an environment in which all people are respected equitably and have access to the same opportunities. Organizationally, inclusion requires the identification and removal of barriers (e.g., physical, procedural, visible, invisible, intentional, unintentional) that inhibit participation and contribution.

International Charter for Health Promoting Universities and Colleges: A Charter developed in collaboration with researchers, practitioners, administrators, students and policy makers from 45 countries representing both educational institutions and health organizations (including representatives from the World Health Organization (WHO), Pan American Health Organization (PAHO) and United Nations Educational Scientific and Cultural Organization
(UNESCO). Out of this came the Canadian Health Promoting Universities and Colleges Network.

**Intersectionality:** Recognition that inequities are never the result of single, distinct factors. Rather, they are the outcome of intersections of different social locations, power relations and experiences

**Mental health:** Refers to the state of a person’s psychological and emotional well-being.

**Okanagan Charter:** An International Charter for Health Promoting University and Colleges, calls on post-secondary schools to embed health into all aspects of campus culture and to lead health promotion action and collaboration locally and globally (23).

**Ottawa Charter:** Released in 1986, the Ottawa Charter identifies three basic strategies for health promotion. These are advocacy for health to create the essential conditions for health; enabling all people to achieve their full health potential; and mediating between the different interests in society in the pursuit of health. These strategies are supported by five priority action areas: Build healthy public policy; Create supportive environments for health; Strengthen community action for health; Develop personal skills, and Re-orient health services.

**Physical health:** The condition of your body, taking into consideration everything from the absence of disease to fitness level. Physical health is critical for overall well-being, and can be affected by diet, level of physical activity, and behaviours like smoking.

**Socio-ecological model:** The socioecological model (SEM) is a theory-based framework used to understand how individual behaviour is influenced by and influences the different environments of the social system. The SEM includes five different environmental levels that influence human behaviour including the individual (intrapersonal), interpersonal, organizational, community, and policy level.

**Sustainable Development Goals:** The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

**Sustainable development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It incorporates many elements, and all sectors, including the health sector.

**Upstream:** Upstream interventions and strategies focus on improving fundamental social and economic structures in order to decrease barriers and improve supports that allow people to achieve their full health potential.

**Well-being:** A multidimensional concept that encompasses physical health, social belonging, mental health, cognitive health, emotional health, economic prosperity, environmental health, cultural belonging and spirituality.
Appendix 2: 2017 Literature Review

Dalhousie University
Student Affairs

Literature Review
‘Healthy Campus’ Initiatives and Health Promoting Universities
I. INTRODUCTION

Post-secondary institutions serve as living, learning and working environments that have a significant opportunity to positively impact the health and wellbeing of students, staff and faculty members (Healthy Campus 2020, 2016). Over the past several years, there has been a shift amongst Canadian universities and colleges to move beyond addressing individual health issues and instead moving towards frameworks that place the institution at the center of student and staff wellbeing (Klein, 2015).

Universities that integrate health into all aspects of operations, business practices and academic life enhance the success of the institution, and create campus communities that prioritize the health of its members (Okanagan Charter, 2015, p.2). Investing in health at universities introduces further advantages to core university operations; including improvements to student and staff recruitment, experience, productivity and retention (Dooris & Doherty, 2010, p. 11). At Dalhousie University, there is a desire to implement a ‘Healthy Campus’ strategy to enable students, staff and faculty to access the tools needed to fulfill both their current and future potential.

The purpose of this literature review is to document best and emerging evidence in the area of healthy campuses and campus health promotion. Research from the peer reviewed literature, along with best practices from the practice and grey literature was considered. From this review, several promising models for a healthy campus have been identified, along with other key areas of focus including, strategies for implementation, organizational culture and leadership, the role of physical environments, and involvement of the campus community.

II. CONTEXT

Already, Dalhousie has a wide range of health and wellness offerings available to students, staff and faculty. The University is looking to identify areas of opportunity within current program and service offerings, and effectively communicate the range of services and supports already available, including off-campus resources.

Data reported from the 2016 National College Health Assessment (NCHA) identified several health concerns for the student population at Dalhousie, including anxiety, depression and high-risk alcohol use. Binge drinking, which is defined in the survey as five or more drinks in one sitting, one or more times in the last two weeks, is significantly more prevalent at Dalhousie compared to the Canadian Reference Group (CRG), with 32.1% and 26.0% reporting these behaviours. In addition to this, 20.1% of Dalhousie students reported that depression impacted their academic performance in the last 12 months (up 5.4% from 2013), while 33.4% of students reported that anxiety impacted their academic performance in the last 12 months (up 8.0% from 2013). Anxiety was ranked as the second greatest factor negatively impacting student performance while depression ranks as the fourth greatest reason (NCHA). These factors were only preceded by stress (40.2%) and sleep difficulties (26.1%), which can be associated with both depression and anxiety.

Meanwhile, there is also a desire to advance the conversation about the connection between health and job performance. The Work Well report from the Dalhousie University Wellness Strategy Team (WST) acts on the results of the Quality of Work Life Survey and has developed a strategic focus on workplace health. The report focused on improving all aspects of faculty and staff members’ wellbeing, including physical, mental, spiritual and financial health. While results show that a majority of Dalhousie employees take pride in and enjoy their work (87% of respondents), Dalhousie’s overall group results fall in the ‘Moderate Concern’ category of the Total Health Index score (QWL Summary, 2015). Similar to students, Dalhousie employees also report mental health concerns, specifically depression (17% report depression), sleep difficulties (41% report less than 7 hours of sleep daily), and workplace stress (42%). Dalhousie employees also identified chronic pain (1 in 4 employees come to work in pain) and financial concerns as major areas affecting their work-
Student and employee health assessments identify areas where joint action across the institution can be taken; specifically with mental health, including stress, sleep difficulties and the impact of on student and employee success. This literature review will identify several strategies to address these identified health concerns using a ‘whole-systems’, healthy campus approach.

The ‘Healthy Campus’ initiative aligns with Dalhousie’s stated institutional strategic priorities to strengthen retention and degree completion, student experience and support, attract, support and reward exemplary faculty and staff, and foster a collegial culture grounded in diversity and inclusiveness (1.1, 1.3, 5.1, 5.2), and with Student Affairs’ strategic objective to develop a student health and wellness framework to underpin strategies on mental health education and support, campus sexual violence prevention and response, hazing prevention and alcohol harm reduction (1ii(e)).

III. DEFINITION

In their systematic review on the implementation of healthy university initiatives, Suarez-Reyes & Van den Broucke (2016) reports that across the selected studies, a health promoting university was defined as an institution that: “provides a supportive environment for health; integrates health in their educational program; protects health and promotes the wellbeing of all community members through healthy policies” (Suarez-Reyes & Van den Broucke, 2016, p.50).

Both the Edmonton and Okanagan Charters importantly add that universities must take action and accept responsibility by looking internally at their own processes, set priorities and build multilevel commitments to action (Edmonton Charter, 2006; Okanagan Charter, 2015). To achieve change and positive results, universities that adopt a ‘Healthy Campus’ approach must remain accountable to their commitments and take a strong leadership role in driving these initiatives.

The objectives of a Health Promoting University are:

- To promote healthy and sustainable policies and planning throughout the university
- To provide a healthy working environment
- To support the healthy personal and social development of the persons involved
- To establish and improve primary health care
- To ensure a healthy and sustainable physical environment
- To encourage wider academic interest and developments in health promotion
- To develop links with the community (Tsouros et al., 1998; Suarez-Reyes & Van den Broucke, 2016, p. 47).

IV. ‘HEALTHY CAMPUS’ FRAMEWORK

The ‘Healthy Campus’ is a health promoting framework that can trace its origins to the Ottawa Charter for Health Promotion (1986) which established that health and wellbeing can be directly attributed to the settings where people learn and work (Cawood, 2010, p. 259). The ‘Healthy Campus’ takes a similar approach as other ‘ecological, whole-system’ initiatives such as Healthy Cities, Health Promoting Hospitals and Health Promoting Schools. It has evolved over the past decades through key movements in health promotion, such as the International Conference on Health Promoting Universities (1996); the publication of the guidelines for establishing Health Promoting Universities by WHO-Euro (1998), the Edmonton Charter for Health Promoting Universities (2006) (Suarez-Reyes & Van den Broucke, 2016, p. 47), and more recently, the Okanagan Charter: An International Charter for Health Promoting Universities and Colleges (2015), a product of the 2015 International Conference on Health Promoting Universities and Colleges.
The Healthy Campus framework has been adapted from the settings or whole-systems perspectives:

**Health Promotion Settings Approach**

Though the Healthy Cities initiative is the most recognizable example of the Healthy Settings approach, the Health Promoting Universities is considered an integral part of the wider Healthy Settings movement (World Health Organization, 2017). Universities represent a key application of the health promotion settings approach (Newton, 2015, p. 58) and offer significant potential to promote health and wellbeing. Ultimately, the goal is to prevent negative health impacts across the whole university system by “integrating processes and structures within the university’s culture [that are] supportive of a commitment to health and health promotion” (World Health Organization, 2017).

Historically, post-secondary institutions have delivered programming on priority issues for specific populations on topics like substance use and mental health. More recently, universities have been leveraging their potential to influence internally and externally, and are moving from a single-topic programming focus to develop a holistic strategy for the ‘whole-university’ (Cawood, 2010, p. 259). This includes a strengthened focus on staff and faculty wellbeing indicated by a growing policy focus on workplace health.

Influenced by socio-ecological theories of health promotion, much of the literature on ‘Healthy Campuses’ discusses the importance of thinking of the university community as an integrated entity where all members understand the role they play in creating a healthy campus. For the post-secondary education sector, a whole-systems approach is centered on creating health-enhancing working, learning and living environments for all; increasing the profile of health and sustainable development in learning, research and knowledge exchange; and contributing to the health, wellbeing and sustainability of the wider community (Dooris, 2012; Newton, 2015, p. 63).

The ‘whole-systems’ approach is understood to connect distinct parts of the university system while working across different domains and engaging different stakeholder groups (Dooris & Doherty, 2010, p. 11). In practice, a ‘whole-systems’ approach at a university, for instance related to healthy eating, can result in several improvements, including: the provision of affordable and healthy food, clear and consistent food labeling, healthy eating skills, and increased knowledge of food and sustainability through research and teaching activities (Dooris & Doherty, 2010, p. 12).

As such, the ‘Healthy Campus’ has the potential to enact change at multiple levels of the university, and the approach is appealing amongst universities worldwide. Although universities take on this commitment to health, many struggle to comply with all principles and objectives of a truly health promoting university. Implementation and evaluation of the ‘whole-systems’ approach to campus health and wellness remains poorly documented and requires ongoing investigation (Suarez-Reyes & Van den Broucke, 2016, p.47).

**IV. APPROACH AND METHODOLOGY**

A structured approach was used to identify the source materials selected for this review. The peer-reviewed literature was the main source of information and data. However, grey literature describing ‘Healthy Campus’ models and frameworks were located and included in this review.

Searches for peer-reviewed journal articles were conducted using the Dalhousie University online databases (Novanet advanced search). References from the peer-reviewed articles were reviewed to ensure journal articles that may have been missed in the online search were included. This was followed by additional web searches to compile practice information. The terms ‘healthy campus’, ‘healthy university’ and ‘health promoting universities’ were used to search the literature as they are often used interchangeably throughout the literature on the ‘Healthy Campus’ movement.
The resulting literature included 16 peer reviewed journal articles and 7 practice-related documents.

V. FINDINGS

The literature reviewed in this report illustrates the accumulated evidence of adopting a ‘Healthy Campus’ model at post-secondary institutions. Key considerations for implementing the ‘Healthy Campus’ approach have been summarized across the following categories:

A. Evidence-informed models
B. Coordination and implementation
C. Organizational culture
D. Physical environment
E. Community involvement

A. Evidence Informed Models

‘Healthy Campus’ initiatives have been implemented around the world; national and multi-national networks have been established in the United Kingdom (UK Healthy Universities Network), Latin America (Ibero-American Network of Health Promoting Universities) and the United States (Healthy Campus 2020). Other countries such as Spain, Germany, China and Thailand have also developed actions on health promoting universities (Suarez-Reyes, 2015, p. 53).

In Canada, Healthy Minds | Healthy Campuses leads national discussions on healthy campuses, including co-hosting the 2015 International Conference on Health Promoting Universities and Colleges, culminating in the Okanagan Charter. However, many Canadian post-secondary institutions drive their own institutional ‘Healthy Campus’ strategies. There are a number of models that can be used to drive Dalhousie’s ‘Healthy Campus’ Initiative, most notably the American College Health Association’s Healthy Campus 2020, an evidence-based toolkit for implementing healthy campus initiatives on university campuses.

Okanagan Charter: An International Charter for Health Promoting Universities and Colleges

The Okanagan Charter summarizes health-promoting universities as institutions that “infuse health into everyday operations, business practices and academic mandates…enhance[ing] the success of our institutions; create[ing] campus cultures of compassion, well-being, equity and social justice; improve[ing] the health of the people who live, learn, work, play and love on our campuses; and strengthen[ing] the ecological, social and economic sustainability of our communities and wider society” (Okanagan Charter, 2015). As of November 2016, six post-secondary institutions in Canada had formally adopted the Okanagan Charter².

The Okanagan Charter identifies key action areas and tasks higher education leaders with bringing the framework back to their own institutions. It was developed by a total of over 600 stakeholders from 45 countries and proposes an approach that is “multi-layered, flexible and localized” (Waterworth & Thorpe, 2017, p. 49). It is centered around two key action areas and principles:

- Call to Action 1: Embed health into all aspects of campus culture, across the administration, operations and academic mandates
  - Embed health in all campus policies
  - Create supportive campus environments

² Simon Fraser University, the University of British Columbia, University of Calgary, University of Lethbridge, Mount Royal University and Memorial University (Healthy Minds/Healthy Campuses, 2016).
- **Call to Action 2:** Lead health promotion action and collaboration locally and globally
  - Integrate health, well-being and sustainability in multiple disciplines to develop change agents
  - Advance research, teaching and training for health promotion knowledge and action
  - Lead and partner towards local and global action for health promotion

The Charter proposes guiding principles on how to mobilize systemic action on campuses, ranging from the use of settings and whole systems approaches, to valuing local and indigenous communities’ contexts and priorities (Okanagan Charter, 2015, p.9-10). The principles of the Charter are “intentionally vague…to accommodate the range of institutions that have adopted it, as well as those that might one day sign on” (University Affairs, 2016). Arguably, the Okanagan Charter might be better imagined as a document that guides and advocates for the formal adoption of health promotion in higher education, rather than a model for action. It calls on post-secondary institutions to make a systemic commitment to health, but does not necessarily propose a road-map for doing so. As Thorpe writes, “the Okanagan Charter is viewed as a useful and flexible framework to further develop strategic planning, coordination and integration in tertiary settings” (Waterworth & Thorpe, 2017, p. 59).

**Healthy Campus 2020**

Healthy Campus 2020 is the product of a multiyear consultation and research process, culminating in the development of a toolkit to support universities and colleges in implementing healthy campus initiatives. The framework goes beyond the Okanagan Charter by proposing pathways and providing resources for campus partners implementing healthy campus initiatives. Healthy Campus 2020 outlines a number of success factors, including:

1. Create a comprehensive, strategic framework that unites health issues under a single umbrella and aligns with the mission and values of institutions of higher education.
2. Requires tracking of data-driven outcomes to monitor progress and to motivate, guide and focus action.
3. Engages a network of multidisciplinary, multisectoral stakeholders at all levels.
4. Guides research, program planning, and policy efforts to promote health and prevent disease.
5. Utilizes population-level intervention, while addressing the social determinants of health (Healthy Campus 2020, 2016).

Healthy Campus 2020 has developed the **Action Model to Achieve a Healthy Campus** to implement initiatives. It is an evidence-based approach that addresses the “determinants and ecological nature of health in campus communities and promotes the importance of implementing interventions that address health at multiple levels, including individual-level interventions and changing social environments, physical environments and policies on university campuses” (Healthy Campus 2020, 2016).

The framework, known as **MAP-IT (Mobilize, Assess, Plan, Implement, Track)**, is a multi-level; step-by-step tool used to plan and evaluate interventions and is summarized below:
Action Model to Achieve a Healthy Campus – ACHA Healthy Campus 2020

Ecological approach addressing determinants of health to improve student, faculty, and staff health.

The tool includes a number of steps with suggested resources and tools that can be used along the way to achieve the desired change in a community:

It is important to emphasize, the tool is an ecological model impacting various levels of campus life, from individual behaviours to policy change. It advocates an ecological approach to student health and uses a 1998 model from McLeroy, Bibeau, Steckler, and Glanz (American College Health Association 2015a) to articulate the relationships between and the ways in which health is affected by intrapersonal, interpersonal, institutional, community, and policy-level factors (DeClercq, 2016, p. 89).

B. Coordination and Implementation

Implementing a ‘Healthy Campus’ initiative requires a high level of commitment and leadership, especially from senior administration of the institution, the steering committee established to guide the work and a range of other stakeholders from across the university (Newton, 2015, p. 60). In a European study, it was found that faculties from the health professions often coordinated ‘Healthy Campus’ initiatives, introducing the challenge of disseminating the initiative throughout the university, and convincing senior administration to take leadership on health promotion efforts (Suarez-Reyes & Van den Broucke, 2016, p. 54).

The work cannot be left to one area of the university community, and should instead be understood to be part of the university’s core business. This requires a top-down commitment from senior administration that is met with bottom-up action from the university community (Ibid, p. 54). Health and wellbeing must be recognized as values that the institution commits to in strategic plans, and linking to other core agendas (Newton, 2015, p. 60). For instance, the Healthy Campus Community Initiative at Simon Fraser University explicitly states its alignment with the University’s strategic vision, its academic plan and other provincial and national initiatives (Simon Fraser University Healthy Campus Community Initiative, 2017).

The structure and organization of universities can also introduce challenges in implementing successful ‘Healthy Campus’ initiatives. Universities seen as complex and large in scale can lead to a
sense of fragmentation, disconnection and isolation (Newton, 2015, p. 61) resulting in students, staff and faculty feeling powerless in their ability to enact change. The university must solicit meaningful participation from all areas of the institution by introducing effective two-way communication (Ibid, p. 61) that is accessible to all.

Going forward at Dalhousie, it will be critical to engage a diverse stakeholder group in the planning, implementation and evaluation of a ‘Healthy Campus’ initiative to ensure adoption across the institution. The foundations of this have been articulated in the Work Well Strategy, with the establishment of the Healthy Workplace Collaborative, Wellness Committees, Wellness Experts and Wellness Champions to guide the implementation of the Workplace Wellness Strategic Focus.

C. Organizational Culture

A ‘Healthy Campus’ requires university leadership to think beyond simplistic understandings of health as an individual’s own responsibility and distinct from the corporate goals and values of the institution (Newton, 2015, p. 62). Instead, it must be understood as a factor impacting productivity and performance and regarded by leadership as key contributors to the vitality and core business for the university.

For staff and faculty, success and performance cannot be achieved at the expense of health, and instead be recognized as instrumental to institutional success (Ibid, p. 62). For students, post-secondary education is often perceived as a major emotional stressor and a “stress-soaked atmosphere…poisonous to learning, judgment, and adaptive functioning – and to the physical and mental health of individuals and organizations” (Klein, 2015, p. 9; Stixrud, 2012, p. 135).

For students, and staff and faculty, these negative perceptions can be attributed to a hierarchical top-down organization. Insufficient investment in initiatives to enhance health and wellbeing, and lack of attention to detail relating to processes and practices that impact student and staff experiences are perceived as ways which organizations are unsupportive and unengaged with the wider university community (Newton et al, 2015, p. 62).

Organizational culture is a factor not to be ignored when considering a ‘Healthy Campus’ approach. In their study exploring stakeholder perceptions of the ‘Healthy Campus’, Newton et al. discovered the strong influence of the organizational context on student and employee health and wellness. They advocate for a ‘human effect’ of organizational change (Ibid, p. 63) that is sensitive and planned to minimize any negative impacts. Alongside this, health must be introduced as a key criterion in all policy development and institutional decision-making (Tsouros, 1998, p. 28; Grossman and Scala) to establish the foundation for health across all areas of the university.

D. Physical Environment

Across the literature, the physical infrastructure of a university campus is seen as a key recommendation for ‘Healthy Campus’ planning. Providing access to green spaces is noted as a major factor that is associated with stress reduction, promoting mental and spiritual health, and increasing social capital by attracting a range of users (DeClerq, 2016, p. 92; Bell and Dyment 2008). Aside from outdoor green spaces, built learning and working environments that are clean, comfortable and accessible can influence behaviours, mood and overall health (Newton, 2015, p. 61; DeClerq, 2016, p. 92).

Knowing this, a ‘Healthy Campus’ initiative must incorporate mindful campus design and incorporate factors that are important for creating a health-promoting campus environment. According to Hamblet (2016), the following factors should be considered:

- Social interaction
- Familiar environment
- Physical activity
- Meditation/relaxation
- Nature contact
- Safety
- Healthy diet

With this in mind, Dalhousie should consider conducting an audit of physical spaces alongside an audit of health and wellness programs and services. This may assist in identifying areas on campus which students, staff and faculty report as important or impactful on their health and wellbeing.

E. Community Involvement:

As it has been mentioned throughout this review, the success of a ‘Healthy Campus’ initiative is highly dependent on the authentic engagement of the campus community. Staff, students and faculty may have differing motivations for seeking involvement in ‘Healthy Campus’ planning, but by providing a platform to address these diverse concerns, engagement across the university will be maximized (Freudenberg, 2013, p. 427).

Yet, mobilizing diverse groups within the university community in planning and implementing ‘Healthy Campus’ initiatives first requires assessment tools to identify priorities. For example, needs assessments bring forward concerns to university administration as a first step in taking action to promote health and wellbeing (Freudenberg, 2013, p. 427). Moreover, feedback and consultation from diverse groups is critical for meaningful participation on campus and should be delivered using participatory and inclusive approaches (Waterworth & Thorpe, 2017, p. 53). Participation is especially needed from groups that may experience additional challenges (e.g., people with disabilities, LGBTQ, international students, Aboriginal and racialized individuals), as well as students from both undergraduate and graduate disciplines and staff and faculty members across all divisions (Ibid, 53).

Involvement of students, staff and faculty in the implementation of ‘Healthy Campus’ initiatives ensures credibility and acceptability amongst the broader university community (Suarez-Reyes & Vand den Broucke, 2016, p. 52). When possible, peer-to-peer models that have support from management and senior leadership should lead ‘Healthy Campus’ programming.

VI. CHALLENGES & IMPLICATIONATIONS

The ‘Healthy University’ model provides a potentially valuable vehicle to influence health and wellbeing at Dalhousie. The literature clearly notes the potential for ‘whole-campus’ approaches to health to enhance staff performance and productivity, student success, and the overall leadership capability of the University (Cawood, 2010, p. 260; Newton, 2015, p. 62).

Nonetheless, challenges with this approach exist. Firstly, the approach remains under-studied and under-evaluated, with a tendency to measure individual projects or actions rather than the ‘whole-system’ approach (Newton, 2016, Dooris 2005). This fails to capture the ‘value added’ by these models, in particular how positive health and wellbeing impacts the core business of a post-secondary institution.

The lack of evaluation on complex cultural changes to the campus community may increase difficulties in prioritizing health in the higher education sector (Knight & La Placa, 2013, p. 42). Going forward, Dalhousie must consider an evaluation strategy that is flexible and can adapt to the evolving nature of the ‘Healthy Campus’ initiative. Simon Fraser University’s adoption of a developmental evaluation framework to measure the success of their Healthy Campus Community Initiative, as well as adding questions related to ‘Healthy Campus’ work to existing surveys should be considered as an approach to follow.
Finally, consideration must be given to the development of a ‘Healthy Campus’ policy. Developing a policy provides a basis for all subsequent actions and ensures the long-term sustainability of the initiative. A policy, or reference to a ‘Healthy Campus’ in institutional strategies, ensures the institution commits to being a health promoting university, rather than one that simply develops health promotion activities (Suarez-Reyes, 2016).

VII. NEXT STEPS

Adopting a ‘Healthy Campus’ approach can improve student achievement and employee productivity, and is the strongest rationale for university support for innovative ‘whole-systems’ approaches to health and wellness (Freudenberg, 2013, p. 427). Universities now reach a broad spectrum of young people, and employ a diverse workforce, including those who face multiple inequalities, making them an important setting for addressing health (Okanagan Charter, 2015; Edmonton Charter, 2006; Freudenberg, 2013, p. 422). Higher education institutions must incorporate the Okanagan Charter’s call to leverage:

[The] unique opportunity and responsibility to provide transformative education… generate, share and implement knowledge and research findings to enhance health of citizens and communities both now and in the future…to incorporate health promotion values and principles in their mission, vision and strategic plans, and model and test approaches for the wider community and society (Okanagan Charter, 2015, p. 5).

Following the evidence gained from the review of the literature, and existing work already underway at the University, Dalhousie is in a position to move towards a ‘whole-system’ approach to campus health. Key considerations include providing multiple opportunities for staff, student and faculty involvement, attention to mindful campus design and the impact of organizational culture. The development of a ‘Healthy Campus’ initiative should be guided by the evidence-based tools and resources referenced in this review.

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Appendix 3: Self-Study Team Contributors

**Co-Chairs:** Dr. Sara Kirk, Healthy Populations Institute and Faculty of Health and Krista Cross, Student Health and Wellness  
**Executive Sponsor:** Jasmine Walsh, AVP Human Resources  
**Resource:** Dr. Brenda Merritt, Dean, Faculty of Health and Verity Turpin, AVP Student Affairs

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1. Emily Jago, Research Manager for the Food Policy Lab, Faculty of Health (chair)  
2. Calvino Cheng, Pathology  
3. Tereigh Ewert-Bauer, CLT  
4. Dr. Heidi Lauckner, OT, Faculty of Health  
5. Janice MacInnis, Human Resources  
6. Marcus Orr, Facilities Management

**Service Provision**
1. Jonnie-Lyn Baron, Manager, Student Health Promotion (chair)  
2. Laura Flick, Sexton Campus student - President, Jack.org Dal Eng  
3. Heather Frausell, Management  
4. Fern Kaufman, Awards & Financial Aid  
5. David Pilon, Director, Counselling & Psychological Services  
6. Tanaka Shumba, Former peer support worker; Stay Connected project  
7. Justin Snow, Disability Management Consultant  
8. Keisha Turner, Student Success Advisor

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3. Calvino Cheng, Pathology  
4. Dr. Shannon Johnson, Psychology & Neuroscience  
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3. Dawn Pickering, Coordinator Clinical Vision Science Program  
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3. Heather Elliot, Computer Science  
4. Les Johnson, CLT  
5. Ken MacDermid, Employee benefits  
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9. Joshua Yusuf, HPRO student

**Data resource self-study:**  
Krystal Caldwell, Dal Analytics

**Other Dalhousie constituents who contributed at various sessions or provided input:**
1. Nicole Blinn, HPRO student  
2. Laura Hynes-Jenkins, Government Relations  
3. Orla McDevitt, Accessible employment  
4. Meghan Rossi, student  
5. Anna Graham Demello, Healthy, Evaluation Coordinator, Populations Institute  
6. Hannah Flaherty, HPRO student
## Appendix 4: Stakeholder consultations

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting/Event</th>
<th>Purpose of Meeting/Event</th>
<th>Attendees</th>
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| September 17, 2019 | Fall Retreat                                       | - Kick off for Phase 3 (Self-Study)  
- Updates from Learning Circles  
- Emerging priority areas explored  
- Introduction to Self-Study concept | Interim President Teri Balser  
Planning & Analytics Team  
Open invitation to University community |
| October 9, 2019    | Self-Study Co-Leads Brief with Interim President   | - Kick off for Self-Study Teams  
- Overview of project timelines and expectations | Interim President Teri Balser  
Planning & Analytics Team  
Self-Study Co-Leads |
| October 16, 2019   | Senior Leadership Retreat                          | - Introduction to Self-Study themes and co-leads to senior leadership  
- Opportunity for senior leadership to provide input into the scope and key questions for each self-study team | Interim President Teri Balser  
Dalhousie Senior Leadership Team  
Planning & Analytics Team  
Self-Study Co-Leads |
| November 6, 2019   | Associate Deans’ Academic Council (ADAC) Briefing  | - Overview of strategic planning process                                                | Susan Spence  
ADAC Members |
| November 25, 2019  | Senate Self-Study Presentations                    | - Overview of strategic planning process  
- Presentations by each Self-Study Team Co-Leads providing overview of theme  
- Questions & Answers from Senators | Interim President Teri Balser  
Dalhousie Senate members  
Self-Study Co-Leads |
| November 27, 2019  | Board of Governors Retreat                         | - Overview of strategic planning process  
- Opportunity for board members to provide input into the emerging strategic themes | Interim President Teri Balser  
Dalhousie Board of Governors  
Dalhousie Senior Leadership Team  
Planning & Analytics Team |
| December 11, 2019  | Briefing with AVPs and Operational Units           | - Overview of strategic planning process  
- Introduction to the self-study co-leads and themes  
- Overview of engagement plans for Strategic Renewal Phase 3 | Dalhousie AVPs  
Dalhousie operational unit leaders  
Planning & Analytics Team  
Self-Study Co-Leads |
| January 21-29, 2020| Self-Study Team Facilitated Sessions               | - Identifying Dalhousie’s current reality for each self-study theme                    | Self-Study Team Co-Leads and Members  
Planning & Analytics Team |
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| January 30, 2020      | Welcome Back Self-Study Workshop                                       | • Identifying critical challenges and trends facing each self-study theme     | • Provost Teri Balser  
• Self-Study Team Co-Leads and Members  
• Self-Study Executive Champions  
• Self-Study Resource People  
• Planning & Analytics Team |
| January-February, 2020 | Senate Think Tank Sessions and Senate Planning and Governance Committee (SPGC) Feedback Meeting | • Mapping critical challenges and trends on basis of need and impact to identify priority areas  
• Identifying critical needs and greatest opportunities for Dalhousie to address | • Provost Teri Balser  
• Dalhousie Senate members  
• Dalhousie SPGC members  
• Self-Study Co-Leads and Members  
• Planning & Analytics Team |
| March 3, 2020         | Black Faculty and Staff Caucus Self-Study Focus Group                 | • Opportunity for self-study team co-leads to engage with caucus members       | • Self-Study Co-Leads and Members  
• Planning & Analytics Team  
• Caucus members |
Appendix 5: Potential paths as we move to the PLAN phase of the MAP-IT framework, as identified by Self-Study Team members

POLICY LEVEL:
- Adopt the Okanagan Charter and embed health and well-being into the strategic plan for 2020 and beyond. In doing so, ensure that there are adequate resources allocated to support a strategic focus on campus health and well-being, and establish accountability structures and practices to monitor strategy and policy implementation.
- Establish a central organization (CO) team to establish the mechanisms to change the culture of health and well-being on campus; identify ‘who’ is leading us to address health issues on campus to support student and employee success; the CO functions to guide vision and strategy related to health and well-being, support aligned activities, established shared measurement practices, cultivate community organization and engagement, advance policies and mobilize resources (28) (e.g. an office of Campus Health and Well-Being and adequate resources). This may include the creation of a Well-Being Advisory Board with champions identified to implement plans and report on metrics by faculties and departments.
- Ensure that higher than minimum wage is provided for all on-campus jobs. Provide support for food banks and food programs (projectDal, Monday Night Meals, Loaded Ladle, DSU Market); have food vouchers available at Student Health and Wellness and/or other strategic areas where students seek support. Bursary Support; well-being bursary programs for faculty and staff in need of access to Dalplex facilities.

COMMUNITY LEVEL:
- Develop a mental health literacy strategy; connect with strong partnerships within and external to the university community emphasizing that the approach to enhancing mental health is about more than providing services, it is about equipping our community with the skills they need to live well and improve their health by creating environments that support them.
- Explore Faculty of Medicine (Department of Family Medicine) partnerships for offering primary care services to faculty, staff and dependents.
- Work with the provincial Department of Health and Wellness to determine how Dalhousie can contribute further to improving access to physicians for faculty/staff members and the community overall.
- Improved access to health care as a community leader, involving both upstream health promotion adaptation (Okanagan Charter) (17) and downstream access to acute care services for staff and faculty in addition to students.
- Lead health promotion action and collaboration locally and globally. Develop a health promoting network or community of practice for research and practices which connect, build, and promote relationships within and external to the university. This does not need to be something new but can be incorporated into existing infrastructure within Dalhousie through strategic infrastructure support. Embedding, promoting engagement, and creating a sense of value in putting...
research into practice by making it part of campus culture. Intentional, formal roles for connecting and integrating research and community of practice (ex. Community health navigator).

INSTITUTIONAL LEVEL:

- Develop a plan to review the design and development of physical and social campus spaces as they relate to health and well-being. Pay particular attention to EDI to ensure that all campus constituents can benefit from a healthy, supportive and equitable campus environment.
- Incorporate universal design principles into teaching spaces and encourage/ensure principles are implemented across campus. In particular, Universal Instructional Design should be an expectation within all areas of teaching and learning to foster inclusion. Curriculum and teaching committees should be established in each faculty to initiate discussions about the relationship between student stress and course curriculum and design.
- Focus on how the university positions well-being in alignment with teaching and learning priorities of the university in the strategic plan and how we measure success. This may include, for example, inclusion of information and resources in syllabi and common methods of linking to online information about health and well-being resources from faculty/departmental websites; inclusion of health and well-being information in viewbooks and recruitment materials.
- Diversity in hiring of Student Health and Wellness health care professionals so that they reflect the diverse communities of students they serve.
- Increase the visibility and consistency of branding, messaging and tools to implement healthy behaviours and preventative measures for communicable diseases (e.g., hand-sanitizing stations on campus) and non-communicable diseases (e.g., mandatory health and well-being resources in initial training and orientation for new students, staff and faculty to improve understanding of how to support yourself and others) and in the built environment (e.g., sharps containers and free menstrual products in all campus bathrooms).
- Consider health and well-being in all aspects of building design and/or refurbishment. Explore the implementation of WELL Certification in appropriate campus buildings (49).
- Consider ways that Interprofessional Education (IPE) can support team-based care as well as learning opportunities.
- Consideration of greater agility and flexibility for students - consider adopting flex days for students, wider acceptance of the student declaration of absence, four-year degrees taking five years, and other means for students to attend to their health needs and feel supported.
- Integrate health and well-being into both Core Competencies and Leadership Competencies. Discussions related to attaching incentives to activities that improve health and well-being (e.g. training, participation, merit review, identification of metrics at all levels that connect to health and well-being).
INTER/INTRAPERSONAL LEVELS:

- Consistent auditing of staff and faculty positions that are vacant, where those responsibilities have been re-directed to address issues of staff/faculty burn out.
- Audit available supports related to health and well-being based on employee group and develop consistent supports for each group.
- Develop an inclusive digital and communication strategy that offers:
  - Consideration for students, faculty, staff, and research staff audiences. This includes a central repository with clear and concise information on how to access health and wellbeing resources;
  - A coordinated approach to navigate “systems” including: faculty, student, student, student affairs, and support staff (including: administration and infrastructure support i.e. plumbing, electrical, etc);
  - Consideration for multi-lingual and multi-cultural populations
  - Promotion of key resources and supports during critical times of the year (e.g. midterms, finals)
- Increase availability of data for Faculties and departments to better understand the health, well-being and climate within their units;
- Establish a Health and Well-being onboarding system, to improve awareness of individual supports and services and opportunities to develop formal/informal networks and support systems for connection; this should be ongoing, layered learning, encouraging help-seeking behaviours and connection.
- Analysis of current cultural breadth of student, staff, faculty to ensure service provisions are available to meet the needs of diverse populations;
- Identify and support participation of campus members who do not have a sense of inclusion and belonging or who feel isolated; identify opportunities, developing pathways forward and holding accountability; establish and enhance culturally safe spaces across campuses that offer opportunities for connection and community building;
- Encourage help-seeking behaviours in community members; develop campaigns targeted to promote help seeking in our diverse campus population, especially populations that may not seek help due to historic marginalization; Further development of EFAP service outcomes.
- Develop and promote clear protocols for responding to those needing support both during business hours and ‘after hours’/emergency situations; Create a postvention protocol to deal with the aftermath of student death, suicide, or other campus disaster; crisis response protocol
- Institute debriefing sessions and supports for individuals working on EDI, mental health, sensitive subject matter; ensure specific training related to mental health is in place for faculty members supervising graduate students.
- Review of certificates in teaching and learning, competency framework by HPI student scholars re: supporting students from a well-being perspective.
- Offer more mental health first aid training or other similar programming (e.g. MH 101, Mental Health in the Workplace) to faculty and staff; develop individual programs/workshops on HWB related topics; certification re: resilience and participation in health promotion activity.
• Create a mandatory first year course embedded in the curriculum focused on wellbeing and inclusion; start with first year students but also consider and support needs of other cohorts of students
• Enhance promotion of existing gathering spaces and identification of additional space needs and opportunities
• Develop creative, collaborative on and off-campus volunteer opportunities to contribute, get to know each other, build community