

ENVIRONMENTAL SUSTAINABILITY IN THE GHHN

RESEARCH FINDINGS & REPORT

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Contributorship

This report was authored and reviewed by:

Hamid Dwyer BA MA, GHHN Tatiana Gayowsky HBASc, HFHT Meghan Davis BEng MD FCFP, HFHT Megan Lynch BScN MEd, GHHN Thy Huynh MES, HFHT



The GHHN

The Greater Hamilton Health Network (GHHN) is one of the first Ontario Health Teams to be established in the province, with the purpose of transforming healthcare in partnership with patients, families, care partners, primary care, local organizations, and the community.

The Greater Hamilton Health Network (GHHN) finds strength in collaboration. Working together to build a healthier Hamilton and surrounding area, the GHHN builds partnerships and shares resources to deliver an integrated, accessible continuum of care. Driven by the needs of our community, the GHHN will address gaps and strengthen systems to build a stronger community — one that feels clear, supported, and equitable. With a commitment to collaboration and patient engagement, the Greater Hamilton Health Network is building healthy communities for a better future.

Foreword

In response to growing concerns by the public and health experts regarding the environmental impacts of healthcare, the GHHN has launched a Community of Practice and begun research to explore environmental sustainability in healthcare among our partners. By analyzing the ways in which our partners are currently perceiving and addressing environmental sustainability, and supporting these efforts, we can ensure both patient and planetary health.



Please direct all inquiries to: Greater Hamilton Health Network info@ghhn.ca | greaterhamiltonhealthnetwork.ca

READING GUIDE

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Banners at the bottom of a page present links to follow for more information about a larger concept/group.



LAND ACKNOWLEDGEMENT

The work of the Greater Hamilton Health Network and its Partnership Council members takes place on traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee, and Mississaugas. Indigenous people who have lived here since time immemorial have deep connections to these lands.

This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississauga of the Credit First Nation.

The GHHN catchment area continues to be home to vibrant, diverse Indigenous communities who have distinct and specific histories and needs, as well as a constitutionally protected treaty. The GHHN is located next to Six Nations of the Grand River and Mississaugas of the Credit but most Indigenous peoples in the GHHN catchment area live in urban Hamilton. We honour this diversity and respect the knowledge, leadership, and governance frameworks within Indigenous communities.

We are grateful for the opportunity to live, meet, and work in this space. We are committed to engaging and building meaningful relationships and partnerships with the Indigenous communities, Six Nations of the Grand River, Mississaugas of the Credit and Urban Indigenous populations on this territory.

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SUMMARY

The Lancet Commission on Climate change has identified climate change as both the greatest global health threat and opportunity of the 21st century (*Watts et al., 2019*). Climate change is already affecting the health of the Canadian population (*P-Desrosiers et al., 2020*), an impact which the healthcare system itself is contributing to. Healthcare is responsible for 4.6% of Canada's total national emissions, four times more than the national aviation industry's contribution (*Eckelman et al., 2018*; *Canada, 2018*).

Furthermore, environmental initiatives are synergistic with existing health goals (*MacNeill et al., 2021*; *Poland & Dooris, 2010*). The Ontario Health Business Plan 2021-2022 established priorities including:

- 1. Leveraging preventative care and supporting overall health (especially with regards to cancer care),
- 2. Reducing health inequities, and
- 3. Improving patient-centred care (including utilizing digital care).

All of these priorities have the potential to decrease the environmental impacts of healthcare (*Business Plan 2021-2022, n.d.*). Environmental efforts within healthcare prioritize disease prevention because downstream care is more resource-intensive than is preventative care (*Lenzen et al., 2020*). Therefore, supporting patient health is central to reducing the environmental impact of healthcare (*MacNeill et al., 2021*). Health promotion strategies, like advising patients eat a plant-rich diet or spend time in nature, and conducting cancer screening, simultaneously benefit planet and patient (for references, see *Plant-Rich Diet, Nature Time*, & *Cancer Screening*).

Finally, climate change and pollution disproportionately affect vulnerable populations (*Levy & Patz, 2015*; *Poland & Dooris, 2010*), so reducing this impact will support human health and equity (for example, in decreasing emissions of noxious gases) (*Kalogirou et al., 2021*; *Lenzen et al., 2020*; *Watts et al., 2021*).



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As the GHHN has adopted these elements of the Ontario Health Business Plan (*Priorities | Greater Hamilton Health Network | GHHN*, <u>n.d.</u>), implementing pro-environmental initiatives is consistent with the primary objectives of the GHHN.

This GHHN report is based on a research project which surveyed our healthcare partners about their past and present environmental endeavours and explored their perception and intentions for future environmental work. This is the first effort, to our knowledge, of any Ontario Health Team (OHT) to understand the environmental perceptions, endeavours, and needs of its partners and to make recommendations regarding improving environmental sustainability within an OHT.

The survey was completed by 19 individuals from 16 different GHHN partners. It demonstrated that healthcare professionals and organizations within the GHHN have enthusiasm for and interest in environmental sustainability. It has also confirmed, however, that there are barriers to progress. We recommend consideration of the following practices both to improve environmental sustainability of partners and practitioners and to help overcome these barriers.

Summary of Recommendations

Perform baseline audits of current sustainability practices

Embed sustainability within Quality Improvement accountability framework

Collaborate both externally and internally (e.g. GHHN community of practice)

Build capacity through education and funding

METHODS

This environmental sustainability analysis is based on three research approaches.



1) We conducted an **online content analysis** to gather information on environmental sustainability from any publications, landing pages, or media in the Hamilton, Haldimand, and Niagara Northwest area. This approach yielded information about specific initiatives within St. Joseph's Healthcare Hamilton (SJHH), Hamilton Health Sciences (HHS), and the Hamilton Family Health Team (HFHT). A limitation of this approach, however, was that not all partners published environmental sustainability information online.

2) Our second approach was to conduct **email-based interviews** to better understand more GHHN partners. Email exchanges were used to collect and confirm information, generate leads, and to apply a snowball sampling strategy (recruit future research participants from current participants' acquaintances) (*Ratislavová & Ratislav, 2014*). At this point, though we had collected data around specific initiatives, barriers to environmental sustainability action in the GHHN partners remained largely unknown.

3) Our consequent third approach was to create and distribute a **targeted survey** enquiring about environmental sustainability initiatives (past, present, or planned), barriers, and perceptions within GHHN partner organizations. Information collected in the online content analysis and the asynchronous interviews informed the questionnaire (for survey questions, see <u>Appendix C</u>).



Distribution

From November 8th to 26th, 2021, the questionnaire was distributed to 160 email addresses affiliated with GHHN partners, asking for it to be completed either by the recipient or someone the recipient knew to be knowledgeable about environmental sustainability efforts in their organization. Survey recipients represented 85 different organizations, patient partners, and healthcare professionals. The survey was completed by 19 individuals from 16 different GHHN partners. Respondents included directors, project managers, coordinators, executive directors, vice-presidents, and chief executive officers. The GHHN Partner organizations consisted of 4 hospital institutions, 8 community organizations, 5 primary care organizations and 1 long-term care organization. For privacy, only data in the aggregate will be shown in this report.



RESULTS

Cumulative Response

Forty-four percent of participating GHHN partners currently incorporate environmental sustainability in their programs/mission. Eighty-three percent of participants indicated that their organization either currently incorporates environmental sustainability or is looking to incorporate environmental sustainability in the future. When asked about broadening environmental sustainability in their practice of health care, most participants responded affirmatively ("We are looking to broaden environmental sustainability"), though 3 of 18 (16.7%) indicated that "[they] are not looking to broaden environmental sustainability."



84.2%

Incorporating, Expanding, or Intending to Incorporate Environmental Sustainability

Current Environmental Initiatives

When asked to list their current sustainability initiatives, ten GHHN partners opted not to answer. To better understand the responses from those who did answer, we will be using a provisional framework to categorize healthcare environmental sustainability efforts which was developed by the *Partnerships for Environmental Action by Clinicians and Communities for Hospitals and Healthcare Facilities* (PEACH) (see *Appendix B* for more information).



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Current Environmental Initiatives

From survey responses, GHHN partners showed they are enthusiastic about being involved in more leadership activities, waste reduction-related initiatives, and advocacy toward environmental sustainability and health equity. Partner concerns include the funding of environmental sustainability programs and coping with costs related to climate change mitigation. Furthering this point, GHHN partners commented that funding and maintaining environmental sustainability programs remains secondary to the primary mission of their organizations (See <u>Threats</u> and <u>Recommendation 4</u>).



Figure 1. Current environmental sustainability categories with which GHHN partners are engaging.



Broadening Environmental Initiatives

When asked how participants intend to broaden environmental sustainability in their organizations, responses included:

- Sustainable material procurement
- Governance & Collaboration among Healthcare & Adjacent Organizations
- Policy Development
- Government Support

Partnerships

- Program/Project Funding & Incentives
- Environmental Sustainability Research
- Building & Property Retrofitting
- Environmental Sustainability Programming & Education

Participants were asked to list any sustainability groups/projects that they were familiar with in the Hamilton, Haldimand, and Niagara Northwest area. More than half of the participants were aware of local environmental sustainability initiatives and the most known sustainability initiative was recycling. Other responses included planting trees, water conservation, promoting reusable water bottles, and energy conservation. Four respondents indicated that they were a part of another sustainability organization. Specific groups which partners had stated they had collaborated with included:

Trees for Hamilton

Hamilton Family Health Team

McMaster University

Bay Area Climate Change Council

Canadian Coalition for Green Health Care

Sustainability Leadership



GHHN Environmental Sustainability: Results

Concerns

When asked to list sustainability concerns specifically pertaining to their organization, participants' responses included rising energy costs, ageing infrastructure, cost of implementing environmental sustainability goals, and more broadly, climate change adaptation.



Figure 2. Environmental sustainability concerns of GHHN partners.



Future Engagement

Fourteen of nineteen (74%) survey respondents indicated they would be interested in participating in workshops or webinars related to green healthcare. Nine participants indicated that they are interested in joining a professional online network to share lessons learned and virtually discuss best practices.



Figure 3. Preferred methods for engagement with environmentalism.

One participant indicated that, currently, their organization is not ready to participate in more green health care related offerings, but they are personally interested in green living best practices for themselves and/or their family. This latter sentiment was reflected by another participant as well. One organization indicated that their organization has designated green work but are interested in engaging however they can in other organizations' efforts. Another response indicated that their organization is interested in re-engaging staff post-pandemic in green workplace initiatives through our environmental committee. Lastly, one organization expressed that while they are interested and do care [about environmental sustainability], they lack the resources to take on any additional projects/initiatives at this time. By and large, respondents demonstrated an enthusiasm for a learning and collaboration platform for decreasing climate impacts of healthcare.

ANALYSIS

The goal of this research was to capture the perceptions and actions related to environmental sustainability in the healthcare space to best inform future research, projects, resources, and program planning within the GHHN.

Our research showed some knowledge of broader environmental sustainability & climate change issues/concerns and industry/sector specific environmental issue awareness among GHHN partners. Additionally, there is readiness for participating in and implementing environmental sustainability among GHHN partners. However, there is also uncertainty among GHHN partners as to how to proceed, what should be implemented, how to prioritise, funding strategies, and who will lead these initiatives.

Limitations

Many of the surveyed organizations are very large so respondents may not have been aware of environmental initiatives within their organizations. In addition, environmental sustainability itself is a large field of knowledge including everything from infrastructure to emissions and waste to health care provision practices; it is therefore difficult to capture the entirety of this lens in a brief survey.





Limitations [continued]

Finally, some areas of health care are not conceptualized as being environmentally sustainable (e.g. Choosing Wisely, smoking cessation, and cancer screening), when in fact preventive health has the greatest potential for positive climate impact by improving health and decreasing downstream environmental resource intensivity (Eckelman et al., 2018; MacNeill et al., 2021; Tennison et al., 2021). It can be helpful to engage with frameworks like that of PEACH to categorize initiatives. This improves understanding of the breadth and depth of environmental impact within healthcare (see <u>Appendix B</u>).

These survey results were gathered during the COVID-19 pandemic, amidst which the ability for individuals to conduct environmental work within healthcare was reduced. As such, the collected responses may not be as wholly representative as they might be if collected in a nonpandemic context. Furthermore, awareness of environmental sustainability initiatives may have decreased during this time period, following their decreased engagement and confounding participant responses.



S.W.O.T. ANALYSIS

The survey and literature search results are presented below as an overview of strengths, weaknesses, opportunities, and threats (S.W.O.T. analysis) that exist within the Greater Hamilton Health Network partners, and which have arisen throughout the course of this research.

Strengths

- 1. There is enthusiasm and interest in environmental sustainability from health care professionals and organizations within the GHHN, as demonstrated through our survey results. GHHN organizations and their leaders are keen on participating in future environmental sustainability programming and collaboration. Facilitated discussion of supports and resources specifically located in the geographical region were identified as a desire among respondents and would also complement these learning endeavours to ensure those lessons are practically applied. See <u>Recommendation 3</u>.
- 2. It is ethically consistent for healthcare practitioners, who adopt the responsibility of human health, to support planetary health (*Jameton & McGuire, 2002*; *Pinzone et al., 2015*; *Sherman et al.,* 2020).



2013

Weaknesses

- 1. **Finite human capital** limits development of environmental sustainability structures in healthcare. While enthusiasm exists among organizations within the GHHN, there are not many designated professionals within these organizations with this role formally within their job descriptions. See <u>Recommendation 4.</u>
- 2. **Funding availability** restricts environmental action and scope. Some GHHN organizations expressed that their existing funding streams do not have the capacity to support further environmental sustainability initiatives. See <u>Recommendation 3</u> and <u>Recommendation 4</u>.
- The healthcare environment may require more tailored approaches to environmental sustainability; work may be required to adapt solutions used in other industries (*Raffaelli & Glynn, 2014*). See <u>Recommendation</u> <u>3</u> and <u>Recommendation 4</u>.
- 4. Sustainability initiatives are currently not prioritized according to relative carbon footprint. Participants identified recycling endeavours as a top priority and PPE and plastic waste as a top concern. This perception is common in healthcare (*Quitmann et al., 2022*). However, based on research from the U.K., recycling and waste management contribute far less to the environmental impact of health care- only approximately 5% (inclusive of water waste) (*Tennison et al., 2021*). See <u>Recommendations 1, 2, & 4</u>.
- 5. COVID-19 and its pressures on the health care system show that without the inclusion of environmental sustainability frameworks embedded in health care, environmental work and impact can be overlooked. As this report is being written (November 2021 March 2022), the health care system and its professionals are busy serving their communities and patients. The GHHN, its partners, and those involved in this environmental sustainability in health care research are limited in their capacity to become involved in environmental sustainability initiatives. Therefore, a weakness is that the lack of embedded environmental sustainability in the practice of health care can deprioritize environmental sustainability issues. See <u>Recommendations 1, 2, and 4</u>.



Opportunities

- In recent years, funding for environmental sustainability from government organizations (e.g. Federal Green Infrastructure Fund) has become more accessible (*I. Canada, 2018*; *Corrigall-Brown & Ho,* 2017). Leveraging funding opportunities can address the financial concerns of environmental sustainability implementation expressed by some GHHN partners in the questionnaire responses. See <u>Recommendation 4</u>.
- Environmental sustainability in the practice of health care is a more novel topic. As such, environmental sustainability successes can be more easily identified to make quick and effective changes, although these should not be perceived as sufficient environmental change (*Poland & Dooris, 2010*). See *Recommendation 1* & *Recommendation 2*.
- Organizational policy adoption (e.g. position statement) has been identified as an effective strategy for enacting pro-environmental changes within healthcare (*Kotcher et al., 2021*; *Pinzone et al.,* 2015). Policy adoption can in turn inspire engagement around these changes (*Griggs et al., 2017*; *Ling et al., 2012*). See *Recommendation* <u>2</u>.
- 4. Much of the care already being provided by GHHN partners, including <u>smoking cessation</u> programs, <u>Choosing Wisely</u>, <u>nutrition</u> <u>counselling</u>, and <u>cancer screening</u>, lessens the negative environmental impacts of healthcare. Viewing these endeavours as supportive of planetary and patient health can motivate health organizations and workers to increase efforts around these goals as well as introduce proxy metrics for tracking planetary impact. Furthermore, it can be encouraging to know that environmental work has already begun and does not need to confer added workload onto individuals. See <u>Recommendation 2</u>.





Threats

- Climate change impacts can affect the accessibility of health care services, and additionally increase hospital admissions, adding strain to infrastructure and resources (<u>O'Neil & Ebi, 2009</u>). GHHN partners must recognize the direct and indirect pressures that climate change can place on their organizations, processes, supply chains, and their patients to ensure resiliency of their institution and services. See <u>Recommendation 1</u> and <u>Recommendation 2</u>.
- In our survey, GHHN partners distinguished the primary goals of healthcare from planetary health. As planetary health aligns with healthcare in its prioritization of patient health, this perception is a barrier to adoption of pro-environmental action within healthcare (Griggs et al., 2017; Quitmann et al., 2022; Jameton & McGuire, 2002).
- 3. It can be difficult to report on environmental sustainability due to a lack of clear metrics and complicated, indirect relationships between patient care delivery and its environmental impacts (*Pinzone et al.,* 2015). While systems of measurement are being developed (*Sherman et al., 2020*), proxy metrics may be used (for example, to estimate engagement in certain projects, the HFHT Green Initiative used project resource orders and educational webinar attendance as metrics of engagement, as practitioners seldom voluntarily reported on environmental activities). See *Recommendation 1*.



RECOMMENDATIONS

Through analysis of environmental sustainability literature, the GHHN partner survey responses, assessment of health care environmental sustainability practices in Canada, and as informed by the experiences of GHHN researchers, managers, and executives, our recommendations to GHHN partners for the practice of environmental sustainability are as follows:

1. Auditing

We recommend that GHHN partners conduct an audit of their environmental sustainability practices to establish a baseline and to create the capacity for benchmarking practices. Audits should involve any environmental sustainability initiatives from small scale, such as planting a small garden to large scale, such as HVAC or energy retrofits. Examples of audits can be found through the U.K.'s *Green* Impact Toolkit, the Canadian Coalition for Green Health Care's Green Hospital Scorecard program, and the W.H.O. guidance for climateresilient and environmentally sustainable health care facilities. The audit should also include sustainable healthcare, such as prescribing (e.g. *respiratory care*), *Choosing Wisely*, and disease prevention (e.g. smoking cessation, cancer screening, and plant-rich diets). Data from audits can be examined alongside the organization's size, funding, competences, staff, and other resources to find which environmental sustainability initiatives fit within the capabilities of the organization. We recommend using the standardized categories laid out in the PEACH Framework for directing audits (see <u>Appendix B</u>).





2. Data & Reporting

We recommend that partners establish accountability and legitimacy by **integrating environmental sustainability data and metrics into all organizational decision-making/strategic planning and/or as a quality improvement metric**, which are required for evaluating the successes of environmental sustainability programs (*Sherman et al., 2020*). The voluntary use of indicators by companies to publicly report on their progress toward greater environmental sustainability is becoming more common (*Veleva et al., 2003*). Reporting and transparency are often used as an input measure to complement environmental performance data. When presented, these reports can be effective in engaging with stakeholders, community members, and staff.

- 1. **Establish a structure** and process of environmental sustainability data collection.
- 2. **Establish methods** to measure the data to compare over time, across departments internally, and across external organizations.
- 3. **Establish a reporting system** where the environmental sustainability data can be disseminated among stakeholders.
- 4. **Use a common framework** for categorizing health care sustainability initiatives (e.g. PEACH (see <u>Appendix B</u>)).





3. Collaboration

We recommend that GHHN partners **collaborate among each other and with external environmental organizations** to share strategies and resources and lead projects together. Informal survey feedback with independent healthcare practitioners suggests that it is difficult to collaborate and coordinate efforts because much environmental work in healthcare is done in an informal capacity. Thus, 'silos' of environmental action are created that are limited to practices or organizations and then reinvented elsewhere. This strategy has resulted in loss of engagement around the topic of environmentalism and can cause any resulting efforts to fail in the long-term.



Coordinated efforts not just within the various sectors of healthcare (e.g. long-term care, acute care, primary care, preventative health, etc.) and professions (e.g. physicians, administration, RNs, pharmacy, respiratory therapy, etc.), but across them, can ensure a consistent message of environmentalism for patients and staff (*McCoy et al., 2014*), reduce workload for those delivering healthcare, ensure that solutions are practical, and further strengthen environmental benefit (*Jamieson et al., 2015*; *McCoy et al., 2014*; *WHO Global Strategy on Health, Environment, and Climate Change: The Transformation Needed to Improve Lives and Well-Being Sustainably through Healthy Environments., 2020*; *WHO Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities, 2020*).

3. Collaboration [continued]

This strategy is intuitive and is furthermore supported by recommendations made by the World Health Organization (*WHO Global Strategy on Health, Environment, and Climate Change: The Transformation Needed to Improve Lives and Well-Being Sustainably through Healthy Environments., 2020; WHO Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities, 2020*). With a coordinated effort, initiatives to decrease healthcare's environmental impact can flourish, and so, too, can advocacy efforts improve as a result of a united front in the healthcare sector (*Jamieson et al., 2015; McCoy et al., 2014; WHO Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities, 2020*). This dialogue is most helpful if non-threatening and evidence-based (*Jamieson et al., 2015; McCoy et al., 2014*).

4. Knowledge & Capacity Expansion

We recommend that GHHN partners and their employees **engage with environmental sustainability presentations and workshops to expand current knowledge and skill bases**. This recommendation stems from the questionnaire responses, wherein some GHHN partners expressed interest in participating in educational and collaborative programming relating to environmental sustainability in healthcare (see <u>Results - Future Engagement</u>). Organizational embeddedness by way of environmental regulation and education around environmental sustainability will aid the introduction of green practices in hospitals and clinics and can limit psychological barriers to green action (<u>Topf, 2005</u>).





4. Knowledge & Capacity Expansion [continued]

- 1. Access environmental sustainability programming and resources when applicable (see <u>Appendix D</u>).
 - a. Seek educational opportunities that prioritize goals based on degree of impact (e.g. carbon footprint).
 - b. Broaden learning opportunities for health delivery-based environmental sustainability to include impactful aspects of care (e.g. Choosing Wisely, Disease Prevention); don't solely focus on infrastructure-based interventions.
- 2. Host workshops for staff, partners, and/or community members for education on environmental sustainability practices.
- 3. **Integrate environmental sustainability in the roles** of executives, staff, and other members of the organization.
- 4. Align knowledge and capacity expansion with organizational structure and institution type.
- 5. **Dedicate funding** to employ or commission environmental sustainability professionals to incorporate environmental sustainability initiatives. Employ in-house environmental sustainability professionals to guide programs specific to your organization and guide corporate/organizational strategy. External environmental sustainability professional(s) may help to develop and assess environmental programs. This recommendation is complementary to <u>Recommendation 1</u> & <u>Recommendation 2</u>.

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GHHN Environmental Sustainability: Appendices

APPENDICES

A. The GHHN

The Greater Hamilton Health Network (GHHN) is one of the first Ontario Health Teams across the province. Its purpose is to help transform health care, in partnership with patients, families, care partners, primary care, local organizations, and the community. The GHHN represents health care leadership across the Greater Hamilton Area. Ontario Health Teams (OHT) are being introduced to provide a new way of organizing and delivering care that is more connected to patients in their local communities. Under Ontario Health Teams, health care providers (including hospitals, doctors, and home and community care providers) work as one coordinated team – no matter where they provide care. Ontario Health Teams are groups of providers and organizations that are clinically and fiscally accountable for delivering a full and coordinated continuum of care to a defined geographic population.

The vision of the GHHN is a healthier community that provides an equitable and seamless continuum of care that actively improves population health and meets the individual needs of our community. A population that is:

- Healthier, with lower rates of chronic illness.
- Activated, informed, and empowered to navigate the system; and
- Treated equitably.

A collaboration of local health and social service partners the GHHN includes representation from more than 30 organizations. We are a dedicated group of professionals, organizations, and people with lived experience working to co-design a patient centred, health system grounded in engagement, health equity and the local needs of the communities we serve.

A. The GHHN Partners





B. PEACH Environmental Framework

The purpose of PEACH is to cultivate and sustain partnerships across health care facilities in Ontario to further support climate action. The essence of this provincial initiative is to engage, encourage, and empower those in healthcare to take climate action.

Leadership	Education	Supply Chain
 Forming a Green Team Leadership Roles Advocacy Social Justice/Equity Funding Opportunities Green Hospital Winners 	 Quality Improvement Mindful Clinical Practice Curriculum Integration Wellness 	 Refuse Reduce Reuse Recycle/ Compost
Drugs & Devices	Buildings & Energy	Food
 Drugs & Climate Changes Deprescribing Anaesthetic Gases Metered-Dose Inhalers 	 Energy Efficiency & Sources Water Use Building Design 	 Procurement Sourcing Locally Sustainable Menus Food Waste
Transportation	Natural Systems	



More information about the PEACH Framework can be found here: <u>https://www.peachhealthontario.com/</u>

C. Survey Questions

The following were questions included on our partner environmental sustainability survey, in sequential order.

- 1. At this time, does your organziation incorporate environmental sustainability in its programs/mission?
- 2. Do you intend to broaden your environmental sustainability in your practice of healthcare?
- 3. If you answered yes, how do you intend to broaden your environmental sustainability in your practice of healthcare?
- 4. How do you currently incorporate environmental sustainability in your practice of healthcare? What sustainability initiative(s) makes your organization the proudest?
- 5. Is your organization part of a sustainability partnership/collective with any other local organizations?
- 6. If you answered yes to the previous question, list the partner organizations below:
- 7. List any past, present or future sustainability initiatives you are familiar with in the Greater Hamilton Area:
- 8. What is your biggest environmental sustainability-related concern for your organization (or healthcare in general)?
- 9. Select all that apply:
 - a. My organization would be interested in participating in workshops or webinars related to green healthcare to share lessons learned.
 - b. My organization would be interested in joining a professional online network to share lessons learned and virtually discuss best practices.
 - c. My organization is not ready to participate in more green healthcare related offerings, but I am personally interested in green living best practices for myself and/or my family.
 - d. My organization is not ready to participate in more green healthcare related offering, we are committed to our professional obligations to healthcare services and a focus on environmental sustainability may prevent us from meeting those obligations.
- 10. Is there anything you would like to comment/add to this brief survey?

D. Environmental Sustainability Programming & Resources

The following are resources & programming for the organizational or practitioner level, along with any specialty subjects or scope. This list was drawn from collaborators' experiences and is not exhaustive. If you are viewing this document virtually, the left column entries are clickable.

<u>Hamilton Family</u> <u>Health Team:</u> <u>Green Initiative</u>	General Practice, all roles: patient care & offices. Practical infographics, EMR downloads, and webinars. + Care Infographuics + virtual care
<u>PEACH Health</u> <u>Ontario</u>	Ontario Green Hospitals.
Dalla Lana School of Public Health: <u>Centre for</u> Sustainable Health Systems	Masterclass in Sustainable Healthcare & Communities of Practice: Inhalers, Equity, Virtual Care, Operating Rooms.
UBC CPD: Annual Environmental <u>Conference</u> (~October 2023)	Holds an annual conference regarding the general sustainability of healthcare. Applicable for all healthcare sectors and roles.



D. Environmental Sustainability Programming & Resources [continued]

<u>The Foundation</u> <u>for Medical</u> <u>Practice</u> <u>Education</u>	Includes environmental impacts in webinars on adult asthma prescribing, resource for general practice physicians.
<u>CASCADES</u> <u>Canada</u>	Canadian project offering fundamental courses as well as targeted courses for your organization, includes playbook and other resources. Applicable for all healthcare sectors and roles.
<u>The Canadian</u> <u>Coalition for</u> <u>Green Healthcare</u>	Toolkits, documents, and initiatives for a wide range of healthcare disciplines, applicable to all healthcare roles.
<u>Canadian</u> <u>Association of</u>	Broad scope centred on health professionals, includes learning opportunities and guiding
<u>Physicians for</u> <u>the Environment</u>	resources.
Physicians for the Environment Centre for Sustainable Healthcare (UK)	resources. Offers foundational courses on a variety of health topics and technical courses.



