



Climate, Health & Sustainable Care Inaugural Symposium



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Health Professions Education

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Moderator: Ross Upshur



**Climate, Health &
Sustainable Care**
Inaugural Symposium



An Investigation of the University of Toronto's Nursing Program Integration of Planetary Health Using the Student-led Planetary Health Report Card (PHRC)

Presented by: Jefin Mathews and Amna Zafar



UNIVERSITY OF
TORONTO



BLOOMBERG
LAWRENCE S. BLOOMBERG
FACULTY OF NURSING
UNIVERSITY OF TORONTO



Background

- What is the planetary health report card?
 - Letter graded report card that is used by healthcare professional faculties around the world to evaluate and improve their focus on planetary health and sustainability in healthcare.
- Purpose:
 - Exploring planetary health strengths and opportunities for our nursing program.¹
 - Tracking progress of implementing and optimizing planetary health in curriculum and resources.
 - Advance the global planetary health movement for a healthier and equitable world.

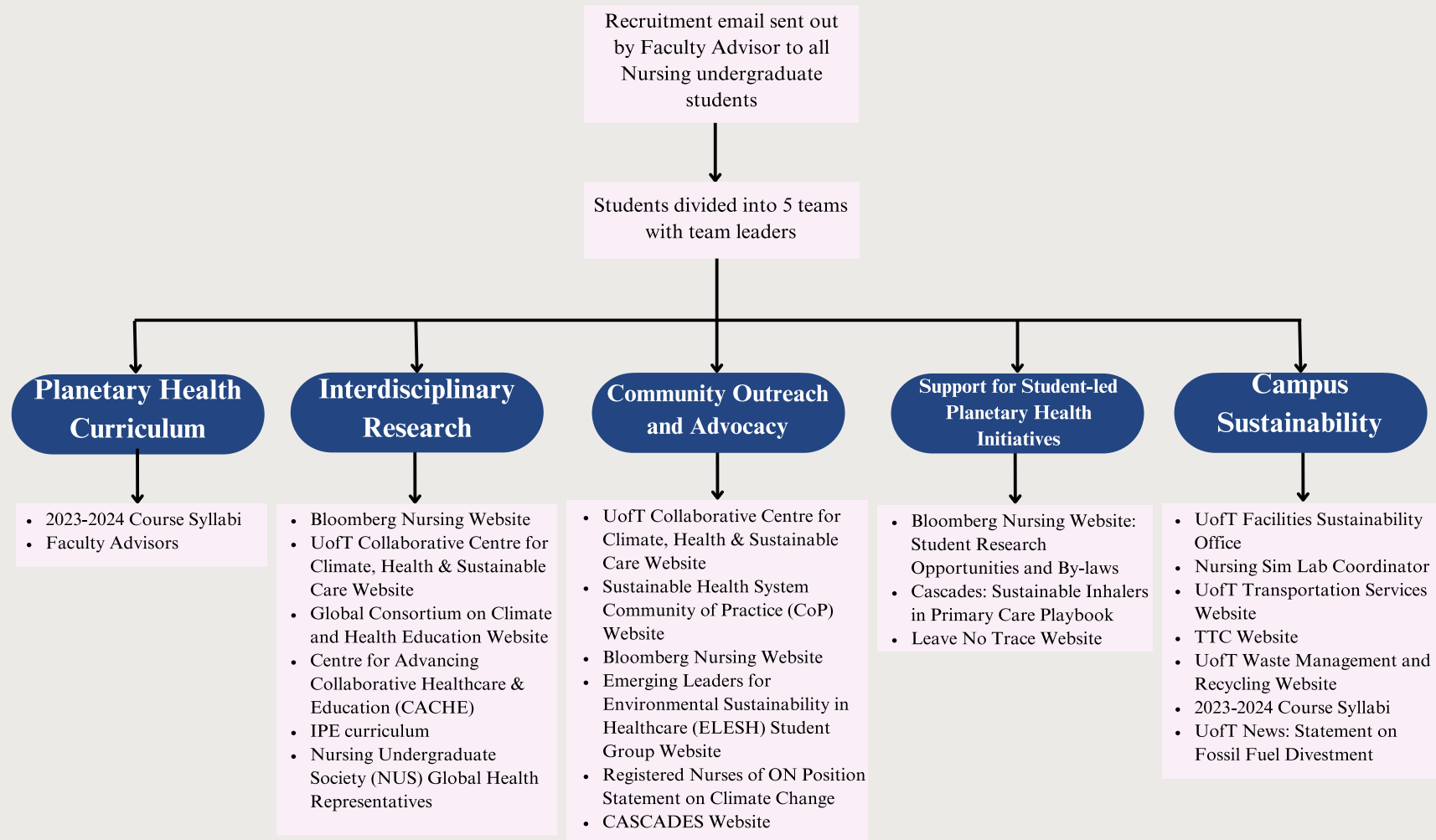


Figure 2: 2024 UofT Nursing PHRC Methodology. This flowchart depicts the sequence and division of work as well as sources of information accessed.

Limitations

- Accelerated 2-year program vs. 4-year program (more time sensitive).
- Tool tends to use terms more applicable to American systems.
- Report card questions were from 2023, which were only available at the time of writing this report. The 2024 questions have been released.

2024 Planetary Health Report Card for UofT Lawrence Bloomberg Faculty of Nursing



Results of the PHRC

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(12/40) \times 100 = 30\%$	D
Interdisciplinary Research (17.5%)	$(7/14) \times 100 = 50\%$	C
Community Outreach and Advocacy (17.5%)	$(9/12) \times 100 = 75\%$	B
Support for Student-led Planetary Health Initiatives (17.5%)	$(4/12) \times 100 = 33\%$	D
Campus Sustainability (17.5%)	$(10/22) \times 100 = 45\%$	C
Institutional Grade	$(30 \times 0.3 + 50 \times 0.175 + 75 \times 0.175 + 33 \times 0.175 + 45 \times 0.175) = 44\%$	C



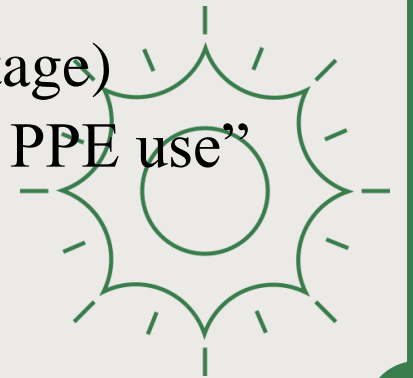
Reccommendation #1: Sustainability Committee

- Student, faculty and sim lab representative
- Committee to discuss sustainability guidelines for events, training and the sim lab in collaboration with Sustainability Office on campus (Campus Sustainability Q11)
 - Practices have been implemented but there are no guidelines.



Recommendation #2: Incorporating more intentional sustainability and planetary health topics into the curriculum

- Ways to incorporate in curriculum:
 - Learn about medications which are more environmentally friendly compared to others
 - Can we (nurses) raise awareness and are there alternatives we can advocate for?
 - Learn about proper PPE use
 - When do we REALLY need to use PPE? (limiting PPE wastage)
 - Grassroots approach to changing the culture of “appropriate PPE use”



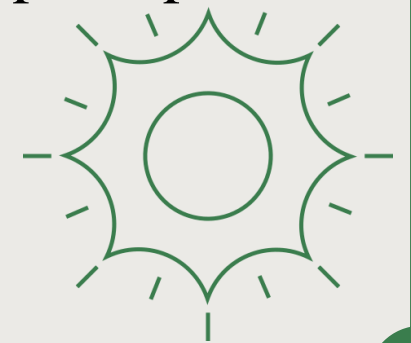
Recommendation #2: Incorporating more intentional sustainability and planetary health topics into the curriculum

- Ways to incorporate in curriculum:
 - Tie existing curriculum topics back to planetary health when possible.
 - Similar to implementation of Indigenous health in every course
 - Ex. Use of planetary health research paper as case study in NUR330
 - Community health course in Year 1 → opportunity to apply these concepts more in-depth
 - Assign existing CASCADES Modules as readings/assignments.



Reccommendation #3: Increasing awareness and accessibility of sustainability topics

- More planetary health and sustainability resources, news, research, and organization promotion in relation to nursing through following avenues:
 - Monthly e-Pulse Bloomberg communications email.
 - Bloomberg Nursing website.
 - NUS promotion of planetary health topics (e.g. during Earth day)
- Create student resource for bike racks/rentals and other sustainable transport options



References

1. Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, de Souza Dias BF, Ezeh A, Frumkin H, Gong P, Head P, Horton R, Mace GM, Marten R, Myers SS, Nishtar S, Osofsky SA, Pattanayak SK, Pongsiri MJ, Romanelli C, Soucat A, Vega J, & Yach D. (2015). Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. *Lancet*, 386(10007), 1973-2028.
2. Planetary Health Report Card. (2023). *Nursing*. <https://phreportcard.org/nursing/>.
3. Planetary Health Report Card. (2023). *Our initiative*. <https://phreportcard.org/about/>.
4. Cascades (n.d.). <https://cascadescanada.ca/about/>.
5. Centre for Advancing Collaborative Healthcare and Education (CACHE) (n.d.). *UofT IPE curriculum*. <https://ipe.utoronto.ca/u-t-ipe-curriculum>.
6. Columbia University Mailman School of Public Health (n.d.). *Global consortium on climate and health education*. <https://www.publichealth.columbia.edu/research/programs/global-consortium-climate-health-education>.
7. Emerging Leaders for Environmental Sustainability in Healthcare (ELESH) (n.d.). <https://elesh.sa.utoronto.ca/>.
8. Innis, J. (2023). Environmentally Responsible Practice. *NUR35: Lecture 10*.
9. Lawrence Bloomberg Faculty of Nursing University of Toronto (n.d.). *Bloomberg nursing research*. <https://bloomberg.nursing.utoronto.ca/research/>.
10. Leave No Trace (n.d.). *The 7 principles*. <https://lnt.org/why/7-principles/>.
11. Martin, W., & Vold, L. (2019). *Climate change and health*. https://nursesunions.ca/wp-content/uploads/2019/05/CFNU_climatechange-web.pdf.
12. Nursing and Climate Driven Vector-Borne Disease (2020). *Nursing and climate driven vector-borne disease tool*. <https://vbd.casn.ca/index.php/e-resource-access/>.

References

13. RNAO (2022). *Position statement on climate change*. <https://rnao.ca/sites/default/files/2022-04/Position%20Statement%20on%20Climate%20Change%20%28April%202021%29.pdf>.
14. Toronto Transit Commision (n.d.). Post-secondary, students, seniors, youths and children. <https://www.ttc.ca/Fares-and-passes/Fare-information/Post-Secondary-Students-Seniors-Youths-and-Children>
15. University of Toronto (2021). *UofT to divest from fossil fuel investments, create climate-positive campus*. <https://www.utoronto.ca/news/u-t-divest-fossil-fuel-investments-create-climate-positive-campus>.
16. University of Toronto (2022). *UTAM achieves divestment pledge, sets more ambitious carbon footprint reduction target for endowment*. <https://www.utoronto.ca/news/utam-achieves-divestment-pledge-sets-more-ambitious-carbon-footprint-reduction-target-endowment>.
17. University of Toronto (n.d.). *Collaborative centre for climate, health, and sustainable care*. <https://climatehealth.utoronto.ca/>.
18. University of Toronto Facilities and Services (n.d.). *A climate positive campus*. <https://climatepositive.utoronto.ca/>.
19. University of Toronto Facilities and Services (n.d.). *Sustainability office*. <https://www.fs.utoronto.ca/sustainability/>.
20. University of Toronto Facilities and Services (n.d.). *Waste management and recycling*. <https://www.fs.utoronto.ca/services/waste-management-and-recycling/>
21. University of Toronto Institute of Health Policy, Management and Evaluation (2021). *COVID-19 and PPE waste: a catalyst for sustainable healthcare?* <https://www.sustainablehealthsystems.ca/blog/covid-19-and-ppe-waste-a-catalyst-for-sustainable-healthcare-1>.

References

22. University of Toronto Institute of Health Policy, Management and Evaluation (2022). *Sustainable health system community of practice*. <https://www.sustainablehealthsystems.ca/about-community-of-practice>.
23. University of Toronto Lawrence Bloomberg Faculty of Nursing (2021). *U of T students share perspective on nurse led sustainability initiatives in healthcare*. <https://bloomberg.nursing.utoronto.ca/news-bulletin/u-of-t-students-share-perspective-on-nurse-led-sustainability-initiatives-in-healthcare/>.
24. University of Toronto Lawrence Bloomberg Faculty of Nursing (2023). *New academic centre unites four health sciences faculties to address global ecological change*. <https://bloomberg.nursing.utoronto.ca/media/in-the-news/new-academic-centre-unites-four-health-sciences-faculties-to-address-global-ecological-change/>.
25. University of Toronto Lawrence Bloomberg Faculty of Nursing (2024). *Environmental Sustainability in our Health Systems*. <https://bloomberg.nursing.utoronto.ca/event/alumni-lunch-learn/>.
26. University of Toronto Lawrence Bloomberg Faculty of Nursing (n.d.). *Health inc. seminar series*. <https://bloomberg.nursing.utoronto.ca/event/health-inc-seminar-series/>.
27. University of Toronto Lawrence Bloomberg Faculty of Nursing (n.d.). *People*. https://bloomberg.nursing.utoronto.ca/people/?profile_type=faculty#directory.
28. University of Toronto Transportation Services (n.d.). *Transportation services*. <https://transportation.utoronto.ca/>

Questions?

Addressing the Climate Education Crisis: Development of Planetary Health Learning Modules for Family Medicine Residents and Teachers at U of T

Presenters: Laura Feldman, Marlee Vinegar, Katherine Yu

Public Health and Preventive Medicine Residency Program, U of T

Faculty Investigators: KitShan Lee (Michael Garron Hospital), Samantha
Green (St. Michael's Hospital)

Background

Multiple calls for the integration of climate change and health into curriculum

- Update to 2025 CanMEDS framework including planetary health competencies
- Needs assessment across DFCM: need for widespread faculty education

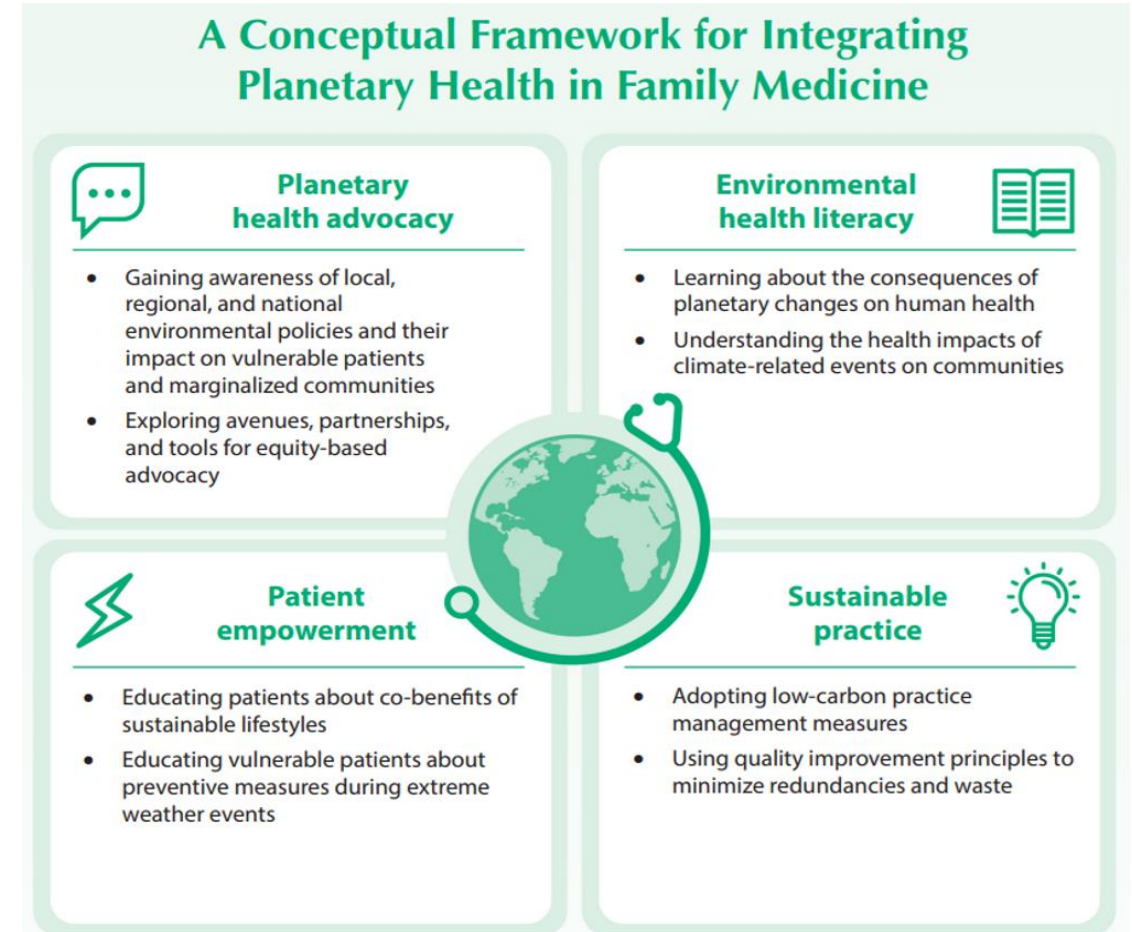
“Climate Change is an educational health crisis” ... “that means our faculty and instructors – as well as our alumni – need to understand it too. We all need to appreciate how climate change touches all aspects of delivering care and how we conduct research. We are past the point where climate change can be considered a special interest. It's a foundational lesson we all must learn”

Dr. Trevor Young, Former Dean of University of Toronto Temerty Faculty of Medicine

CFPC 2020 GIFT Report:

Guide to Integrating Planetary Health in Family Medicine Training

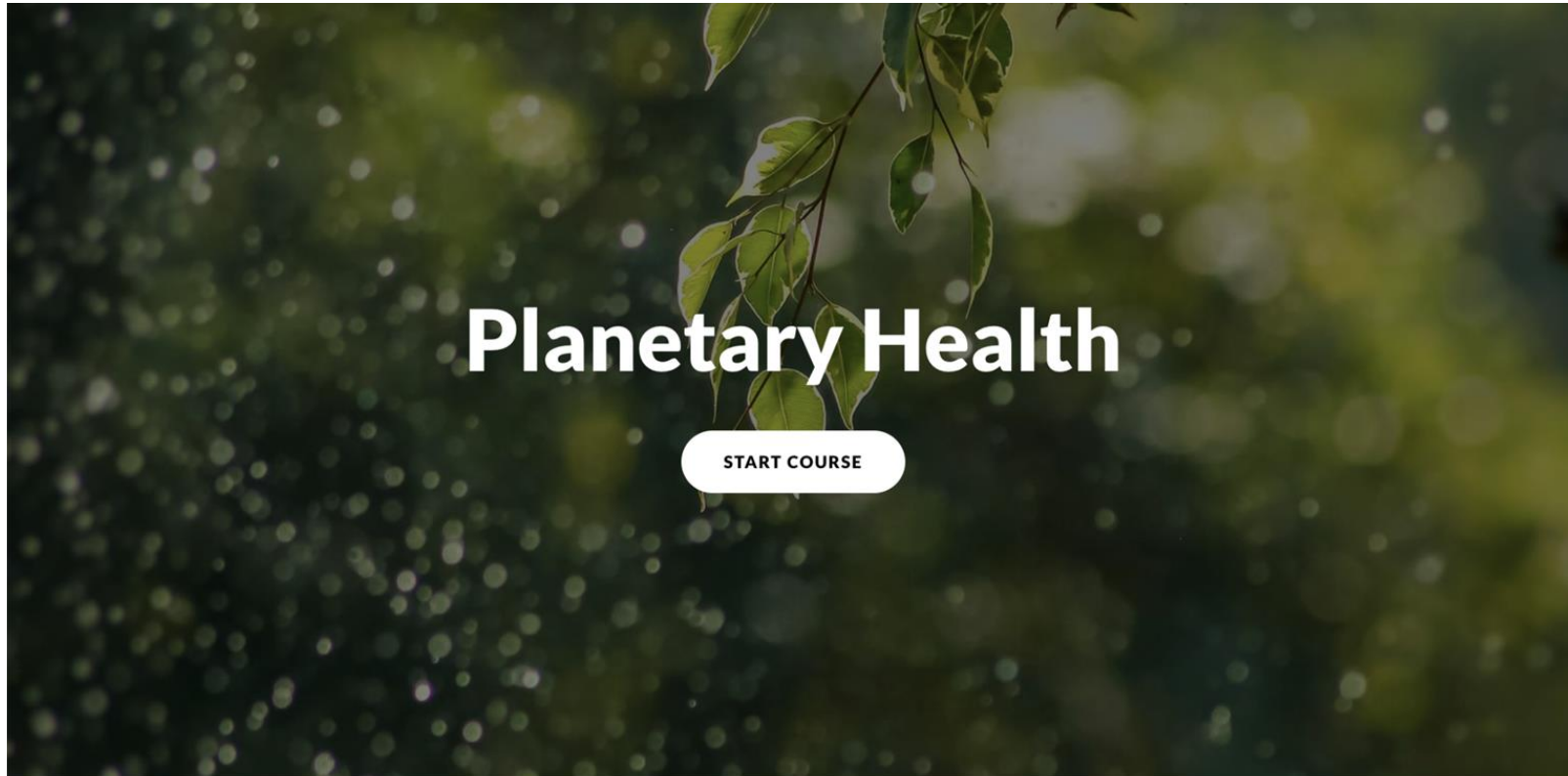
- Environmental health literacy
- Planetary health advocacy
- Patient empowerment
- Sustainable practice



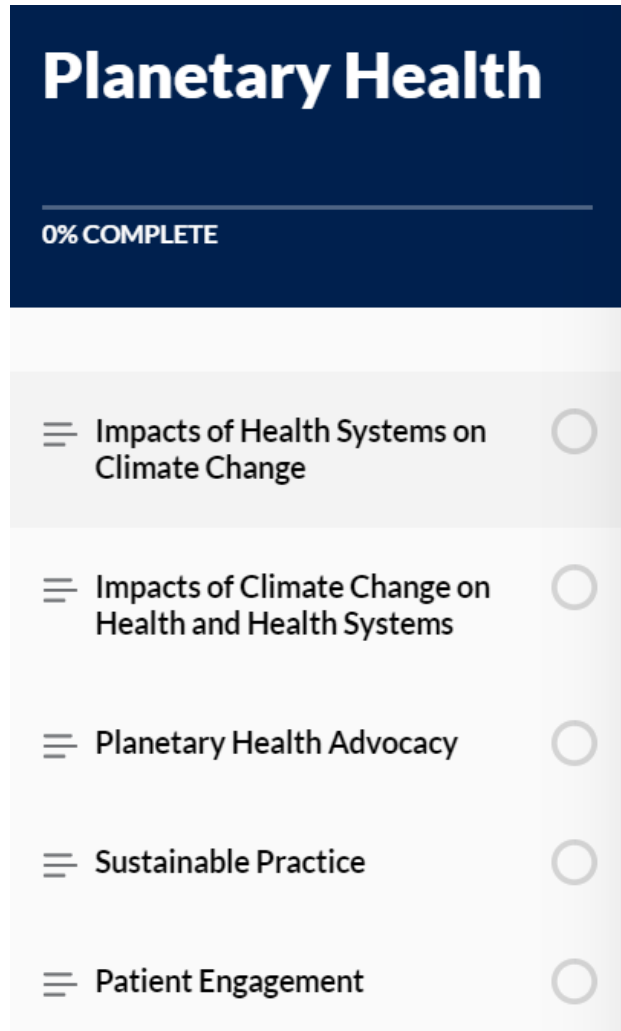
Curriculum Format

1. E-learning Module
 - a. Knowledge-based objectives
 - b. Self-reflection and transformative learning
2. In person Case-Based Learning Module
 - a. Transformative learning

E-learning Modules



Breakdown



Informational content:

Where can we improve sustainability in primary care?

In the UK's assessment of carbon emissions production from primary care, nearly half of all emissions were due to pharmaceuticals, with 13% of all emissions from metered-dose inhalers. Other contributors include the equipment used, personal travel of staff and patients, energy and water use, and waste production.

Use of existing content (e.g., CASCADES):



Breakdown

Links to resources (e.g., Health Providers Against Poverty ODSP Cooling Devices letter template):



**LETTER
TEMPLATE**



**HEALTH
PROVIDERS
AGAINST
POVERTY**

Updated: June 30, 2024

Embedded videos:



Knowledge checks and reflection activities:

Match the intervention to the sustainable healthcare principle

Helping 21 year old patient choose an IUS over OCP for contraception.	Patient Empowerment
Arranging spirometry testing for a 60 year old patient who was prescribed an MDI for cough	Environmental Alternatives
Goals of care discussion with 83 year old patient who was diagnosed with breast cancer.	Reducing unnecessary Care
Colon cancer and diabetes screening in 52 year old patient who rarely comes in.	Health Promotion

What principles can you identify in the follow up plan for your 60 year old patient?

Type your answer here

SUBMIT

Practice-Based Learning

Objectives

1. Learners will recognize and apply the principles of planetary health into clinical encounters.
2. Learners will practice educating patients on the co-benefits of sustainable lifestyles.
3. Learners will utilize preventative counseling to support vulnerable patients with comorbid conditions during extreme weather events.
4. Learners will adopt low carbon practice management measures.
5. Learners will apply methods to reduce unnecessary healthcare utilization.
6. Learners will advocate for the protection of planetary health via micro, meso, and macro levels.

Practice-Based Learning

Case #1: Respiratory Illnesses (Asthma/COPD)

- The connection between air pollution and asthma/COPD
- Co-benefits of smoking cessation, exercise, active transportation, and reducing personal emissions
- Asthma/COPD diagnosis confirmation
- Climate conscious inhaler prescribing

Case #2: Extreme Weather (heat illness)

Case #3: Mental Health

Facilitators

- Funding - EDF Grant
- Champions - KitShan, Samantha, us
- Collaborators/experts - MedEd, e-learning, medical writers, subject matter experts
- Alignment with academic requirements - RAP
- Alignment with case-based learning in Med Ed
- CanMEDS update to include planetary health

Challenges

- Educational expertise
- Student uptake & engagement
- Durability/longevity
- TIME
 - Competing interests
 - Implementation: where to fit into existing curriculum
- Incorporating Indigenous perspectives
 - Upcoming: collaboration with Indigenous Education Lead

Next Steps

- Beta-testing
- Implementation
- Evaluation

Please provide feedback to inform future events

If you're heading out early,
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Symposium Evaluation Survey

