Planetary Health Report Card (Medicine) 2026:

Medical College of Wisconsin

2025-2026 Contributing Team:

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Land acknowledgment:
We acknowledge in Milwaukee that we are on traditional Potawatomi, Ho-Chunk and Menominee homeland along the southwest shores of Michigami, North America's largest system of freshwater lakes, where the Milwaukee, Menominee and Kinnickinnic rivers meet and the people of Wisconsin's sovereign Anishinaabe, Ho-Chunk, Menominee, Oneida and Mohican nations remain present.

Summary of Findings

Overall Grade	B

Curriculum	A-

Medical College of Wisconsin (MCW) has integrated planetary health across all phases of medical education, including required workshops, systems-based learning, clerkship teaching, and a 4-week Climate Change & Human Health elective. Core strengths include training in climate communication, environmental history-taking, sustainable clinical practice, and health equity. Planetary health concepts are reinforced longitudinally throughout pre-clerkship and clinical training.

Recommendations:

- Appoint a dedicated faculty lead for planetary health integration.
- Expand required content on healthcare waste reduction and sustainable procurement.
- Continue strengthening longitudinal reinforcement during clinical rotations.

Interdisciplinary Research	A-

The Center for Sustainability, Health, and the Environment (SHE Center) strengthens interdisciplinary coordination of sustainability and climate-health research. Faculty conduct research on environmental toxins, green space and health equity, and environmental justice, with advisory input from a Community Advisory Board. MCW maintains national climate-health affiliations and has hosted climate-focused events.

Recommendations:

- Recruit faculty with a primary research focus in planetary health.
- Formalize community co-leadership in research agenda setting.
- Expand recurring planetary health–focused conferences or symposia.

Community Outreach and Advocacy	C+

MCW partners with multiple community organizations to promote environmental health and climate justice initiatives. Earth Month programming and Global Health events demonstrate engagement with students and the broader community. Some affiliated hospitals provide environmental health materials, though climate-specific patient education is limited.

Recommendations:

- Develop patient-facing educational materials on climate and health.
- Establish CME offerings in planetary health for practicing clinicians.
- Create recurring public-facing planetary health education events.

Support for Student-Led Initiatives	B

MCW supports student engagement through Medical Students for Sustainable Future (MS4SF), sustainability-focused scholarly pathways, co-curricular programming, and community garden initiatives. Students participate in advocacy, food systems programming, and sustainability quality improvement efforts. Faculty mentorship and institutional support are present but decentralized.

Recommendations:

- Establish a student sustainability liaison within institutional governance.

Campus Sustainability	D

MCW has implemented energy reduction strategies, sustainable lab initiatives, transportation investments, and infrastructure improvements. The SHE Center provides institutional coordination for sustainability efforts.

However, operational sustainability progress remains limited relative to other sections.
Recommendations:

- Develop and publish a carbon neutrality roadmap.
- Expand renewable energy procurement.
- Implement formal sustainability requirements for events and food services.
- Expand campus-wide compost access.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many health professional school's institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients' health. This preparation is in the hands of the institutions providing our health professional training. It is imperative that we hold our institutions accountable for educating health professional students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centred on environmental health impacts 5) school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.

- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.

- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:

    1. Describe how the environment and human health interact at different levels.
    2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
    3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.

- **Medical School/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.

- **Core Curriculum:** This refers to the taught material that is delivered to the entire cohort of students in one year.

- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

Other considerations:

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

Planetary Health Curriculum

Section Overview: ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's health professional students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 point)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	2
Score explanation: *EMED-D4105-020 - Climate Change & Human Health, M4* *This selective is a 4-week selective offered to M4s after their clerkship phase; instructional methods include lectures, independent learning, experiential learning through community site visits; topics include the foundations of climate change science, links between climate change and health, physician actions along the socio-ecological model, healthcare sector environmental impact and need for resiliency, food insecurity, sustainability quality improvement, climate change policy and advocacy, and medical education.*	

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
In this 1.5-hr workshop, students use patient cases to discuss in detail the health impacts of extreme heat driven by climate change and apply these concepts to a patient with cardiovascular disease and pregnancy.

Spring Respiratory Block, Phase 1, M1
This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 2 involves a patient with asthma and includes the learning objective: "Provide anticipatory guidance education to patients with respiratory conditions on ways to recognize and mitigate environmental risks related to climate change (e.g., heat, air quality)."

Fall GI-Nutrition Block, Phase 1, M1
This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 3 involves a patient with gallstones and includes the learning objective: "Identify risks of extreme heat and dehydration to the biliary system."

1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Spring Phase 1 Renal Block, Phase 1, M1
This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 4 involves a patient with end-stage renal disease. A learning objective for this session is "Describe the ways in which critical healthcare services are vulnerable to extreme weather events and propose solutions for building resilience." Within the case, students are prompted to consider and discuss the ways in which healthcare services, including dialysis, are vulnerable to extreme weather events and propose solutions for building resilience.

Psychiatry Clerkship, Phase 2, M2
1.5 hour interactive lecture dedicated to the topic of mental health and climate change. Includes a section on psychological and behavioral responses to acute disasters related to extreme weather events.

EMED-D4105-020 - Climate Change & Human Health, M4

The introduction lecture includes a discussion based on the National Oceanic and Atmospheric Administration (NOAA) billion-dollar wealth and climate disasters diagram and covers mental health impacts of extreme weather events.

1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2

Score explanation:
Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
In this 1.5-hr workshop, the introduction lecture includes the Centers for Disease Control and Prevention (CDC) climate change and health "wheel" and we discuss shifts in infectious disease in the state of Wisconsin, including Lyme's disease.

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
This session includes a 1-hr small-group activity based on a patient case with a climate-sensitive respiratory illness requiring independent/small-group synthesis of information, and peer-teaching through facilitator guided discussion.

Fall INTE-D3300-M3 - Cont Prof Dev, Phase 2, Phase 2, M3
This session includes a 60-minute interactive lecture dedicated to the topic of climate-smart healthcare, half of which is dedicated to incorporating climate change into patient encounters. Obtaining an environmental history and counseling patients to build adaptive capacity includes content specific to air pollution.

Spring Respiratory Block, Phase 1, M1

This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 2 involves a patient with asthma and includes the learning objective: "Provide anticipatory guidance education to patients with respiratory conditions on ways to recognize and mitigate environmental risks related to climate change (e.g., heat, air quality)."

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: *Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1* *In this 1.5-hr workshop, students use patient cases to discuss in detail the health impacts of extreme heat driven by climate change and apply these concepts to a patient with cardiovascular disease.* *Spring Cardiovascular Block, Phase 1, M1* *This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 3 involves a patient with hyperlipidemia and includes the learning objective: "Identify lifestyle modifications which co-benefit human and planetary health" Content includes air pollution exposure as a risk factor for atherosclerosis and prompts students to consider how they would counsel patients to lower this risk.* *Spring Cardiovascular Block, Phase 1, M1* *This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 4 involves a patient with heart failure and includes the learning objective: "Explain the mechanism of how heat exposure can impact patients with heart failure"*	

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: *Psychiatry Clerkship, Phase 2, M2 and M3*	

1.5 hour interactive lecture dedicated to the topic of mental health and climate change. Key learning objectives include (1) Explain how environmental factors are a major determinant of mental health, (2) Describe how psychiatric conditions and treatments can increase vulnerability to the health impacts of climate change and propose preventative measures. (3) Provide an example of non-pharmaceutical intervention that promotes both mental and environmental health (4) Access at least one resource on the mental health impacts of climate change.

EMED-D4105-020 - Climate Change & Human Health, M4
This course includes independent work and a small group discussion dedicated to the topic of climate change and mental health, as well as ecosystem services and wellbeing.

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2

Score explanation:
Fall: INTE-12103 - The Good Doctor 1, Phase 1, M1
1-hour interactive lecture on the topic of gastrointestinal health, nutrition and climate change which covers the relationships between climate change, ecosystems, food security and water quality

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
The 30-minute introduction lecture focuses on the topic of climate change, health equity, and environmental justice, followed by a 60-minute small group activity entailing patient cases that highlight vulnerable patient populations and climate-health risk factors. Students are taught to assess patient climate-vulnerability by considering their exposures, sensitivities, and adaptive capacity.

1.10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: *Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1* *The 30-minute introduction lecture includes a slide dedicated to discussing the unequal regional health impacts, and emissions contributions, globally..*	

Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: *Fall Hematology-Immunology Block, Phase 1, M1* *This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 3 involves a patient with B-cell acute lymphoblastic leukemia and includes the learning objective: "Describe impacts of environmental exposures on human health." The patient's mother in the case was exposed to pesticides while pregnant and this is discussed as a risk factor. The reference includes discussion of prenatal exposures and risk factors for childhood leukemia: https://pmc.ncbi.nlm.nih.gov/articles/PMC5080868/*	

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: *Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1* *Lecture includes slides on major climate health impacts affecting our university's geographic region, as well as slides on historic redlining and its impact on Milwaukee resident flooding-health vulnerability.* *EMED-D4105-020 - Climate Change & Human Health, M4* *This 4-week course includes community site visits to learn about the local impacts and community solutions to issues including food insecurity and access to green space.*	

1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: *Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1* *Fall INTE-D3300-M3 - Cont Prof Dev, Phase 2, M3* *The indigenous principle Seventh Generation is defined, attributed to indigenous knowledge and then used to teach the term/concept of planetary health.*	

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: *Pediatric Clerkship, Phase 2, M2 and M3*	

The clerkship includes a compulsory asynchronous activity which covers the following learning objectives: Lead as an environmental toxin; the disproportionate risks for lead poisoning in Milwaukee and Racine and why, particularly among children of color; rates of lead poisoning based on census track review and based on race/ethnicity. The clerkship also includes a Student Case Report session. In this session, students identify, present a patient case from their clinical experience and discuss the relevant social determinants of health. The student instructions include: "This could include topics such as the disproportionate impact of anthropogenic environmental toxins on marginalized populations" and provide lead-poisoning and smoke exposure as examples.

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 point)	
Score Assigned:	3

Score explanation:
Fall INTE-12103 - The Good Doctor 1, Phase 1, M1
This 1-hour interactive lecture on the topic of gastrointestinal health, nutrition and climate change includes 3-4 slides dedicated to the environmental and health co-benefits of a plant-based diet. Students use an online calculator to estimate the carbon footprint of their current diet and explore the impact of replacing items with more climate friendly options.

Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
Lecture includes a slide on co-benefit actions, including the planet and human benefits of shifting towards a plant-based diet.

EMED-D4105-020 - Climate Change & Human Health, M4
This 4-week course includes multiple sessions on the planetary and human health impacts of our food system, food waste and benefits of a plant-based diet. Instructional methods include a community site visit to a food bank that rescues 70k pounds of food weekly, watching a documentary and small group discussion.

1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation:
Fall: INTE-D3300-M3 - Cont Prof Dev, Phase 2, M3
This session includes a 30-minute interactive lecture dedicated to the topic of the environmental impact of healthcare systems, including its carbon footprint, and actions we can take to minimize these impacts. It provides Choosing Wisely and Climate Action as a resource.

EMED-D4105-020 - Climate Change & Human Health, M4
This course includes a lecture on addressing healthcare sustainability through a quality improvement framework (SusQI) and a workshop during which students complete a SusQI project template on an opportunity identified based on their clinical experience/observations. Students receive feedback on their project template and discuss their ideas in a small group session.

Fall Hematology-Immunology Block, Phase 1, M1
This unit includes weekly problem-based discussions with a facilitator-led student small-group. Week 1 and Week 4 include the learning objective: "Identify areas for high value care in medical management." Content links planetary health to high-value care, including antibiotic stewardship and choosing PO medication versus IV analogues when clinically appropriate.

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	2
The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	2
The health **and** environmental **co-benefits** of **non-pharmaceutical management** of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	1
Waste production within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	0

Score explanation:
Fall: INTE-D3300-M3 - Cont Prof Dev, Phase 2, M3

This includes a 30-minute interactive lecture dedicated to the topic of the environmental impact of the healthcare system and services. Slides within this lecture address all highlighted items above. It provides Choosing Wisely and Climate Action as a resource.

- *The lecture explains that unnecessary tests, treatments, and procedures create avoidable harms to patients and generate unnecessary environmental emissions through equipment use, transportation, and resource consumption. Students are taught that reducing low-value care benefits both patient outcomes and planetary health by minimizing waste and carbon emissions associated with healthcare delivery.*
- *The lecture includes a section titled "Pharmaceuticals – less can be more!" which addresses the environmental and health consequences of polypharmacy and over-prescribing. Students learn that pharmaceuticals contribute approximately 10% of U.S. healthcare carbon emissions through manufacturing, packaging, transportation, and disposal. The course teaches deprescribing strategies, medication review practices, and the importance of selecting non-pharmacologic treatments where appropriate to reduce both patient harm and environmental impact.*
- *The lecture explicitly discusses the role of preventative care and lifestyle interventions in promoting both patient health and planetary health. Students are taught that interventions such as active transportation, plant-based diets, and social activities provide co-benefits by improving physical and mental health while reducing environmental impacts.*
- *The lecture discusses the environmental footprint of surgical care in a section on operating room sustainability. Students learn that surgery is highly resource-intensive due to energy use, sterilization requirements, advanced equipment, and large volumes of disposable materials. Operating rooms can account for up to 70% of hospital waste and consume significantly more energy per square foot than other hospital spaces.*
- *The lecture includes dedicated slides on anesthetic gases and their greenhouse gas effects. Students are taught that less than 5% of inhaled anesthetic gases are metabolized, with the remainder released into the atmosphere. The lecture highlights the extremely high global warming potential of certain gases (e.g., desflurane has a GWP ~2540 times greater than CO_2) and discusses strategies to reduce anesthesia-related emissions.*
- *The lecture includes content on the climate impact of inhaler devices, explaining that metered dose inhalers use hydrofluorocarbon propellants with 1,300–3,300 times the global warming potential of CO_2. Students are introduced to data showing that inhaler prescriptions produce substantial greenhouse gas emissions and that dry powder inhalers may reduce environmental impact when clinically appropriate.*

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2
Score explanation:	

Fall: INTE-D3300-M3 - Cont Prof Dev, Phase 3, M3 *This session includes a 30-minute interactive lecture on general climate change communication strategies and then students are taught how to incorporate climate change into their clinical care (inpatient and/or outpatient encounters), using a simple framework for vulnerability: vulnerability = exposure + sensitivity - adaptive capacity.* *EMED-D4105-020 - Climate Change & Human Health, M4* *Climate health communication strategies are discussed and practiced in the contexts of patient care and advocacy.*

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?	
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)	
Only **elective** coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)	
Score Assigned:	2
Score explanation: *Fall INTE-D3300-M3 - Cont Prof Dev, Phase 2, Phase 2, M3* *This session includes a 60-minute interactive lecture dedicated to the topic of climate-smart healthcare, half of which is dedicated to incorporating climate change into patient encounters. Obtaining an environmental history with the goals of understanding a patient's personal exposures and sensitivities is discussed in detail. The CH^2OPD^2 mnemonic (Community, Home, Hobby, Occupation, Personal, Diet, Drugs) is offered as a tool for guiding an environmental/exposure history.* *EMED-D4105-020 - Climate Change & Human Health, M4* *Students develop their own template for obtaining an environmental/exposure history and practice these skills through written patient cases and role playing.*	

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	2
Score explanation:	

Grant funding obtained in partnership with the MCW Center for Sustainability, Health and the Environment supports planetary health curriculum development in medical school curriculum. The medical school leadership is a key stakeholder and encourages course director collaboration.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	4
Score explanation: *Core pre-clerkship curriculum includes a dedicated 1.5-hour lecture/small-group workshop on planetary/sustainable healthcare. These topics are briefly reinforced in core basic science units as part of problem-based discussion throughout Phase 1. Phase 2 (clerkship) students receive an interactive lecture on climate-informed healthcare, addressing the environmental footprint of healthcare and how to integrate planetary health into clinical practice, as well as a dedicated 1.5 hr interactive lecture on the impacts of climate on mental health within the Psychiatry Clerkship. In post-clerkship curriculum, students are offered a 4-week elective dedicated to climate change and human health with a focus on climate action at all levels of the social ecological model.*	

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	0
Score explanation: *Grant funding obtained in partnership with the MCW Center for Sustainability, Health and the Environment supports planetary health curriculum development in medical school curriculum. The grant provides funding for two co-principal investigators and two co-investigators, one of whom is a data analyst.*	

1.23. Does your health professional curriculum include teaching on civic

engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation
Health Equity Thread, Phases 1, 2, and 3
Students participate in Health Equity Thread sessions throughout medical school, learning about the social, structural, and environmental determinants of health. They hear from community organizations and learn that they can be involved in their community, and how to advocate for their patients as future physicians through the legislative process and community engagement.

Spring: INTE-12104-010 - The Good Doctor 2, Phase 1, M1
Environmental and structural determinants of health are discussed in detail. Examples of physicians engaging in civic/advocacy action are provided and students are provided organizations within which they can voluntarily engage, including the MCW chapter of MS4SF.

EMED-D4105-020 - Climate Change & Human Health, M4
One week of the course is dedicated to civic engagement and advocacy. Students first write a policy analysis on a local environmental justice issue and then use that analysis to create an example of public testimony or write an op-ed. Volunteer civic engagement opportunities are provided throughout the course.

PWAY-12210-1 and PWAY-22211-060 Urban and Community Health Scholarly Concentration
This elective is a 2-year longitudinal course of which about 8% of 225 first-year medical students enroll each year. The Built Environment session is a half-day interactive seminar which introduces environmental health and focuses on the impact of the transportation environment on health, safety, and wellbeing. Pre-work includes community site observation and engagement with topic experts and civic leaders (specifically Vision Zero from the City of Milwaukee). Students also spend time reflecting on the built environment immediately surrounding their UCH community partner organization. The concentration also includes a service-learning component for which all students participate in projects submitted by community organizations to meet their identified needs. These projects include opportunities which address environmental and structural health, for example the projects with Vision Zero (UCH Class of 2028), Clean Wisconsin (UCH Class of 2029), and Healthy Climate Wisconsin (UCH Class of 2029).

Section Total (62 out of 75)	**82.67%**

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Interdisciplinary Research

Section Overview: ***This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution.*** *Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	2
Score explanation: *MCW currently has researchers investigating health issues related to planetary health, but none who have a primary research focus in planetary health or healthcare sustainability. Related projects include studies on the impacts of environmental toxins on human health, focusing on vulnerable populations, such as Native American communities, disproportionately affected by pollution (Environmental Health Research). Other work investigates how environmental and systemic factors, such as green space, racial segregation, and redlining, contribute to health disparities and how community-driven solutions can promote health equity. (Environmental Social Justice Research).* *Additionally, the Institute for Health & Humanity, MCW examines social determinants of health and disparities, emphasizing populations impacted by climate change . The Center for Sustainability, Health, and the Environment (SHE Center, MCW) furthers MCW's engagement in sustainability by addressing climate challenges, reducing greenhouse gas emissions in healthcare delivery and research, and promoting environmentally sustainable healthcare practices . While these efforts demonstrate MCW's involvement in planetary health and sustainability topics, they do not represent a primary research focus for faculty, resulting in a score of 2 points under this metric.*	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)
There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 point)
There is **no** dedicated department or institute. (0 points)

Score Assigned:	3

Score explanation:
The MCW established the Center for Sustainability, Health, and the Environment (SHE Center) in 2023, which aims to unify MCW's progress in improving planetary and human health by working across mission areas to educate, build knowledge, enhance patient care, and collaborate with communities. In its first year, faculty, students, and staff affiliated with the Center have presented their work at 6 conferences and community events and published on the environmental impacts of in-person residency interviews. The SHE Center is housed within MCW's Institute for Health & Humanity. Additionally, the Institute for Health & Humanity explores social determinants of health and environmental disparities through its research efforts.

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?
Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)
Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)
No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 point)
There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:	2

Score explanation:
The MCW has a Community Advisory Board (CAB) that includes ten local community members serving as advisors for the Health First Climate Action Research Center, which is supported by an National Institutes of Health (NIH) grant. This advisory board provides guidance on the center's research priorities, ensuring that voices from communities disproportionately affected by climate change and environmental injustice are included in shaping the research agenda. (NIH Grant Announcement) Additionally, MCW houses the Community Engagement Core for this center, further embedding community perspectives into environmental health research.

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?	
There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)	
There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)	
The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)	
There is **no** website. (0 points)	
Score Assigned:	3
Score explanation: *MCW provides a dedicated website for the Center for Sustainability, Health, and the Environment (SHE Center), which serves as a central hub for sustainability and planetary health resources. This website includes information on sustainability initiatives, events, and resources related to health and the environment. Notably, it features a newsletter section that regularly shares updates on leadership activities, research initiatives, upcoming events, and available funding opportunities. By consolidating these components, the SHE Center website ensures accessibility and effective communication for the campus community.*	

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)	
Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	3
Score explanation: *MCW and Froedtert Health hosted the Sustainable Health Care Summit on June 26, 2025 at Helfaer Auditorium. The summit included a sustainability resource fair, a plant-forward food demonstration, a screening of The Here Now Project, and a panel discussion with sustainability experts focused on reducing the environmental impact of healthcare delivery. The event also*	

highlighted practical strategies for sustainable healthcare systems and climate-conscious medical practice. *Additionally, MCW hosted programming during Global Health Week addressing environmental justice and Indigenous health, including a session on the Enbridge Line 5 pipeline and its impacts on Tribal Nations' health and environmental systems, followed by cultural programming with Native drumming and storytelling. These events demonstrate institutional engagement with sustainability, environmental justice, and planetary health topics. Because MCW hosted events related to sustainable healthcare and planetary health within the past year, the institution meets the criteria for 3 points for this metric.*

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
Score explanation: *MCW is a member of the Global Consortium on Climate and Health Education (GCCHE), which unites health professional training institutions to promote climate readiness and health sector resilience in the face of climate change. Through our academic affiliation with Froedtert Thedacare Health, we are also a member of Practice Greenhealth.*	

Section Total (14 out of 17)	**82.35%**

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Community Outreach and Advocacy

Section Overview: ***This section evaluates a school's engagement in community outreach and advocacy efforts associated with planetary health.*** *Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

3.1. Does your institution partner with community organisations to promote planetary and environmental health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3

Score explanation:
The Medical College of Wisconsin (MCW) collaborates with multiple community organizations to promote planetary and environmental health through research, education, and advocacy initiatives.

- *Reflo and Milwaukee Public Schools Partnership: MCW partners with Reflo and Milwaukee Public Schools through an Environmental Protection Agency (EPA)-funded project to examine the impact of schoolyard greening on student wellness and environmental sustainability. This collaboration also includes developing a climate health equity curriculum for K-12 educators to teach climate justice.*
- *Green Spaces and Public Health Research: MCW researchers are studying the impact of green spaces on public health in Wisconsin's urban neighborhoods. This research aims to assess how exposure to green spaces can improve mental health, reduce stress, and enhance overall well-being, particularly in underserved communities. The project engages local residents in community-driven research to evaluate environmental and health impacts. (AHW Endowment Blog)*
- *Walnut Way Conservation Corp: MCW also works with Walnut Way, a Milwaukee-based organization that fosters environmental stewardship and civic engagement to advance health equity in urban neighborhoods. Walnut Way's initiatives focus on green infrastructure, environmental justice, and sustainable community transformation, aligning with planetary health goals.*
- *MCW is engaged in a partnership with Clean Wisconsin to create neighborhood-level tools that integrate data on pollution, climate change exposure, and environmental quality to illuminate how degraded ecosystems directly shape human health outcomes in Milwaukee communities.*

3.2. Does your institution offer community-facing courses or events regarding planetary health?	
The **institution** offers community-facing courses or events at least once every year. (3 points)	
The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The **institution** has not offered such community-facing courses or events. (0 points)	
Score Assigned:	2
Score explanation: *As part of MCW's Earth Month Activities, MCW's SHE Center hosted an Earth Day celebration with community speakers from Milwaukee Riverkeeper, Urban Ecology Center, the Wisconsin Department of Natural Resources and Compost Crusaders. Members of the MCW community were in attendance and participated in programs such as the seedling swap and recycling of plastic bags, batteries and soda can tabs.* *MCW students, staff and faculty participated in community-facing events related to the environment and health in 2025. This included participating in Healthy Climate Wisconsin's Weathering the Storm Conference and speaking in the Zilber College of Public Health Seminar.*	

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)	
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)	
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)	
Score Assigned:	2
Score explanation: *MCW provides regular updates on planetary health and sustainable healthcare topics through the SHE Center newsletter. This newsletter is distributed to students and highlights sustainability initiatives, planetary health events, and opportunities for engagement, such as the Global Health Week activities and community-focused projects addressing environmental health issues.*	

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post-graduation with the aim of ensuring their knowledge and

skills in planetary health and sustainable healthcare remain up to date during their professional career?	
Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)	
Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	0
Score explanation: There are no such accessible courses at MCW.	

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: *MCW is affiliated with Children's Wisconsin and Froedtert Hospital. Children's Wisconsin provides patient-facing educational materials related to environmental health exposures. For instance, their Asthma, Allergy, and Immunology Center offers guidance on minimizing exposure to outdoor allergens (Asthma Triggers). Additionally, the Children's Health Alliance of Wisconsin, associated with Children's Wisconsin, has initiatives like the Wisconsin Asthma Coalition and Lead Poisoning Prevention programs that offer resources on environmental health. On the other hand, Froedtert Hospital does not appear to provide specific patient-facing educational materials focused on environmental health exposures. While the hospital emphasizes patient safety and offers various health resources, there is no clear evidence of materials addressing environmental health risks such as exposure to pollutants or chemicals.*	

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)
Some affiliated hospitals have accessible educational materials for patients. (1 point)

No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	0
Score explanation: *There is no evidence that affiliated hospitals provide patient-facing educational materials specifically addressing the health impacts of climate change. While both hospitals offer various health resources, they do not appear to include information on how climate change affects health.*	

Section Total (8 out of 14)	**57.14%**

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Support for Student-Led Planetary Health Initiatives

Section Overview: ***This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*** *Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)	
No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	1
Score explanation: *MCW supports student involvement in sustainability-related initiatives through its Scholarly Pathways Program. This program allows students to design and implement projects aligned with their interests, which may include sustainability or planetary health quality improvement (QI) projects. Additionally, MCW offers the Medical Student Summer Research Program (MSSRP), which provides funding for research projects. While MSSRP does not specifically target sustainability or planetary health, students may propose and secure funding for projects related to these topics, provided they meet the program's criteria.*	

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek them out and carry them out in their spare time. (1 point)	
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	1
Score explanation:	

There are opportunities for students to engage in planetary health/sustainable healthcare research. However, there is no dedicated research program or fellowship specifically for planetary health or sustainable healthcare. Students must take the initiative to identify mentors, develop project proposals, and secure approval or funding.

4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.	
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)	
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, but it lacks key information. (1 point)	
There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)	
Score Assigned:	1
Score explanation: *MCW has a webpage for the Center for Sustainability, Health, and the Environment (SHE Center), which highlights the institution's mission for environmental sustainability and provides information on current sustainability efforts. The SHE Center webpage details various initiatives and programs related to sustainability in healthcare and environmental health. However, while the SHE Center webpage provides an overview of institutional efforts, it does not include comprehensive or up-to-date information on specific planetary health projects or contact details for potential mentors. Students must use other resources, such as the Faculty Collaboration Database, to independently identify mentors, as no centralized directory exists specifically for planetary health or sustainable healthcare projects and guidance.*	

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2

Score explanation: *The Medical Students for a Sustainable Future (MS4SF) Interest Group at theMCW is a registered student-led organization supported by a faculty advisor. MS4SF's mission is to promote awareness of the intersection between climate change and human health, advocate for sustainable practices in healthcare, and encourage local action to address environmental health issues. The group actively engages with peers and the community to foster initiatives that support planetary health and environmental sustainability. MS4SF is affiliated with the national Medical Students for a Sustainable Future network, connecting students to broader efforts in planetary health advocacy and education.*

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	0
Score explanation: There is no such liaison.	

4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score explanation:	

MCW provides several co-curricular opportunities for students to engage with planetary health. MCW has a student-run garden, maintained by medical student volunteers, which offers hands-on experience in organic agriculture and sustainable food systems. *MCW's MS4SF with support from the SHE center promotes a local community garden where students are encouraged to volunteer with maintenance and are free to take produce as needed. Leftover produce is donated to MCW's community pantry. MS4SF also hosted a food insecurity and food waste event where students discussed the environmental impacts of food waste. Students focused on solutions to divert food waste and how efforts can reduce food insecurity. The talk was followed by students creating shelf stable oatmeal and soup jars in recyclable materials for donation to local food pantries.* *The Office of Global Health during Global Health Week, provided a platform for students to engage with real-world examples of how academic medical centers can address climate change and environmental justiceThis event also fulfilled the category of events where students learn from environmental justice communities, as it featured insights from local professors, who discussed Indigenous sovereignty, climate justice, and health impacts .* *Additionally, MCW has a Wilderness Club that organizes outdoor excursions, such as hiking and nature-based activities, promoting environmental awareness and student well-being and a Run Club that meets twice a week.*

Section Total (10 out of 15)	**66.67%**

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Campus Sustainability

Section Overview: ***This section evaluates the support and engagement in sustainability initiatives by the institution.*** *The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our institutions, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.*

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	2
Score explanation: *MCW has the Center for Sustainability, Health, and the Environment (SHE Center), which addresses healthcare sustainability and environmental health. The center is dedicated to campus sustainability but neither the MCW Facilities and Operations department nor MCW's hospital affiliates have staff members dedicated to sustainability efforts.*	

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?	
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)	
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)	
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)	
The institution does **not** meet any of the requirements listed above (0 points)	
Score Assigned:	0

MCW has made efforts to reduce carbon emissions, including converting steam heating from coal to natural gas and reducing energy consumption per square foot by 40% since 2008. However, MCW has stated that achieving net-zero emissions is not feasible due to its energy-intensive operations and limited renewable energy opportunities.

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes, institution buildings are **100%** powered by renewable energy. (3 points)	
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	0
Score explanation: *MCW is a member of the Association for the Advancement of Sustainability in Higher Education (ASHEE) and the affiliated hospital, Froedtert has been certified as an Energy Star campus. Additionally, efforts such as converting steam heating from coal to natural gas and renewing 40% of the chilled water plant assets have resulted in a 70% reduction in emissions. However, the institution does not fully meet the 100% renewable energy threshold required for full points.*	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?	
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)	
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)	
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)	
Sustainability is **not considered** in the construction of new buildings. (0 points)	
Score Assigned:	2
Score explanation:	

MCW applies green building criteria in campus design and operations. It also recycles over 90% of construction debris and routinely implements energy conservation projects, including lighting retrofits and digital controls.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?	
Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)	
The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)	
The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)	
Score Assigned:	1
Score explanation: *MCW has actively invested in sustainable transportation infrastructure to reduce the environmental impact of commuting. The institution has a carpool program that matches participants through an online system based on location and work schedules, providing preferred parking in the employee lot for those who carpool. Additionally first-year medical students are given priority parking when registering as a carpool vehicle. This initiative is newly implemented and data to show student usage is unavailable. MCW has contributed to the Milwaukee County Bus Rapid Transit (BRT) system and constructed a station on the medical center campus to facilitate public transportation use. Additionally, MCW has relocated and rebuilt bus stops to be more accessible, placing them near the front entrance of the campus. To support alternative transportation options, MCW has invested in "complete streets," which emphasize pedestrian and bicycle safety by providing dedicated walking and biking lanes. The institution has also invested in Bublr Bikes, a Milwaukee County bike-sharing program, to further encourage sustainable transportation choices. However, these initiatives are not well-advertised or utilized by students.*	

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)	
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)	
There is **no** compost or recycling program at the institution. (0 points)	
Score Assigned:	1

Score explanation: *MCW has a comprehensive recycling program for plastics, glass, and paper, with receptacles in offices and near trash locations. Additionally, the institution partners with Compost Crusader to divert food waste for composting. However, this initiative is not yet accessible for students and faculty and is only used by food services.*

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	0
Score explanation: *MCW contracts with outside vendors for its food services. These providers have transitioned to compostable containers, prioritize local food sourcing, and offer vegetarian meal options at all times. These initiatives align with sustainability standards that emphasize reducing meat consumption and minimizing environmental impact, however, there is no guideline in place.*	

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	2
Score explanation: *MCW integrates sustainability into procurement by sourcing local foods, eliminating priority chemicals in furniture purchases, recycling construction debris, and actively recycling multiple*	

waste streams. However, the sustainability guidelines are not comprehensive or mandatory across all purchasing decisions.

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?	
Every event hosted at the institution **must** abide by sustainability criteria. (2 points)	
The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)	
There are **no** sustainability guidelines for institution events. (0 points)	
Score Assigned:	0
Score explanation: *MCW does not currently have formal sustainability requirements for events, nor are there strong institutional incentives in place for sustainable event planning. The institution has created a food waste reduction form that individuals can fill out when hosting an event in an effort to divert leftover catered food to students on campus.*	

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)	
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
Score explanation: *MCW promotes sustainable lab practices through initiatives like the Freezer Challenge, "Shut the Sash" energy savings campaign, a chemical inventory sharing system, and solvent reduction programs. Additionally, MCW has a department-specific gifting system where labs can donate and receive unused equipment. While this is confined to individual departments, MCW's InfoScope platform also advertises a lab equipment exchange and trade initiative, helping to reduce unnecessary purchases and waste across multiple research teams.*	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)

The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	1
Score explanation: *MCW has not divested from fossil fuels, but there have been conversations amongst leadership and through the SHE Center to begin efforts.*	

Section Total (11 out of 32)	**34.38%**

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Grading

Section Overview
This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for the Medical College of Wisconsin School of Medicine.
The following table presents the individual section grades and overall institutional grade for the Medical College of Wisconsin School of Medicine on this Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(62/75) x 100 = 82.67%	A-
Interdisciplinary Research (17.5%)	(14/17) x 100 = 82.35%	A-
Community Outreach and Advocacy (17.5%)	(8/14) x 100 = 57.14%	C+
Support for Student-led Planetary Health Initiatives (17.5%)	(10/15) x 100= 66.67%	B
Campus Sustainability (17.5%)	(11/32) x 100 = 34.38%	D
Institutional Grade	**(82.67x0.3 + 82.35x0.175 + 57.14x0.175 + 66.67x0.175 + 34.38x0.175) = 66.89%**	**B**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which Medical College of Wisconsin has participated in the Planetary Health Report Card initiative.