



Planetary Health Report Card (Medicine): *University of Sheffield*



2022-2023 Contributing Team:

- Students: Sam Segal*
- Faculty Mentors: Pirashanthie Vivekananda-Schmidt
- *Primary Contact: Sam Segal, ssegal2@sheffield.ac.uk

Summary of Findings

| | |
|---|-----------|
| Overall | B- |
| <u>Curriculum</u> | B |
| <ul style="list-style-type: none"> • The University of Sheffield includes Planetary Health (PH) topics throughout the curriculum. Public health teaching in particular includes brief mentions of many of the key PH topics. • Recommendations: Further integration of PH topics into the curriculum may be beneficial, including discussing environmental impacts of doctors' actions outside of lectures dedicated specifically to the topic. | |
| <u>Interdisciplinary Research</u> | B- |
| <ul style="list-style-type: none"> • PH research is taking place within the medical school via the School of Health and Related Research (ScHARR), which has links to other centres conducting sustainable research such as the Institute of Sustainable Food. • Recommendations: The medical school could consider how to involve communities who are being disproportionately affected by climate change into decisions about the research agenda, and they could set up a website for planetary health news. | |
| <u>Community Outreach and Advocacy</u> | C |
| <ul style="list-style-type: none"> • The medical school has some community outreach relating to PH, with SSC options in phase 2b and 3a enabling students to work with community organisations, though beyond this there is not much community outreach. • Recommendations: The medical school could host community-facing events about planetary health, especially topics which may be relevant to the local community. There could also be engagement in professional education activities for graduates to ensure their planetary health knowledge remains up to date. | |
| <u>Support for Student-Led Initiatives</u> | B |
| <ul style="list-style-type: none"> • There are multiple student-led groups which are supported by the university to engage in PH activities, such as Healthy Planet Society and Students for Global Health. Furthermore, multiple societies in the wider university work on sustainability issues or engagement with nature. • Recommendations: Further support could be put in place for students interested in conducting PH-related research, including providing information about available opportunities and mentors and providing grants to conduct such research. | |
| <u>Campus Sustainability</u> | C+ |
| <ul style="list-style-type: none"> • The university and the medical school have both made some progress towards campus sustainability, including significant action on utilising renewable energy and divesting from fossil fuels. However, despite promising targets being set across more sectors, including waste, transportation and food, there is significant work to be done to meet these. • Recommendations: Targets to improve sustainability in areas such as transportation and waste need to be met. Examples could include introducing more sustainable travel options for students going on placements, introducing food waste recycling, and enforcing stronger sustainability guidelines for food, procurement, and events. | |

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 analyzing 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, urbanization, 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 medical 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 medical training. It is imperative that we hold our institutions accountable for educating medical 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 color, 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 medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical 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 centered on environmental health impacts 5) medical 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 medical school 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 vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School 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. 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 (Metric #19 in Curriculum Section):** This is a series of questions providers 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.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical 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.
- **Clerkship:** 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 or placements.

Other considerations:

- If there are more than one "tracks" at your medical school 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).

Added to our resources last year, the Planetary Health Report Card [Literature Review by Metric](#) collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical 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. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year? | |
|--|---|
| 3 | Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. |
| 2 | Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. |
| 1 | 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. |
| 0 | No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. |
| <p><i>There are multiple elective opportunities with a focus on planetary health. In the Phase 2b Social Accountability SSC, opportunities include working in a secondary school to educate pupils about the links between climate change and health before working with them on a project to reduce the school's carbon footprint. Another option is working with Manor & Castle Development Trust, "developing use of local green space which aids mental and physical wellbeing whilst improving local environment".</i></p> <p><i>In Phase 3a one SSC option is the Green Impact SSC, in which students develop their knowledge of climate change as a health issue, then work in General Practices to implement the Green Impact for Health Toolkit, which is an audit tool aimed at reducing the environmental impact of General Practice.</i></p> | |

Curriculum: Health Effects of Climate Change

| 2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change? | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 1 lecture 'Global Environmental Public Health' (15th December 2022) includes in depth discussion of the current nature of temperature rises, with information on the direct health impacts of heatwaves as well as the further impacts caused by drought, food insecurity and diseases. The Phase 4 lecture 'Climate Change, Sustainability and Public Health' also includes several slides detailing rising global temperatures, with explanations of the effects of extreme heat, drought, and other extreme weather events in terms of individual and population health.

3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 1 lecture 'Global Environmental Public Health' (15th December 2022) goes into depth regarding the health implications of drought, food security and food safety and the impact of climate change on healthcare systems. The Phase 4 lecture 'Climate Change, Sustainability and Public Health' similarly details the impacts of cyclones, droughts, and extreme heat on both individual health and healthcare systems.

4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 1 lecture 'Global Environmental Public Health' (15th December 2022) has a slide explaining how the distribution of vector borne diseases such as malaria are changing due to rising global temperatures.

5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 1 lecture 'Global Environmental Public Health' (15th December 2022) has a slide discussing the global impact of air pollution with relation to deaths, as well as detailing the respiratory health impacts of forest fires, explaining that they are becoming more frequent due to climate change. The Phase 1 lecture 'Environmental impact on lung disease' (21 November 2022) discusses air pollution as a major exacerbator of asthma and discusses the respiratory effects of extreme weather events such as Australian thunderstorms. The impacts of air pollution as a cause of multimorbidity during ageing are discussed in the Phase 3b lecture 'Multimorbidity' (10th January 2022). The phase 1 lecture 'Sustainability and Health' (20th February 2023) discusses the impact of air pollution on foetal and neural development, as well as the links between exposure and pollution. The phase 4 lecture 'Greener Practice Sheffield' details the impact of air pollution on respiratory and cardiovascular diseases in terms of deaths related to specific conditions.

6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The phase 4 lecture 'Greener Practice Sheffield' details the impact of air pollution on cardiovascular diseases in terms of deaths due to stroke and IHD and discusses how extreme heat leads to heat-related illness, death and cardiovascular failure. The Phase 4 lecture 'Climate Change, Sustainability and Public Health' has a slide explaining how heat waves have led to excess deaths, particularly among more vulnerable groups, such as elderly people.

7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 2a lecture 'Global Environmental Issues and Public Health' contains a brief mention of mental health effects of climate change. The Phase 4 interactive workshop on Sustainable QI also includes a slide explaining what eco-anxiety is, why it may be considered an appropriate response to the climate crisis and giving links to [resources](#) that may provide support.

8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 1 lecture 'Global Environmental Public Health' (15th December 2022) details the relationship between health and sanitation, how reductions in soil quality due to erosion and pollution impact on food security, as well as discussing how climate change will result in an increase in global hunger and malnutrition.

The phase 2a lecture Global Environmental Issues and Public Health considers the health impacts of water scarcity and pollution, as well as discussing in detail the environmental impact of the agricultural system on availability of clean water and biodiversity.

9. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 4 lecture 'Climate Change, Sustainability and Public Health' explains how older adults are more at risk of serious complications such as death from extreme weather events, and also explains how poverty is associated with bearing increased climate burdens.

10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The Phase 2a lecture 'Global Environmental Issues and Public Health' discusses the global distribution of deaths relating to air pollution.

The Phase 4 lecture 'Climate Change, Sustainability and Public Health' explains how changing patterns of population health are unevenly distributed, with greater impacts falling on Asia and Africa, and how climate change will continue these trends. It explains what the most significant impacts of

climate change will be in various regions of the world, e.g. reduced crop yields and risk of flash flooding and heatwaves in Europe, with water stress resulting in significant falls in crop yields and exacerbation of malnutrition and food insecurity in Africa.

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

11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The lecture 'Investigation and Management of Infertility' (1st April 2022) discusses how environmental factors can affect conception.

12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The University of Sheffield is situated in a city previously famous for its industry, therefore it is important students understand how the industrial background can affect healthcare in the area. This is frequently mentioned in many lectures and tutorials in all years, due to the local clinical relevance. Specifically, in the lecture 'Occupational lung disorders' Dr Clare Burton discusses occupational hazards and how they can cause common lung conditions, whilst the lecture 'Environmental influences on lung disease' mentions steel working specifically as a risk factor for COPD. The Phase 2a lecture 'Case Presentation - Neoplasia' also discusses how numerous industry and environmental factors increase the risk of neoplasia.

13. To what extent does your medical school emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

| | |
|---|--|
| 3 | Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education |
| 2 | Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum. |

| | |
|--|--|
| 1 | Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework. |
| 0 | This topic was not covered. |
| <i>This topic was not covered in the core curriculum or elective coursework.</i> | |

| | |
|--|--|
| 14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults? | |
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| <i>The Phase 4 lecture 'Climate Change, Sustainability and Public Health' discusses how increasing urbanisation leads to worse health outcomes, particularly affecting those in poverty, those with limited access to healthcare and limited access to key services such as clean water.</i> | |

Curriculum: Sustainability

| | |
|---|--|
| 15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet? | |
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| <i>The Phase 4 lecture 'Greener Practice Sheffield' (10th January 2023) discusses the co-benefits of human and planetary health, specifically referring to a more plant-based diet and reductions in meat, especially red meat. This topic is also discussed in the Phase 2a ILA (compulsory seminar) 'Atherosclerosis', in which students are encouraged to consider what is meant by the term co-benefits and offer their own examples. Facilitators ensure that students discuss plant-based diets as one such co-benefit. The Phase 4 lecture 'Climate Change, Sustainability and Public Health' explains the environmental impact of increased meat consumption and links this to the health impact, explaining that there are multiple reasons why we should be encouraging a diet lower in meat.</i> | |

| | |
|---|---|
| 16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems? | |
| 3 | This topic was explored in depth by the core curriculum |

| | |
|---|--|
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| <p><i>The Phase 4 lecture 'Greener Practice Sheffield' explains the total carbon footprint of the healthcare system (and primary care as a proportion of that), what the major sources of carbon emissions within the healthcare system are and gives ways to reduce the environmental impact of primary care, including deprescribing and social prescribing, environmentally-friendly inhaler prescribing, reducing travel and waste and conducting sustainable QI projects.</i></p> <p><i>The Phase 4 lecture 'Climate Change, Sustainability, and Public Health' also explains the environmental impact of the NHS, including procurement, energy use and travel.</i></p> | |

| 17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each) | |
|---|--|
| 2 | The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment |
| 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. |
| 1 | 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 | Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated |
| 1 | The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions |
| 1 | The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. |
| 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) |
| <p><i>The Phase 3b lecture 'Prescribing in primary care' (11th January 2023) includes an explanation that 60-95% of the carbon footprint of General Practice comes from prescribing, as part of a discussion about appropriate prescribing, whilst the Phase 4 lecture 'Use of tests' (6th October 2022) explains the environmental reasons behind rationalising testing. The Phase 4 lecture 'Climate Change, Sustainability, and Health' also explains that reducing unnecessary medicalisation is a significant way to reduce the environmental impact of clinical practice. Social prescribing is at various points throughout the curriculum. For example, the phase 4 lecture 'Greener Practice Sheffield', which includes a slide on non-drug interventions to support healthy living, referring to active travel, green and blue social prescribing and others.</i></p> | |

| | |
|--|--|
| | <p>Meanwhile, social prescribing is taught to students in the Polypharmacy week of their Early Years GP teaching and referred to in the Asthma/COPD week.</p> <p>The Phase 4 lecture 'Greener Practice Sheffield' details the carbon impact of asthma care, including a comparison of the environmental impacts of MDIs vs DPIs, discussing which inhalers are particularly harmful and also consideration of other factors such as inhaler recycling.</p> |
|--|--|

Curriculum: Clinical Applications

| 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? | |
|---|---|
| 2 | Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. |
| 1 | Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. |
| 0 | No, there are not strategies introduced for having conversations with patients about climate change |
| <p><i>The Phase 3a SSC Greener Practice encourages students to work with General Practices to implement environmental changes. As part of this, students conduct telephone calls with asthma patients to discuss switching to a more environmentally friendly inhaler, including the environmental rationale behind this. According to Dr Honey Smith, who runs this project, there are also plans to include formal teaching on how to have climate conversations with patients during consultations within this project, but these have not yet been implemented.</i></p> | |

| 19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history? | |
|--|--|
| 2 | Yes, the core curriculum includes strategies for taking an environmental history. |
| 1 | Only elective coursework includes strategies for taking an environmental history. |
| 0 | No, the curriculum does not include strategies for taking an environmental history. |
| <p><i>The Phase 1 lecture 'Environmental influences on lung disease' (21st November 2022) encourages students to consider occupational and industrial exposures as a cause of lung diseases. Medical students are also taught how to take a full social history, including consideration of occupational hazards. For example, the phase 2b lecture 'Taking the Nearly Perfect History' (20th June 2022) includes specific mention of occupational hazards and hobbies as part of taking a social history.</i></p> | |

Curriculum: Administrative Support for Planetary Health

| |
|---|
| <p>20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?</p> |
|---|

| | |
|--|--|
| 4 | Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education. |
| 2 | Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education. |
| 0 | No, there are no improvements to planetary health education in progress. |
| <p><i>There are ongoing efforts within the faculty to increase and improve planetary health teaching, but progress has been slow. Examples include introduction of sustainable QI into the curriculum, as well as extending teaching on sustainable prescribing (doubling the amount of time spent and bringing in a larger team). Sustainable prescribing has also been integrated into the metric of safe prescribing within the phase 4 curriculum. However, beyond this, major improvements in planetary health education have not occurred.</i></p> | |

| 21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum? | |
|--|--|
| 6 | Planetary health/ESH topics are well integrated into the core medical school curriculum. |
| 4 | Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. |
| 2 | Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s) . |
| 0 | There is minimal/no education for sustainable healthcare. |
| <p><i>Planetary Health is taught at various points throughout the curriculum. Although the majority of this is taught in standalone lectures (mostly in public health teaching), some topics are well integrated into the curriculum. Examples of this include teaching on occupational and environmental exposures as risk factors, whilst the learning objective of safe prescribing is being expanded to include sustainable prescribing. Overall, there is still some way to go to integrate teaching about the climate crisis into the curriculum, but aspects of planetary health which are particularly relevant to the local community are consistently taught throughout the programme.</i></p> | |

| 22. Does your <u>medical school</u> 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? | |
|--|--|
| 1 | Yes , the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare |
| 0 | No , the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. |
| <p><i>Dr Pirashanthie Vivekananda-Schmidt is the lead for Professionalism and Patient Safety and is actively involved in incorporating planetary health and sustainable healthcare into the curriculum through their responsibilities around ethical practice.</i></p> | |

| | |
|------------------------------|--------|
| Section Total (52 out of 72) | 72.22% |
|------------------------------|--------|

Back to Summary Page [here](#)

Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and 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, medical schools 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 emphasized.*

| 1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u> ? | |
|--|---|
| 3 | Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability. |
| 2 | Yes, there are individual faculty members at the medical school who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus. |
| 1 | There are planetary health and/or healthcare sustainability researchers at the institution , but none associated with the medical school. |
| 0 | No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time. |
| <p><i>According to Professor Andrew Lee, the medical school has just secured funding from the Worldwide Universities Network to build a research consortium with other academics around the world to study climate change and health system preparedness to its consequences. The School of Health and Related Research (ScHARR), which is part of the medical school, is also involved in research into sustainable food systems and the health benefits of urban green space. However, there is not a faculty member with a primary focus on planetary health, so this will be awarded 2 points.</i></p> | |

| 2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u> ? | |
|--|--|
| 3 | There is at least one dedicated department or institute for interdisciplinary planetary health research. |
| 2 | 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. |
| 1 | There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. |
| 0 | There is no dedicated department or institute. |
| <p><i>The University of Sheffield has the School of Health and Related Research (ScHARR), which conducts research with themes including: 'Health and Place', 'Food and Nutrition', 'Global Health', and 'Health Equity and Inclusion'. The theme 'Health and Place' includes research into the natural</i></p> | |

environment and green space, environments and health inequalities, the physical environment, and climate change and disaster management. Meanwhile, the Food and Nutrition research group is an interdisciplinary team researching activities associated with the study of interactions between food, nutrition and society. They also work with the Institute for Sustainable Food within the University of Sheffield, which aims to address how the “production and consumption of food contributes to and is influenced by global grand challenges such as climate change and how this can be mitigated”.

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 medical school?

| | |
|---|--|
| 3 | 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. |
| 2 | Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. |
| 1 | No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. |
| 0 | There is no process, and no efforts to create such a process. |

There is no such process currently in place at the University of Sheffield.

4. Does your institution have a planetary health website that centralizes ongoing and past research related to health and the environment?

| | |
|---|---|
| 3 | There is an easy-to-use, adequately comprehensive website that centralizes 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. |
| 2 | There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. |
| 1 | The institution has an Office of Sustainability website that includes some resources related to health and the environment. |
| 0 | There is no website. |

The University of Sheffield has a comprehensive [website](#) which includes information on the environmental impact of the university, its sustainability strategy, ongoing research into sustainability and opportunities for students to study courses in which this is a focus. The sections on sustainable research include researchers studying subjects relating to health and the environment, but there is no section on the website which is specifically dedicated to this subject, so this will be awarded 2 points.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

| | |
|---|--|
| 4 | Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year. |
| 3 | Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. |
| 2 | Yes, the institution has hosted a conference on topics related to planetary health in the past three years. |
| 1 | The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event. |
| 0 | No, the institution has not hosted a conference on topics related to planetary health in the past three years. |
| <i>The university hosts the Grantham Symposium every year, which focuses on sustainability and planetary health. This is not directly part of the medical school, so would be awarded 3 points.</i> | |

| 6. Is your <u>medical school</u> a member of a national or international planetary health or ESH organization? | |
|---|---|
| 1 | Yes, the medical school is a member of a national or international planetary health or ESH organization |
| 0 | No, the medical school is not a member of such an organization |
| <i>Sheffield Medical School is a member of the Planetary Health Alliance.</i> | |

| | |
|-------------------------------------|---------------|
| Section Total (11 out of 17) | 64.71% |
|-------------------------------------|---------------|

Back to summary page [here](#)

Community Outreach and Advocacy

Section Overview: *This section evaluates medical school 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 color. 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.*

| 1. Does your medical school partner with community organizations to promote planetary and environmental health? | |
|--|--|
| 3 | Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health. |
| 2 | Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health. |
| 1 | The institution partners with community organizations, but the medical school is not part of that partnership. |
| 0 | No, there is no such meaningful community partnership. |
| <p><i>The medical school has strong links to the primary care sustainability group 'Greener Practice' via Dr Honey Smith. Third year medical students can take part in the Greener Practice SSC, which promotes sustainability within general practices, and encourages participation from an increasing number of practices each year.</i></p> <p><i>Phase 2b medical students have opportunities to work with community organisations promoting planetary and environmental health during their 4 week Social Accountability SSC. Examples include: working at Heeley City Farm, which uses the background of a mini farm and community gardens to address inequality and lack of opportunity in the local community; King Edward VII School, where students work with the school to educate students about the link between climate change and health and reducing the school's environmental impact; and Manor & Castle Development Trust, which promotes physical activity, environmental projects and Green prescribing.</i></p> | |

| 2. Does your medical school offer community-facing courses or events regarding planetary health? | |
|---|---|
| 3 | The medical school offers community-facing courses or events at least once every year. |
| 2 | The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. |
| 1 | The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events. |
| 0 | The institution/medical school have not offered such community-facing courses or events. |

The University has hosted community-facing events for its 'Big Green Event' series, such as a workshop on Communicating Sustainability (18th January 2022). However, the medical school was not involved in the planning of these events and has not hosted its own events, so this will be awarded 1 point.

3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

| | |
|---|---|
| 2 | Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare. |
| 1 | Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates. |
| 0 | Students do not receive communications about planetary health or sustainable healthcare. |

The Medical School has previously been supportive of the Climate Strikes, and included updates about this in newsletters and communications. Since then, the medical school itself has rarely included planetary health/sustainability issues in its own communications, but the university has an [online sustainability newsletter](#), which sometimes includes planetary health topics.

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?

| | |
|---|---|
| 2 | 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. |
| 1 | Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers |
| 0 | There are no such accessible courses for post-graduate providers |

Neither Sheffield medical school nor its affiliated hospital trusts currently engage in such activities.

5. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about environmental health exposures?

| | |
|---|--|
| 2 | Yes, all affiliated hospitals have accessible educational materials for patients. |
| 1 | Some affiliated hospitals have accessible educational materials for patients. |
| 0 | No affiliated medical centres have accessible educational materials for patients. |

[This report](#) has been produced to educate on climate change and health, and has an educational element relating to environmental health exposures (pages 8-12). This is related to health specifically in Sheffield, and as all the teaching hospitals are associated, it relates to all of them. However, as its

sole purpose isn't education of patients, and is not readily accessible to patients, this shall receive 1 point.

6. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about climate change and health impacts?

| | |
|---|--|
| 2 | Yes, all affiliated hospitals have accessible educational materials for patients. |
| 1 | Some affiliated hospitals have accessible educational materials for patients. |
| 0 | No affiliated hospitals have accessible educational materials for patients. |

[This report](#) has been produced to educate on climate change and health, and has an educational element relating to environmental health exposures (pages 8-12). This is related to health specifically in Sheffield, and as all the teaching hospitals are associated, it relates to all of them. However, as its sole purpose isn't education of patients, and is not readily accessible to patients, this shall receive 1 point.

| | |
|------------------------------------|------------|
| Section Total (7 out of 14) | 50% |
|------------------------------------|------------|

Back to summary page [here](#)

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.

| 1. Does your <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project? | |
|---|---|
| 2 | Yes, the medical school or institution either offers grants for students to enact sustainability initiatives/QI projects or sustainability QI projects are part of the core curriculum. |
| 1 | The medical school or institution encourages sustainability QI projects (to fulfill 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. |
| 0 | No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. |
| <p><i>There is a morning of teaching in 5th year on climate change and health. This includes a workshop on sustainable QI.</i></p> <p><i>There are also multiple SSCs options which have a focus on sustainable QI, such as the Phase 3a Greener Practice SSC and the Heeley City Farm, Whirlow Hall Farm and King Edward's School options of the Phase 2b Social Accountability SSC.</i></p> | |

| 2. Does your <u>institution</u> offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare? | |
|---|---|
| 2 | The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research. |
| 1 | There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek these out and carry them out in their spare time. |
| 0 | There are no opportunities for students to engage in planetary health/sustainable healthcare research. |
| <p><i>Sheffield Medical School offers research opportunities to students in their fourth year which can include planetary health topics, covering topics including nutrition and climate or public health communication relating to climate change. However, these are unfunded, so this will be awarded 1 point.</i></p> | |

3. Does the medical school have a webpage where medical students can find specific information

related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

| | |
|---|--|
| 2 | The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. |
| 1 | There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. |
| 0 | There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. |

The medical school has created a Google site entitled 'Planetary Health and Sustainability,' which details what planetary health is and the opportunities available in the medical school to learn more about it. It also documents where Planetary Health has been included into the curriculum and it features videos explaining key concepts such as health promotion and the impacts of human activities on health including pandemics. The website encourages students to join Healthy Planet Society if this is of interest to them, but it does not feature any contact details for potential mentors.

4. Does your medical school have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

| | |
|---|---|
| 2 | Yes, there is a student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare. |
| 1 | Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support . |
| 0 | No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare. |

Healthy Planet Society is a student group which aims to raise awareness of sustainability issues and advocates for sustainable practices within the medical school. The society receives faculty support from Dr Pirashanthie Vivekananda-Schmidt .

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?

| | |
|---|--|
| 1 | Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee. |
| 0 | No, there is no such student representative. |

The University has a Sustainability Steering Committee and a Sustainability Delivery Committee, which both include the Students' Union Sustainability Officer Sam Timson as a member. The role of the

Sustainability Steering Committee is to make decisions and assign funding to sustainability projects within the University. There is not, however, a similar group on the medical school decision-making council.

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)

| | |
|---|---|
| 1 | 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. |
| 1 | Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts. |
| 1 | Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) |

The Green Impact group at the University of Sheffield has organised the [Sustainability Skills & Education \(SusSEd\) series](#) of talks, which students are encouraged to attend with accreditation for regular attendance. The focus in 2022 is on biodiversity, with talks held from April-May. Last year's series was held from February-March, with the focus also on the biodiversity crisis.

The University of Sheffield has a Beekeeping society, which holds weekly hive inspections during summer months and holds other activities such as crafting using sustainable materials such as wax wrap.

The Wilderness Medicine Society runs several events throughout the year, including weekends away in the Peak District, walks in the peaks in which medical scenarios are practised, and talks from professionals working in the wilderness.

Section Total (10 out of 15)

66.67%

Back to summary page [here](#)

Campus Sustainability

Section Overview: *This section evaluates the support and engagement in sustainability initiatives by the medical school and/or 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 endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing 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 medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.*

| 1. Does your medical school and/or institution have an Office of Sustainability? | |
|--|--|
| 3 | 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 and/or medical school. |
| 2 | 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 medical school and/or hospital sustainability. |
| 1 | There are no salaried sustainability staff , but there is a sustainability task force or committee |
| 0 | There are no staff members or task force responsible for overseeing campus sustainability |
| <i>There is no office of sustainability at either the medical school or the wider University. The University does have a sustainability leadership team, which reports to the University Executive Board, with representation from academic, professional services and student bodies.</i> | |

| 2. How ambitious is your institution/medical school plan to reduce its own carbon footprint? | |
|---|--|
| 5 | The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030 |
| 3 | The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040 |
| 1 | The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate |
| 0 | The institution/medical school does not meet any of the requirements listed above |
| <i>The University, including the medical school, has a target of carbon neutrality across all activities by 2038, including a target of net zero on campus by 2030. The strategy is documented in a comprehensive document, with the overall strategy downloadable from the University website.</i> | |

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?

| | |
|---|---|
| 3 | Yes medical school buildings are 100% powered by renewable energy |
| 2 | Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy. |
| 1 | Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy. |
| 0 | Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy. |

Sheffield Medical school is attached to the Royal Hallamshire Hospital which is run by the Sheffield Teaching Hospitals Trust. As a result of which, the Medical School facilities are all rented from the Hallamshire Hospital - including the energy. According to Peter Townsend from the estates department at the trust, all of the electricity used by the trust is from a renewable energy provider which they pay a premium for. However, the medical school still uses gas heating, which (based on figures from 2021) accounts for approximately half of its energy use, so this will be awarded one point.

4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published sustainability rating system or building code/guideline?

| | |
|---|---|
| 3 | Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable. |
| 2 | Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted . |
| 1 | Sustainable building practices are inadequately or incompletely implemented for new buildings. |
| 0 | Sustainability is not considered in the construction of new buildings. |

Sheffield University's [Sustainable Strategy Plan](#) includes embedding sustainability criteria into decision making for new buildings and major refurbishments, with referral through the sustainability governance process if relevant. This metric has been marked as complete. However, older buildings within the medical school have not been retrofitted, so this will be awarded 2 points.

5. Has the medical school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

| | |
|---|--|
| 2 | Yes, the medical school 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. |
|---|--|

| | |
|---|---|
| 1 | The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised. |
| 0 | The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options. |
| <p><i>The Medical School has implemented some environmentally-friendly transportation options. The main example of this is the H1 bus, which runs between the two major hospitals within Sheffield, the Royal Hallamshire (where the medical school is based) and the Northern General. This bus is free for NHS staff and University of Sheffield students, and is frequently used by students who have placements or teaching at the Northern General. There were also plans to implement similar shuttle bus schemes to the other major placement sites (in Rotherham, Barnsley, Chesterfield and Doncaster), but these were put on hold due to the COVID pandemic and no progress has been made on this front since 2019.</i></p> | |

| 6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)? | |
|---|---|
| 2 | Yes, the medical school has both compost and recycling programs accessible to students and faculty. |
| 1 | The medical school has either recycling or compost programs accessible to students and faculty, but not both. |
| 0 | There is no compost or recycling program at the medical school. |
| <p><i>The Medical School's waste is handled by Sheffield Teaching Hospitals, aside from more specialist waste such as chemicals and computers. The trust does have a conventional recycling programme in place, although there is currently no organics recycling or food waste collection scheme, so this will be awarded 1 point.</i></p> | |

| 7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)? | |
|---|---|
| 3 | Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. |
| 2 | There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is engaged in efforts to increase food and beverage sustainability. |
| 1 | There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is not engaged in efforts to increase food and beverage sustainability. |
| 0 | There are no sustainability guidelines for food and beverages. |
| <p><i>The Medical School uses the University's sustainability criteria for sourcing food and beverages. This has included removing the most carbon intensive foods (such as beef and lamb) from University outlets, with further plans to more actively promote sustainable foods. The campus also has a zero-waste shop in the Students' Union. However, progress on this metric has been slow, with targets set out in the sustainability action plan largely missed.</i></p> | |

8. Does the medical school or institution apply sustainability criteria when making decisions about supply procurement?

| | |
|---|---|
| 3 | Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement. |
| 2 | There are sustainability guidelines for supply procurement, but they are insufficient or optional . The medical school is engaged in efforts to increase sustainability of procurement. |
| 1 | There are sustainability guidelines for supply procurement, but they are insufficient or optional . The medical school is not engaged in efforts to increase sustainability of procurement. |
| 0 | There are no sustainability guidelines for supply procurement. |

Sheffield Medical School is covered by the University of Sheffield's [procurement strategy](#). This emphasises the importance of socially and environmentally responsible procurement, including staff training to eliminate unsustainable purchasing practices and embedding sustainability into contracting activity. Staff websites provide information on the environmental reasons to reduce orders and on environmentally friendly procurement, sharing equipment and using local and independent suppliers. The University is also part of the North Eastern University Procurement Group. However, as detailed in the [sustainability action plan](#), the majority of these metrics have not yet been met.

9. Are there sustainability requirements or guidelines for events hosted at the medical school?

| | |
|---|---|
| 2 | Every event hosted at the medical school must abide by sustainability criteria. |
| 1 | The medical school strongly recommends or incentivizes sustainability measures, but they are not required . |
| 0 | There are no sustainability guidelines for medical school events. |

The Medical School follows the University's [sustainability strategy](#), which includes reviewing sustainability plans of venues used to host events. However, these actions are not marked as complete, indicating that they are not currently mandatory.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?

| | |
|---|---|
| 2 | Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable. |
| 1 | There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. |
| 0 | There are no efforts at the medical school to make lab spaces more sustainable. |

The Green Impact scheme which the university takes part in includes a lab-specific section. Some departments have their own Green Impact Teams, such as the combined Departments of Infection, Immunity, and Cardiovascular Disease and Oncology and Metabolism (IICD-OM), which provides

regular updates on campus-wide sustainability initiatives, provides practical information to enable staff and students to reduce their lab's impact and organises recycling and waste reduction initiatives. For example, a system has been established to collect and recycle pipette tip boxes, media bottles and chemical bottles, which cannot be recycled in normal mixed recycling bins. Advice is also given to reduce single-use plastic consumption, purchase from sustainable companies and run equipment more efficiently.

11. Does your institution's endowment portfolio investments include fossil-fuel companies?

| | |
|---|--|
| 4 | 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. |
| 3 | The institution is entirely divested from fossil fuels. |
| 2 | The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. |
| 1 | The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment. |
| 0 | Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. |

The University of Sheffield has entirely divested from fossil fuels, as documented [here](#). There is also a recommendation that investment managers “actively consider and strive for” protection of the environment when investing, but divested funds have not necessarily been reinvested in renewable energy resources.

Section Total (18 out of 32)

56.25%

Back to summary page [here](#)

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% |

**Within each grade bracket, a score in the top 5% (_5 to _9%), receives a “+”, and a score in the bottom 5% (_0- _4%) receives a “--”. For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the University of Sheffield School of Medicine

The following table presents the individual section grades and overall institutional grade for the University of Sheffield School of Medicine on this medical-school-specific Planetary Health Report Card.

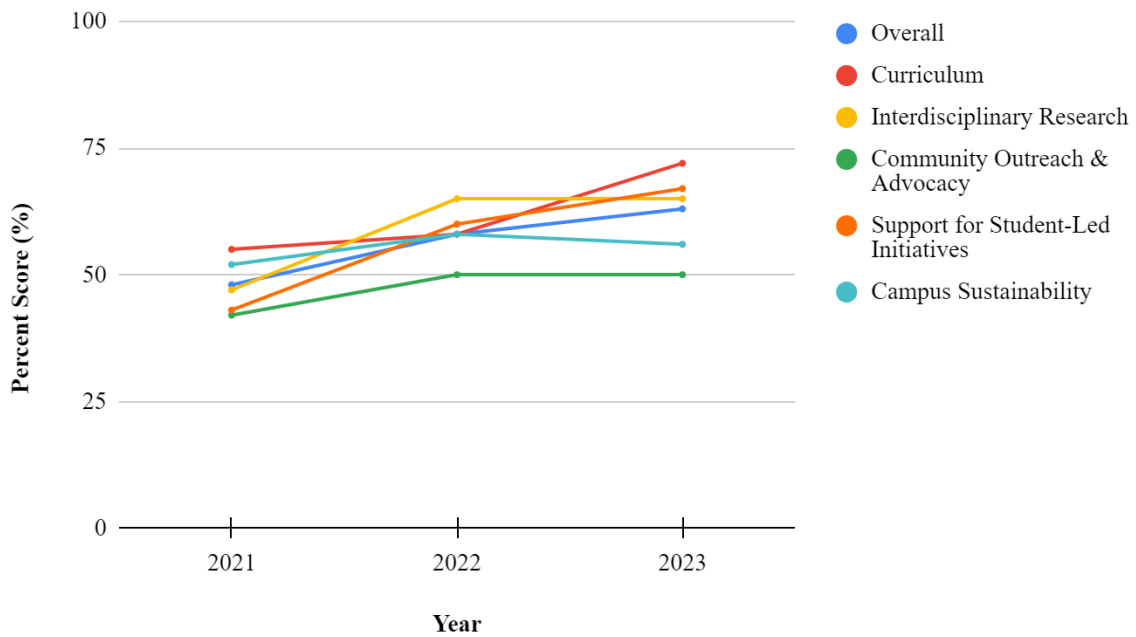
| Section | Raw Score % | Letter Grade |
|---|---|--------------|
| Planetary Health Curriculum (30%) | $(52/72) \times 100 = 72.22\%$ | B |
| Interdisciplinary Research (17.5%) | $(11/17) \times 100 = 64.71\%$ | B- |
| Community Outreach and Advocacy (17.5%) | $(7/14) \times 100 = 50\%$ | C |
| Support for Student-led Planetary Health Initiatives (17.5%) | $(10/15) \times 100 = 66.67\%$ | B |
| Campus Sustainability (17.5%) | $(18/32) \times 100 = 56.25\%$ | C+ |
| Institutional Grade | $(72.2 \times 0.3 + 64.7 \times 0.175 + 50 \times 0.175 + 67 \times 0.175 + 62.5 \times 0.175) = 63.25\%$ | B- |

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which The University of Sheffield Medical School has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for University of Sheffield Medical School



(For those teams that have participated in the PHRC initiative for more than one year, we have created this Google spreadsheet which can be used to generate a graphical representation of the school's trends of section-based and overall scores. You can either plug the numbers into the table and then just copy and paste your graph into your report, or you can create a copy of the Google spreadsheet so you can have a version long term to update and edit. [Here](#) is the link to the spreadsheet to create your graph if you would like to include one.)