



Planetary Health Report Card:

University of Sheffield Medical School



2020-2021 Contributing Team:

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Summary of Findings

Curriculum	C +
<ul style="list-style-type: none"> University of Sheffield does include planetary health in the curriculum, but it lacks integration longitudinally. In first and second year, various aspects of planetary health are discussed in lectures. There is also some discussion of planetary health in seminar work (ILAs). Recommendations: There is a lack of teaching about introducing conversations about planetary health into conversations with patients. This could be introduced in clinical skills, or early years GP. There could be more SSCs relevant to planetary health. 	
Interdisciplinary Research	C
<ul style="list-style-type: none"> The University of Sheffield has dedicated departments for interdisciplinary research, ScHARR and the Institute for Sustainable Food. The institution hosted a series of webinars on topics related to planetary health and sustainability in 2021. However the series is not directly aimed at medical students. Recommendations: Sheffield Medical School could organise a conference directly related to Planetary Health. They could also join the Planetary Health Alliance and the Global Consortium on Climate and Health Education, and set up a website with planetary health news. 	
Community Outreach and Advocacy	C -
<ul style="list-style-type: none"> University of Sheffield Medical school has little community outreach relating to planetary health. In the Phase 3a SSC there is an opportunity to partner with ‘Greener Practice’. In the 2b Social Accountability SSC, there is no option to partner with a planetary health group. Relating to the 2019 climate strikes, the Medical School was supportive. Sheffield Teaching Hospitals does have some accessible educational materials for patients. Recommendations: more community partnerships relating to planetary health in SSCs. 	
Support for Student-Led Initiatives	C -
<ul style="list-style-type: none"> The University of Sheffield and the Medical School support student groups dedicated to planetary health. There are two medical societies (Student for Global Health & Healthy Planet Sheffield) dedicated to this topic who receive funding from the Student Union and work closely with faculty members. In addition the University offers opportunities for students to participate in co-curricular planetary health programs either through the Sustainability Skills & Education series of webinars or via volunteering programs in Sheffield. Recommendations: Support for student-led initiatives mostly comes from the wider University rather than the Medical School. We recommend the medical school offers increased support to students interested in sustainable initiatives for example via creating a website that advertises mentors or opportunities for students relating to PH or ESH and prioritises grants for related research. 	
Campus Sustainability	C
<ul style="list-style-type: none"> Sheffield Medical school has made good progress to become a more sustainable campus in conjunction with the wider University, including fossil fuel divestment and using fully renewable energy on site, to setting achievable goals for carbon neutrality in the future. Recommendations: There is still much to improve with the campus sustainability. Goals and plans are already in place at the Medical School, especially in transportation and building, but we also recommend focusing on making lab spaces more sustainable and improve/introduce sustainable guidelines for events and procurement. 	

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance defines planetary health as “a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems.” 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 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.

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 change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health 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 medical school offer elective courses 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>In the 3rd year (Phase 3a) there is a 6 week elective course offered by Dr Honey Smith named "Greener Practice" in which students learn about the impact of healthcare on the environment and promote greener practice within GP surgeries in and around Sheffield. This was offered to the previous and current year medical students.</i></p>	

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?	
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 effects of extreme temperatures and their effects on the body are not covered at all in the Sheffield Medical School's syllabus.</i>	

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.
<i>This point is covered briefly. Professor Fishwick, in his lecture 'Environmental influences on lung disease' (example: 28th November 2019), discusses how extreme weather events, such as the Australian thunderstorms, have correlation with increased asthma cases. This would be awarded 2 points.</i>	

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.
<i>Infectious diseases as a public health problem is introduced in the second year (Phase 2a) at Sheffield Medical School. In the lecture "Public Health and Pandemics" by Dr Andrew Lee, he introduces how climate and environmental changes can influence the pattern of an infectious disease. For example how climate change has allowed vectors such as mosquitos carrying infections to live further north than before.</i>	

5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including 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.
<p><i>Within first year teaching the impacts on cardiorespiratory health from climate change are discussed multiple times. Professor Fishwick, in his lecture 'Environmental influences on lung disease' (example: 28th November 2019), discusses how air pollution aggravates lung diseases, and is a factor in causing childhood asthma. Professor Fishwick also discusses how extreme weather events, such as the Australian thunderstorms, have correlation with increased asthma cases.</i></p> <p><i>Dr Andrew Lee and Dr Kristen Bash, in the lecture 'Sustainable Healthcare' (example, 19th December 2019), explain the main air pollutants, and the impacts they have on cardiorespiratory health. This topic is also covered in the lecture 'Sustainability and health' from Professor Anna Jorgensen (example: 24th February 2020). This would be awarded three points</i></p>	

6. 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.
<p><i>The impacts of the climate and ecological emergency are discussed indirectly, such as the impact of migration and trauma on mental health. However, they are not discussed directly and this would be awarded 0 points.</i></p>	

7. 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.
<p><i>This topic is covered multiple times within the first and second year teaching. Within the Lecture "Health, A Global Perspective: Dr Robert Akparibo" (example, 16 November 2019), unsafe water and sanitation are mentioned as being an important risk factor leading to disease/mortality in developing countries. Within ILA 1 (compulsory seminar work) in phase 2, the question: 'What do you understand by the term 'co-benefits' in relation to health and climate change? Give one example from this case' is</i></p>	

given. This prompts research into the topic and encourages discussion on planetary health in the groups. Within the lecture 'Sustainable healthcare: Dr Andrew Lee, Dr Kristen Bash' (example, 19th December 2019), climate change impacts related to agriculture (relating to water and food security) and climate related deaths are discussed. In Phase 2, the relationship between food security and obesity are discussed within the lecture 'Population approaches to managing obesity': Dr Kristen Bash (example, 10 December 2020). This will be awarded 3 points.

8. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, 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.

This topic is not covered by core curriculum or elective coursework.

9. Does your medical school curriculum address the unequal 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.

This topic is covered within first year, in the lecture 'Sustainable Health care' by Dr Andrew Lee and Dr Kristen Bash (example: 19th December 2019). It is explained how climate related deaths varies between regions due to varying factors. This would be awarded 2 points.

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

10. 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.
<p><i>In the 3rd year of medical school at Sheffield (Phase 3a) this topic is covered under women's health. It is covered specifically in the lecture "Investigation and Management of Infertility" given by Dr Jonathen Skull. In the lecture, it is discussed how it is important to take into account environmental and occupational hazards that can lead to infertility. However, this is only covered briefly with very little detail as to why these hazards affect fertility.</i></p>	

11. 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.
<p><i>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 in all years, due to the local clinical relevance, More specifically Professor Fishwick, in the lecture 'Environmental influences on lung disease' (example: 28th November 2019): mentions steel work as a risk factor in COPD. This topic is also covered in the lecture 'Sustainability and health' from Professor Anna Jorgensen (example: 24th February 2020). In second year teaching, in the lecture 'Case presentation neoplasia', from Professor K Survana, (example: 10th november 2020), several industry related environmental factors are discussed as risk factors for neoplasia. This would be awarded three points.</i></p>	

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?	
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>This is not mentioned in the curriculum or in elective coursework.</i></p>	

13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women,	
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communities of color, 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.
<p><i>In the second year of medicine at the University of Sheffield, small group sessions titled ‘Sociological factors contribute to illness’ led by Dr Jennifer Burr discuss how poverty exposes people to health hazards. For example, disadvantaged people are more likely to live in areas where they are exposed to harm such as air-pollution and damp housing. However, as the sessions mainly focus on describing the patterns of health inequalities in the UK and describing sociological theories to understanding health inequalities, this would be awarded two points and not three.</i></p>	

Curriculum: Sustainability

14. Does your medical school 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.
<p><i>In second year of medicine at Sheffield, the environmental and co-benefits of a plant-based diet are briefly mentioned. Within ILA 1 (compulsory seminar work) on atherosclerosis in phase 2a, the question: ‘What do you understand by the term ‘co-benefits’ in relation to health and climate change? Give one example from this case’ is given. This prompts research into the topic and encourages discussion on planetary health in the groups. The facilitators also made sure students discussed the benefits on a plant-based diet within the session. This would be awarded two points.</i></p>	

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?	
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>In the first year of medical school at Sheffield there is a lot of public health lectures including around the environment and how it is affected by our healthcare practices. This topic is included briefly in a lecture titled “The Environment and Public Health” by Dr Andrew Lee on 07/08/18. In the lecture he mentions how much waste is generated by the NHS and hospitals. A fantastic quote from his lecture: “If you waste unnecessary tests, if you waste unnecessary investigations and treatments, if you waste unnecessary callbacks and appointments - there is not only a healthcare cost, but a carbon cost”. However, the course does not contain any examples of ways to implement sustainable best practice, and is the healthcare related wasted is only a minor part of this lecture.</i></p>	

Curriculum: Clinical Applications

16. 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>Students are encouraged to discuss the benefits of lifestyle improvement with patients (e.g. in patient communication skills in the GP module of phase 3b). This centres around eating behaviours (namely reducing fat, salt, and sugar intake), increasing exercise, and smoking cessation. There are some overlaps between the health behaviours that students are encouraged to discuss with patients with having a lower carbon lifestyle (e.g. exercise may mean that patients use their car less) however these co-benefits are not made explicit when teaching medical students, nor are students encouraged to discuss the co-benefits with climate change to patients. Likewise, there are no points in the curriculum where students are encouraged to discuss climate change itself with patients.</i></p>	

17. 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>At the medical school in Sheffield, a lecture by Dr Clare Burton title “Occupational lung disease” (e.g. 21/03/2020) in second year covers the impact of occupational health hazards on lung diseases and it highlights the importance of taking exposure history. Moreover medical students are also taught how to take a full social history, which includes asking patients about exposures to occupational hazards, in other clinical sessions.</i></p>	

Curriculum: Administrative Support for Planetary Health

18. Is your medical school currently in the process of improving Education for Sustainable Healthcare (ESH)/planetary health education?	
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>Members of the senior leadership team have met with members of a planetary health focussed student group: the staff were engaged with the suggestions given by the students and have made changes, such as incorporating planetary health themes within the phase 2 ILA’s. Major improvements within planetary health education, however, have not been materialised.</i></p>	

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core 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>There are several points in the curriculum where planetary health is addressed: for instance the Phase 1 ‘Sustainable Healthcare’ lecture by Andrew Lee and Kristen Bash, and a recent addition of a lecture in Phase 4 ‘Planetary Health’ delivered this year which will hopefully continue to be presented for future years. There is some integration in the Phase 2a ILA’s where students are asked sustainability related questions relating to the case (e.g. What do you understand by the term ‘co-benefits’ in relation</i></p>	

to health and climate change? Give one example from this case.) However, using this example, co-benefits are not covered in the core curriculum and facilitators are not provided any information about how to teach this. Furthermore, the single questions phase 2a ILA's are the only time where sustainability / planetary health is integrated; therefore these topics are not integrated longitudinally through the course.

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?

1*	Yes, the medical school has an incentive program.
0	No, the medical school does not have an incentive program.
<i>Such a program doesn't currently exist.</i>	

Section Total (31 out of 58)	31
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Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

*The medical school has proactively taken on a role to increase planetary health teaching by reaching out to final year student **Isobel E Avery-Phipps** to create a lecture to give to her year, on planetary health. This occurred in the second semester of fifth year for the first time in 2021. There are also meetings under way to increase planetary health related objectives in ILA sessions (problem based learning seminars). Therefore, action is underway in this area which should be credited.*

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 medical school?	
4	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
3	Yes, there are faculty members at the School of Medicine who have a primary research focus in a planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the School of Medicine 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>At the University of Sheffield, there are a few faculty members who have a primary research focus in planetary health and/or healthcare sustainability.</i></p> <p><i>- Dr Andrew Lee is part of the Global Health research group and is a lecturer at the medical school His research involves health protection, international health as well as health service management.</i> https://www.sheffield.ac.uk/scharr/people/staff/andrew-lee</p> <p><i>- Dr Julie Balen is part of the Global Health research group and is a lecturer in Global Health at the medical school. Her research interests are global health and development, health policy and systems research, international health management and global reproductive health.</i> https://www.sheffield.ac.uk/scharr/people/staff/julie-balen</p> <p><i>- Dr Kristin Bash is a member of ScHAAR working with the Grantham Centre on Nutrition & Sustainability. She is also an honorary lecturer in public health at the medical school.</i> https://www.sheffield.ac.uk/scharr/people/pgr-students/kristin-bash</p>	

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

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 in health and wellbeing, emergency and immediate care, workforce and extended roles, cancer and public health evaluation. ScHARR focuses on many different research themes, including Health and Place, Global Health and Food and Nutrition. One of the former's interests are Environments and health inequalities. The Global Health research group works across a wide range of health systems to produce research which uses realist evaluation and synthesis to explain effectiveness in the context of social, environmental, economic, and political determinants of health. Finally, the Food and Nutrition research group is an interdisciplinary team pursuing research activities associated with the study of interactions between food, nutrition and society. They also work with the Institute for Sustainable Food at the University of Sheffield, whose missions include helping make agri-food systems more sustainable with "the health of our environment, the healthiness of our food and the health of the global population at the core".</i></p>	

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.
<p><i>There is no process by which communities disproportionately impacted by climate change injustice give input about the research agenda at Sheffield medical school.</i></p>	

4. Does your institution have a planetary health website, or a website centralizing various campus resources 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.
<i>The University of Sheffield has a blog compiling stories of sustainability in Sheffield. However, it is not updated and does not mention planetary health. Because of that, we gave our institution 0 for this metric.</i>	

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted 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>We were advised the institution had hosted a conference/talk related to planetary health in the last few years. Academics at the University of Sheffield are also hosting talks every week from February to March 2021 on the biodiversity crisis, and some of the webinars are related to planetary health. Three points will be awarded.</i>	

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?	
2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.

0	No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.
<i>The University of Sheffield has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.</i>	

Section Total (9 out of 19)	9
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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>University of Sheffield has a centre for energy, environment and sustainability. They partner with a variety of people, including at a local level. As per their description: ‘Members of CEES regularly engage with a variety of stakeholders, including policy makers, government agencies, employers, the media and NGOs at local, national and international levels. Their research is wide-reaching and has had a direct impact on society’ (via https://www.sheffield.ac.uk/cees/impact). The medical school has community organisation relationships, but none specifically relating to environmental health. There is an opportunity to organise a SSC with an environmental group called ‘Greener Practice’, but this is done through the student’s own organisation. This will be awarded one point.</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 medical school has not offered such community-facing courses or events.
<p><i>The university creates resources available to the public such as 'How to have a sustainable Christmas'. There are planetary health related events run by societies, but these are predominantly organised by students, rather than the medical school itself. One point is awarded.</i></p>	

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 regularly receive communications about planetary health or sustainable healthcare.
<p><i>Yes. The medical school have previously spoken out about the climate change strikes, and were supportive of this. Information about this was given in updates via the newsletter, and the website, and the learning portal. Related information is sometimes include:, eg, on medical school news homepage. This will be awarded 1 point.</i></p>	

4. Do hospitals affiliated with your medical school 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 centers have accessible educational materials for patients.
<p><i>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 it's sole purpose isn't education of patients, this shall receive 1 point.</i></p>	

5. Do hospitals affiliated with your medical school 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.
<i>Same rationale as above (metric 5)</i>	

Section Total (5 out of 12)	5
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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.*

1. Does your institution offer support for medical students interested in enacting a sustainability initiative?	
2	Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
1	The medical school 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.
0	No, the institution does not offer opportunities or support for sustainability initiatives.
<i>The institution does not offer grants and does not encourage sustainability initiatives. This will be awarded 0 points.</i>	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
3*	The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare.
2*	The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.

1	There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.
0	There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.
<i>Sheffield medical school offers research opportunities to students in their fourth year of study which can be related to planetary health/sustainable healthcare. However, they are unfunded. This will be awarded 1 point.</i>	

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.
<i>There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors at the University of Sheffield.</i>	

4. Does your medical school have funded, 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 funded 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 and/or funding.
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.
<i>Sheffield medical school has a few societies dedicated to planetary health and/or sustainability (Student for Global Health & Healthy Planet Sheffield). As they are registered with the university's student union, they are eligible for funding. Members of Healthy Planet Sheffield have worked with the medical school on projects such as the inclusion of sustainability in the phase 3a curriculum. The</i>	

society has also received the faculty's support during the Climate Strikes they organised which started at the medical school.

<https://sheffmedsoc.com/societies/healthy-planet-society-sheffield/>

<https://www.facebook.com/SheffieldStudentsForGlobalHealth/>

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

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

There is no medical student liaison on a sustainability committee at the medical school. However, the Student Union of the University of Sheffield has a Sustainability Committee. They are a group of students representing the student body on Ethical and Environmental issues in the SU and at the University. They campaign for changes needed at the University to make the University of Sheffield more sustainable.

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) that follow Leave No Trace principles.

- *The Green Impact group at the University of Sheffield has organised the [Sustainability Skills & Education \(SusSEd\)](#) series of webinars from February to March 2021. Students are encouraged to attend the talks as an accreditation is given at the end.*

- *The Student Union at the University of Sheffield offers a wide range of volunteering opportunities with organisations in Sheffield. A few of these are related to building community resilience to man-made environmental impacts. For example, the Conservation Outreach Workshop Volunteer group is made of students running conservation workshops with children across Sheffield. Students can also work with the Development Education Centre of South Yorkshire, which aims to help people to develop the skills and commitment to bring about a more just, sustainable world.*

Section Total (6 out of 14)

6

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>At Sheffield Medical School, there is no office of sustainability. However, there is a sustainability committee which is University wide which is made up of unpaid staff and students. There are discussions undergoing within the Medical School to introduce a director of Sustainability in the future.</i>	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
0	There is no stated goal for reduction of CO2 emissions.
<i>The Medical School is encompassed in the wider University of Sheffield sustainable strategy. The sustainability strategy even aims to reach carbon neutrality goals by 2038 (with the campus being net 0</i>	

by 2030). The actual strategy is seemingly well thought out and planned in a comprehensive document with a separate action plan.

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 energy used by the trust is from a renewable energy provider which they pay a premium for. So the Medical School pays the Trust for the energy they use, which comes from renewable sources. However, there are no on-site renewable sources.

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 rating system or sustainable 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.

According to Peter Townsend from the Estate department there are no new building projects from the Medical School as well as no plans for retrofitting or remodelling any of the buildings used by the Medical School. However, according to Kevin Corke at the Medical school, the faculty is just finalising its estates development framework (strategy for future) which looks to reduce space, and would see sustainable initiatives be key as part of any investment in new/ refurbished spaces.

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.

The Medical School has implemented some environmentally-friendly transportation options and has plans to do more. The current option within Sheffield is that transport between the 2 main hospitals, the Royal Hallamshire and the Northern General, is free with a NHS and Student Bus called the H1. This is used often by the students for any clinical training or placement in the Northern General as well as by other NHS staff who work in both Hospitals. The Medical School also were planning to implement shuttle buses for those on placement in the further hospitals like Doncaster, Chesterfield and Barnsley. However, due to COVID, these plans were put on hold. But, to the best of our knowledge, there are still plans to implement these shuttle buses in the future. However, currently the med school actively promotes against car sharing and public transport for transport to placement in these areas due to the COVID risk.

6. Does your medical school 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.

The University and the Sheffield Teaching Hospitals trust both have conventional recycling programmes for most widely recyclable materials through “mixed recycling waste” streams. However, neither have a widespread composting programme, although some local composting schemes do take place within the faculty. This however, is not easily available to students.

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?

3	Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.
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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 Sheffield Medical School uses the same guidelines as the University when it comes to sourcing food and beverages. The guidelines however, are very lax and essentially only “buy locally where possible”. This only really applies to a few products (e.g. meat and milk) and so is very limited with no obvious effort to buy more sustainably other than that.</i></p>	

8. Does the medical school or associated 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.
<p><i>The University of Sheffield does have sustainable procurement guidelines after it being made an objective in the University’s Environmental Policy. However, these are only guidelines and not requirements so there is no enforcement of following guidelines in procurement. The Medical School however, has stated that it uses sustainable criteria when selecting a supplier for tendered purchases. Furthermore, the Medical school has been utilizing additional funding through the SALIX scheme to purchase more energy efficient equipment.</i></p>	

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.

Although the Medical School has no sustainability guidelines for medical school events, the medical school departments do engage with the Green Impact Initiative on a yearly basis. Some departments have put in place local guidelines but there are no medical school wide guidelines.

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.

After having talked to the Sheffield Teaching Hospitals Trust's estates manager Peter Townsend, we discovered that there are no efforts from the Medical school to make the lab spaces more sustainable.

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	No, the institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil-fuel companies.
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 is [committed](#) to be entirely divested from fossil fuels

Section Total (15 out of 29)

15

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 an average of the section grades. 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 Sheffield School of Medicine

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

Section	Raw Score	Grade
Planetary Health Curriculum	31 / 58 = 55%	C +
Interdisciplinary Research	9 / 19 = 47 %	C
Community Outreach and Advocacy	5 / 12 = 42%	C -
Support for Student-led Planetary Health Initiatives	6 / 14 = 43%	C -
Campus Sustainability	15 / 29 = 52%	C
Institutional Grade	48.2	C