



Planetary Health Report Card:

HULL YORK MEDICAL SCHOOL



2020-2021 Contributing Team:

- Students: Tanzima Uddin (hytu2@hyms.ac.uk), Bonita Sinartio, Jia Mang Lee, Madeleine Jacobs, Sujata Shrestha, Annie Russell, Emily Ho, Charlotte MacAulay, Harmeen Kaur Jagpal
- Faculty Mentors:
 - Dr Helen Elsey PhD FFPH, Senior Lecturer in Global Health, helen.elsey@york.ac.uk
 - Dr Paul Whybrow, Health & Society Theme Lead, Paul.Whybrow@hyms.ac.uk

Summary of Findings

Curriculum	D–
<ul style="list-style-type: none"> The curriculum at Hull York Medical School (HYMS) fails to explicitly address planetary health (PH) and education for sustainable healthcare (ESH). The Health and Society theme covers topics such as population health and global health, and a poor grade is reflective of the content gap in topics such as climate change and its relation to human health, and sustainable healthcare. HYMS does address the impacts of urbanisation and its effect on cardiorespiratory health but does not explicitly include teaching on PH. PH and ESH are not well integrated and are primarily addressed briefly in standalone lectures. The medical school should identify PH as a priority theme and include this material in learning objectives. 	
Interdisciplinary Research	C–
<ul style="list-style-type: none"> HYMS lacks a dedicated institute for interdisciplinary PH research. The medical school may draw from existing centres at the University of York, such as the Stockholm Environment Institute at York, Sustainability Institute Waste Network, The Centre for Urban Research (CURB) and York Environmental Sustainability Institute, and the Energy and Environment Institute at the University of Hull. Both institutions have comprehensive research on PH but lack focus on ESH. HYMS has joined the Global Consortium on Climate and Health Education and is the only medical school in Europe to do so. The medical school should commit to involvement in various research centres and recruitment of PH researchers. 	
Community Outreach and Advocacy	F–
<ul style="list-style-type: none"> HYMS scored 0 points in this category. HYMS needs to be more supportive of student advocacy for planetary health. They could work with Students for Global Health to promote opportunities such as policy writing and lobbying to improve in this category. A solution is to offer regular coverage of issues related to PH and ESH in university update communications. A medical student led blog/newsletter dedicated to PH/ESH, actively promoted by the medical school through email, is another solution. Regarding community outreach, HYMS could offer public courses/events on the topic of PH/ESH. They could work with the York Teaching Hospital NHS Foundation Trust to produce accessible educational materials for patients about climate change and health impacts. 	
Support for Student-Led Initiatives	C
<ul style="list-style-type: none"> HYMS does support student-led initiatives, especially through the INSPIRE Student Research Project, but lacks explicit support and enthusiasm for PH initiatives. The medical school could facilitate connections between research mentors and students, create grant opportunities, and develop a student fellowship program designated for PH. There is also potential for a student representative that serves on a medical school or institutional decision-making council to advocate for sustainability best practices. 	
Sustainability	C
<ul style="list-style-type: none"> HYMS lacks a dedicated Office of Sustainability and goals for carbon neutrality, and should consider the use of renewable energy sources. The University of Hull urgently needs to address its investments with fossil-fuel companies, and should follow the University of York's divestments. 	

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>Hull York Medical School offers electives in the form of the Scholarship and Special Interest Programme (SSIP). Relevant SSIP topics include:</p> <ul style="list-style-type: none"> ● Introduction to Global Health: Concepts and Controversies by Hannah Jennings: The SSIP introduces students to key debates and issues in global public health. Topics include the social determinants of health and inequalities, the sustainable development goals, epidemiological transition and disease burden, pandemics and climate change. ● Global Health and Palliative Care by Joseph Clark: This SSIP looks at some of the key issues in global health with a focus on access to palliative care. There is a focus on the gross inequalities in access to basic palliative care interventions such as strong analgesics for cancer-related pain, particularly in low-resource countries, the reasons for this, and what might be done to redress the balance. ● Urbanisation: threat or catalyst to improve global health? by Helen Elsey. The growing numbers of urban poor bear the brunt of multiple health challenges, including the double burden of communicable and non-communicable diseases, exposure to environmental and man-made hazards and limited access to quality, affordable health care. This SSIP explores the challenges facing urban areas in low and middle-income countries and considers some of the potential solutions. <p>Despite some electives touching on the topic of global health, HYMS does not offer a SSIP with a primary focus on in Education for Sustainable Healthcare or Planetary Health. Therefore 1 point was awarded.</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.
<p>Climate change is a topic which is not well addressed by the HYMS curriculum. There is no explicit teaching regarding the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure. Heat exposure is briefly bullet pointed in a Year 4 learning objective ‘Approach to altered conscious level’ in the Acute Care block.</p>	

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.
<p>HYMS does not address the impacts of extreme weather events on individual health and/or on healthcare systems in its learning objectives. It is possible it is covered in informal teaching.</p>	

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.
<p>In Hull York Medical School’s ‘Global Health and its Determinants’ lecture from the Disease Processes block, Dr Helen Elsey briefly mentions that climate change is a key determinant of global health on one</p>	

slide. In the ‘Principles of communicable disease control’, Jack Lewis does cover various modes of transmission of infectious disease but fails to address its changing relationship due to climate change.

This metric is awarded 0 points as climate change is briefly mentioned in the lectures above but fails to make clear links to the patterns of infectious disease.

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.

In year 3 of HYMS, in the Cardiorespiratory block, there was a clinical topic titled, “Interstitial Lung Disease”. In this topic, there was a lecture called “Occupational and Environmental Health as Related to Lung Disease” by Dr. Micheal Crooks. The learning outcomes in the lecture included “identify the major effects of environmental health in the development and developing world, consider the relationship between air quality and respiratory health, and identify agencies in the UK with a responsibility for environment and health.” This explicitly highlighted that population health is significantly affected by our environment, and included examples such as climate change and air pollution. It also highlighted the main pollutants such as nitrogen dioxide. This also goes into the specific diseases such as asthma, pneumoconiosis, etc.

This topic was extensively covered in one lecture of the 5 year course. Therefore, more should be included, especially since we cover cardiovascular health all throughout the year. Nevertheless, it was explicitly discussed, therefore a 2 was rewarded.

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.

In Year 1 of HYMS, in the Psychological Medicine block, there was a lecture titled “Stress, physical illness, and coping” by Dr. Stella Morris. This highlighted how other’s upbringing and environment can impact their stress response. This includes living in Urban neighbourhoods and having damp, inhabitable homes.

Although it does not explicitly state that environmental degradation and climate change can impact mental health, it does address difficult environments that can negatively impact it. Therefore, this was awarded a 0.

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.

After looking through all the blocks in HYMS, there was no mention of the relationships between health, individual patient food and water security, ecosystem health, and climate change. This could be highlighted in informal teaching or mentioned in lectures, however was not explicitly discussed as part of learning outcomes or outlines for lectures.

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.

After looking through all of the blocks in HYMS, there was no mention on the impact of climate change on marginalised populations in learning outcomes or lectures.

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.
<p>In the Women’s Health Block in 4th year of HYMS, we also covered Dermatology. In the clinical topic benign and malignant lesions, there was mention of the differences between the epidemiology of skin conditions and how it’s incidence is increasing due to global warming. This however did not go into much detail on the unequal health impacts of it globally.</p> <p>Although there was some mention of the effects of climate change on health, especially global warming, there was no discussion on how it impacts those around the world globally. Therefore, this would be rewarded a 0.</p>	

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>In the Reproduction and Growing Child block in Year 2 of HYMS, there was a lecture on “Introduction of drugs and teratology on pregnancy by Paula Rusell from the Regional Drug and Therapeutic Centre in Newcastle. Associated with the lecture are objectives on drugs in pregnancy and the effects on the growing child. This covered radiation and chemicals as a cause of teratogenicity. However, does not mention the specific chemicals or any health effects of industry related environmental toxins. Nevertheless, it did provide some resources to look at different teratogens in more detail, along with some further readings.</p> <p>In the Women’s Health block in Year 4 of HYMS, there was a lecture on “Infertility: An Introduction into Causes, Investigations, and Management” by Mr. Keith Cunningham and Mr. Piotr Lensy. Associated with the lecture are objectives on male and female factors of infertility. There was mention of environmental oestrogens as a cause of male subfertility, however it wasn’t explicit about if this was due to industry-related environmental toxins.</p> <p>Although there was mention of the effects of different toxins on both pregnancy and the growing child, and also further fertility, this was not focused on industry related toxins. Therefore, this would be rewarded a 0.</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>In HYMS Year 2 Health and Society lecture “Global determinants of disease”, the impact of travel and migration on diseases in the UK are discussed as well as the interaction between the environment and health.</p> <p>In Year 2 lecture “Environmental health”, there is discussion surrounding the relationship between air quality and agencies in the UK with a responsibility for the environment and health.</p> <p>Urbanisation SSIP Year 2: threat or catalyst to improve global health? by Helen Elsey. The growing numbers of urban poor bear the brunt of multiple health challenges, including the double burden of communicable and non-communicable diseases, exposure to environmental and man-made hazards and limited access to quality, affordable health care. Although this SSIP explores the challenges facing urban areas in low and middle-income countries, it does not address environmental threats that are relevant to the university’s surrounding community.</p> <p>Therefore, it is awarded 0 points as the lectures and SSIP do not specifically talk about the environmental threats from humans and how that can influence the university’s local community.</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.
There are no lectures from years 1-4 and no year 2 SSIP that mention indigenous communities.	

13. Does your medical school 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, 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>In the year 2 SSIP “Introduction to global health: concepts and controversies” by Hannah Jennings, topics include social determinants of health and inequalities, epidemiological transition and disease burden, pandemics and climate change.</p> <p>In the year 2 SSIP “Urbanisation: threat or catalyst to improve global health?” by Helen Elsey. The growing numbers of urban poor bear the brunt of multiple health challenges, including the double burden of communicable and non-communicable diseases, exposure to environmental and man-made hazards and limited access to quality, affordable health care. This explores the challenges facing urban areas in low and middle-income countries and considers some of the potential solutions.</p> <p>However, there are no year 1-4 lectures specifically addressing impacts of anthropogenic environmental toxins on marginalised populations.</p> <p>As there are SSIPs that mention the social determinants of health and inequalities and this can include anthropogenic environmental toxins, it is awarded a score of 1.</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>The Year 4 study guide in Block 41: Child Health bullet pointed to restrictive diets and the nutritional problems that may arise from that. This does not explicitly address the environmental and health co-benefits of a plant-based diet, and is up to the students discretion to research such a topic.</p> <p>A Year 1 SSIP: What is the human diet? by Sam Cobb covers the "natural" diet of humans and changes in diets over time. But again, fails to explicitly address the link to plant-based diets.</p> <p>HYMS does not specifically mention the environmental and health benefits of a plant based diet but elements may be addressed in the year 1 SSIP. Therefore, this is awarded 0 points.</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.
There are no lectures from years 1-4 that explicitly highlights waste generated by healthcare systems and how to improve sustainable practices in health care.	

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
At Hull York Medical school, there is no teaching provided on initiating conversations with patients about the health effects of climate change. There are no teaching sessions like lectures or seminars on the relationship between climate change and health in general. It is possible for this topic to be covered during clinical skills sessions, but this is not explicit.	

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.
From first year, students are trained to take a full social history; which includes asking patients about exposure to environmental and occupational hazards. They are taught to ask for the patient’s occupation and contextualise the health risk of occupational hazards. As they progress through the medical school, students are taught to look at the patient’s whole history, including the social history, to come up with the most likely diagnosis. This is evident in OSCEs where failing to take a social history can result in point deductions. When teaching is given on specific diseases/conditions, social risk factors are always covered.	

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.
HYMS is currently revising its curriculum and intends to make major improvements to ESH/sustainable healthcare.	

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>The effect of air pollution is touched upon in a few lectures of second year during the teaching of respiratory diseases. There are a few SSIP electives (such as Introduction to global health: concepts and controversies by Hannah Jennings, Global Health and Palliative Care by Joseph Clark, Urbanisation: threat or catalyst to improve global health? by Helen Elsey) which can cover topics such as planetary health, but explicit links are absent.</p> <p>In the first two years of medical school, HYMS integrates the effects of air pollution on respiratory health into the core curriculum by including a few lectures on respiratory disease. However, planetary health themes, like climate change on infectious disease, mental health and heat-related illness could be better covered throughout the 5 years of the programme.</p>	

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.
<p>The medical school does not have an incentive program as far as we students are aware of.</p> <p>There are no workshops focused on supporting and connecting faculty across HYMS and the partnered universities who have chosen to take an interest in climate and sustainability - related concepts.</p>	

Section Total (12 out of 58)	12
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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 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>After searching on the HYMS website, we found no evidence of healthcare sustainability researchers, nor faculty members with a primary research focus in planetary health. The University of York does have considerable researchers in planetary health including Stockholm Environment Institute at York, York Environment, Sustainability Institute Waste Network, The Centre for Urban Research (CURB) and York Environmental Sustainability Institute. The University of Hull also does have researchers in planetary health as part of the Energy and Environment Institute.</p> <p>This metric is awarded 1 point as although there are planetary health and/or healthcare sustainability researchers at both institutions (University of York and University of Hull), these research centres are not affiliated with Hull York medical school.</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.

The University of York has the [Stockholm Environment Institute at York](#), [Sustainability Institute Waste Network](#), [The Centre for Urban Research \(CURB\)](#) and [York Environmental Sustainability Institute](#). The University of Hull has the [Energy and Environment Institute](#).

This metric is awarded 3 points as there are dedicated research centres and institutes for planetary health at the individual institutions.

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.

At HYMS there is no process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda.

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.

HYMS does not have an Office of Sustainability website but University of York does adequately meet this metric: <https://www.york.ac.uk/about/sustainability/>. The website signposts environmental sustainability research, student and staff opportunities to make more sustainable choices and outlines the university's efforts to meet the UN Sustainable Development Goals. The University of Hull also does adequately meet this metric: <https://www.hull.ac.uk/choose-hull/university-and-region/sustainability/sustainability>. The website does explicitly state its planetary health leader, as well as its policies, strategies and opportunities for student engagement.

Despite the University of York website not being explicit with upcoming events, leaders in planetary health, and relevant funding opportunities, both websites are overall of a good standard in outlining student opportunities and therefore awarded 2 points. This could be awarded 3 points but neither were comprehensive as they were separate webpages for various research centres.

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.

Although the Students for Global Health (SFGH) society at HYMS have held various online events such as a Child Health Conference, Coronavirus series, 'The Climate Emergency Declared: One Year On' (discussing impact on refugees and frontline action), workshops on inclusion healthcare, the institution itself has failed to host a conference or symposium.

This metric is awarded 0 points because although the HYMS branch of SFGH 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, HYMS were not involved in the creation of the events.

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.
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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.
Hull York Medical School has joined the Global Consortium on Climate and Health Education (and is the only medical school in Europe to do so!) but is not a part of the Planetary Health Alliance.	

Section Total (8 out of 19)	8
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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.
Although the medical school does have community partnerships, none are themed around or address planetary topics of health.	

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.
There are no courses currently offered by HYMS, nor are any lectures about climate and the environment integrated into the curriculum. Although student-led societies have run events themed around Global Health, nothing led by the university has occurred to date.	

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.

No official communications have been themed around this topic.

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.

- Friarage Hospital & James Cook University Hospital: Little to no online resources on the hospital website on environmental health exposures. There are information leaflets on hospital associated infections.
- York Hospital: Little to no online resources on the hospital website on environmental health exposures. There are information leaflets on infection prevention and control.
- Scarborough Hospital: No online resources on environmental health exposures.
- Castle Hill Hospital & Hull Royal Infirmary: Little to no online resources on the hospital website on environmental health exposures. There is a [guide](#) for patients and carers on diet.
- Scunthorpe General Hospital & Diana, Princess of Wales Hospital: Little to no online resources on the hospital website on environmental health exposures.

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.

There are little to no online resources on the hospital websites for climate change and health impact.

No affiliated medical centers have accessible educational materials for patients about climate change and health impacts.

Section Total (0 out of 12)

0

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.
<ul style="list-style-type: none"> ● University of Hull: Sustainability and Environmental Management (Staff and Student Engagement) <ul style="list-style-type: none"> ○ Students are eligible to apply for current initiatives (no grants). ● University of York: Environmental Sustainability Institute <ul style="list-style-type: none"> ○ Provides knowledge of the funding landscape, and identifies and disseminates upcoming research opportunities. <p>For INSPIRE Student Research Projects, funding can be requested to cover research project costs and can cover sustainability initiatives therefore awarded 2 points.</p>	

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.

Hull York Medical School offers funding for eligible INSPIRE Student Research Projects, which could be a planetary health/sustainable healthcare project, but there are no explicit paid fellowships for research related to planetary health and/or sustainable healthcare.

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.

Despite HYMS having no webpage informing medical students about planetary health or sustainable healthcare projects, the University of York page does have a page dedicated to sustainability and student-led initiatives. (<https://www.york.ac.uk/about/sustainability/>) This page however does not specifically address healthcare. The University of Hull's webpage does include contact details of potential mentors (<https://www.hull.ac.uk/work-with-us/research/themes/energy-and-the-planet>).

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.

Students for Global Health is a student organisation dedicated to sustainability in healthcare, but it is unfunded and lacks faculty support.

At HYMS, Students for Global Health strives to educate and advocate for Planetary health and sustainability in healthcare, but lacks funding and faculty support, therefore awarded 1 point.

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 sustainability representative in Hull or York Medical school, or medical student liaison on a sustainability committee.

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 University of Hull has a society called Beach clean club which is a student led society which is environmentally driven and passionate about the local ecosystem and sustainable living.

The University of York has multiple societies that aim to increase environmental awareness. These include:

- Environment Society which involves events on discussions on the current environmental issues in society
- Garden Society that strives to build a greener university campus
- Nature Society that educates others on the use, properties, and identification of plants in our community
- Outdoor Society that runs weekly walks in the British countryside.
- People and Planet, a branch of the largest student network in Britain campaigning to take action on world poverty, human rights, and the environmental crisis

There were multiple student led organisations that looked at the wilderness and outdoors in both universities and HYMS in general. Furthermore, there were other societies that looked at ways of improving environmental impact along with providing students opportunities to learn to be more conscious about their impact on society. However, there is a lack of events in which students learn directly from members of a local environmental justice community and cultural arts events, installations or performances. Despite having a Wilderness society, it does not follow the 'leave no trace' principle. Therefore this was awarded a 2.

Section Total (7 out of 14)

7

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
<p>The University of Hull has a dedicated sustainability operation, led by Director of Estates, Stephen Dale. They have a detailed Hull Environmental Sustainability Strategy, which is accessible from Hull Universities website. However, this is dated 2018/19, therefore is now 2 years old.</p> <p>The University of York also has a dedicated sustainability operation, which can be contacted through Email, Twitter and Facebook. The main aim for the University of York is to achieve the UN Sustainable Development Goals and provide information on what they are doing to achieve them on the University's website.</p> <p>After looking at HYMS website there is no indication that there is a dedicated Office of Sustainability.</p>	

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.

Hull plans to be carbon neutral by 2027.

Hull University has already decreased their carbon emissions by 31%, and plan on reducing this further by:

- Transitioning to renewable sources of energy to fuel the campus
- Making further energy efficiencies through optimising our estate and campus infrastructure
- Improving our recycling rate and waste management
- Reducing single-use plastics
- Reduce water consumption
- Embed sustainable procurement
- Enhance the levels of biodiversity on campus
- Support colleagues in considering sustainability when making travel choices

York does not have a plan to be carbon neutral, however they do have a Carbon Management Plan where they have aimed to reduce carbon emissions by 43% by 2020 (using 2005 as their base line). York University is aiming to implement some more initiatives to reduce their carbon emissions further, including:

- The pool bike scheme - makes bikes more available on campus
- One planet week - organises activities and events to promote living within our Earth's resources
- The green impact scheme - rewards departments seeking to be more sustainable
- Student Switch Off - encourages students to think about energy usage

Hull York Medical School - there is no indication that HYMS has established a plan to become carbon neutral.

Due to the fact that HYMS is split between two institutions, one of which has a clearly defined carbon neutral plan (Hull). Whereas, the other only has outlined ways in which to reduce carbon emissions, but no timeline for carbon neutrality (York). Therefore, awarded 2 points.

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.

Using data from peopleandplanet.org, Hull:

- scores 45/45% for using combined heat and power energy
- scores 17.5/35% for generating some of their own energy
- 20/20% for buying some or all of its electricity from renewable sources

Using data from peopleandplanet.org, York:

- scores 45/45% for using combined heat and power energy
- scores 35/35% for generating some of their own energy
- 0/20% for buying some or all of its electricity from renewable sources

Information regarding how the medical school is powered is scarce and we were only able to find some figures from peopleandplanet.org.

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.

Faithful+Gould were in charge of a £3.9 million refurbishment of the Hull York Medical School building at the University of York. They diverted 98% of waste from landfill and rainwater harvesting was used on the site and all taps changed from lever to push button, to provide a 32% reduction in water use. By placing 98% of subcontracts locally, they minimised emissions by up to 22%.

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.

York “aims to make travelling around campus better for everyone and to ease pressure on the environment at the same time”. They are doing this through a range of schemes, including:

- The cycle pool scheme - where bikes are available to rent for 48-hours at a time
- Cyclescheme - where you can save up to 42% on the cost of a bike
- Given £10 for attending a 90 minute cycling lesson
- e-scooters used between the East and West campus for FREE and 75p an hour to get to the city centre
- Student and staff bus pass discounts
- Enterprise Car Club

Hull schemes:

- Liftshare scheme
- Adoption of updated travel plan linking lifeshare, EV and public transport
- Replacement of grounds fleet with electric vehicles

The York campus has a range of environmentally-friendly transportation which would score a 2. However, due to the lack of safe active transport, public transport, or carpooling options found on the Hull campus thus overall scores 1 point.

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.

Hull:

- Domestic waste - disposed via recycling, general and mixed waste bins which are accessible to students and staff. Processed by Veolia
- Non-domestic waste and Residential waste - also processed by Veolia

Veolia is an excellent company and priorities sustainability, through the use of both compost and recycling programs.

York:

- None of the main waste from the University of York is sent to landfill
- 54% is recycled
- 14 tonnes of waste is reused through the Warplt system
- Domestic waste - disposed via recycling, general and mixed waste bins which are accessible to students and staff

Waste disposal from Hull York Medical School is processed through the University’s programmes, and there is a range of recycling points at both the York and Hull University which are easily accessible for students and staff.

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.
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.

Hull has agreed to a range of Fair Trade and Sustainable Food policies, which led to the recent award of Soil Association Food for Life Catering Bronze award.

- Sustainable food sourcing
- No longer purchasing single use plastic water bottles

York:

- 25% of York University's food budget is spent purchasing local, sustainable food
- All eggs are free range
- Most of the meat comes fresh from the region, from suppliers demonstrating the highest animal welfare standards
- The fish comes from suppliers following the Code of Conduct for Responsible Fisheries
- Do not purchase endangered species
- Working with local suppliers to reduce food packaging

The medical school has made steps to supply adequate sustainable food and drink options. Steps are more prominent at the York campus compared to the Hull campus.

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.

There is no evidence of sustainability guidelines for supply procurement. Sustainability is a topic which HYMS needs to address, and fails to address sustainability in supply procurement.

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.

Currently, there are no sustainability guidelines for medical school events. For many of the events which medical societies organise, there is more emphasis on health and safety, and a lack of concern about sustainability measures.

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.

There is no evidence of any efforts to make 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 York does not invest in tobacco companies and fossil fuels, and have instructed Fund Managers to divest from any funds in such firms.

The University of Hull however, refused to comply with a freedom of information request on its endowment investments in December of 2018 and highlighted its reluctance to confirm its stake in the fossil fuel industry.

Despite the University of York completely divesting from fossil fuel investments, the University of Hull has failed to divest. hence, this metric cannot score higher than 1.

Section Total (14 out of 29)	14
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Grading

Section Overview

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

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

Planetary Health Grades for the Hull York Medical School

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

Section	Raw Score	Grade
Planetary Health Curriculum (30%)	12 / 58 = 20.7%	D–
Interdisciplinary Research (17.5%)	8 / 19 = 42.1%	C–
Community Outreach and Advocacy (17.5%)	0 / 12 = 0.0%	F–
Support for Student-led Planetary Health Initiatives (17.5%)	7 / 14 = 50.0%	C
Campus Sustainability (17.5%)	14 / 29 = 48.3%	C
Institutional Grade	30.8%	D