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# **Planetary Health Report Card:** ***HULL YORK MEDICAL SCHOOL***

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2021-2022 Contributing Team:

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## Summary of Findings

<b>Overall</b>	<b>C</b>
<u><b>Curriculum</b></u>	<b>D-</b>
<ul style="list-style-type: none"> <li>Hull York Medical School (HYMS) addresses planetary health (PH) in stand-alone lectures on limited topics in Phase 1 and elective components. Education for sustainable healthcare (ESH) is lacking. The curriculum is currently under improvement with a focus on PH and ESH, and PH lectures for Phase 2 have been scheduled.</li> <li><b>Recommendations:</b> Incorporate PH/ ESH teaching throughout the pre-clinical and clinical curriculum, especially considering ESH. Formalize a role overseeing integration of PH/ ESH into the curriculum.</li> </ul>	
<u><b>Interdisciplinary Research</b></u>	<b>A</b>
<ul style="list-style-type: none"> <li>HYMS recently hosted a conference for staff and students with multiple expert speakers following COP26 and is a member of the Global Consortium on Climate and Health Education. HYMS also has researchers with a primary focus on PH and has processes which allow those affected by environmental injustice to influence the research agenda.</li> <li><b>Recommendations:</b> Join the Planetary Health Alliance for more access to planetary health resources.</li> </ul>	
<u><b>Community Outreach and Advocacy</b></u>	<b>C-</b>
<ul style="list-style-type: none"> <li>HYMS is involved in regional projects promoting green prescribing and regenerative food processes. Student communications sometimes include planetary health Topics. HYMS has no relevant community facing courses or events, and there are no materials for patients around environmental health exposures or health impacts of climate change.</li> <li><b>Recommendations:</b> Formalise PH/ ESH in student communications. Create patient accessible information around environmental health exposures or climate change and its health impacts.</li> </ul>	
<u><b>Support for Student-Led Initiatives</b></u>	<b>B</b>
<ul style="list-style-type: none"> <li>There are research opportunities in PH at HYMS and a well-supported Students for Global Health society. However, there is no student representation involved in curriculum reform or sustainability, and the medical school lacks a centralised webpage for PH initiatives, successes and available projects.</li> <li><b>Recommendations:</b> Create a specific webpage for HYMS PH topics and create a student representative role focused on PH/ ESH. Inclusion of a sustainability focus into required quality improvement projects.</li> </ul>	
<u><b>Campus Sustainability</b></u>	<b>C+</b>
<ul style="list-style-type: none"> <li>The Universities of Hull and York have comprehensive plans for carbon neutrality by 2030. There is good recycling availability on campus and the institutions have good guidance on sustainable supply procurement. HYMS lacks a dedicated staff member for sustainability, and there are no guidelines for event sustainability.</li> <li><b>Recommendations:</b> Appoint a designated staff member for sustainability at the medical school and develop guidelines or requirements for events promoting sustainability.</li> </ul>	

# Statement of Purpose

*Planetary health is human health.*

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

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

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

# Definitions & Other Considerations

## Definitions:

- **Planetary Health:** is described by the *Planetary Health Alliance* as “a solutions-oriented, transdisciplinary field and social movement focused on analyzing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth”. For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
  1. Describe how the environment and human health interact at different levels.
  2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
  3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (for example, undergraduate departments (USA), other related departments eg Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric 19 in curriculum section):** This is a series of questions providers are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mold after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Clerkship:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations or placements.

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

# Planetary Health Curriculum

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

## Curriculum: General

1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3	<b>Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.</b>
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.

Hull York Medical School offers electives in the form of the Scholarship and Special Interest Programme (SSIP) components. Relevant SSIP topics include:

- Urbanisation: threat or catalyst to improve global health? by Helen Elsey for Year 1. This SSIP explores how urbanisation presents health challenges, including the double burden of communicable and noncommunicable diseases, exposure to environmental and man-made hazards and limited access to quality, affordable health care.
- Introduction to Global Health: Concepts and Controversies by Hannah Jennings for Year 2. This SSIP explores 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 for Year 2. This SSIP explores the inequality in accessing palliative care especially in low-resource countries. Contributing factors and solutions for this issue are also explored.

As multiple elective aspects of the course (specifically Urbanisation and Introduction to Global Health) focus on Planetary Health topics, this metric has been awarded 3 points.

## Curriculum: Health Effects of Climate Change

**2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?**

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>

The relationship between extreme heat, health risks, and climate change was not mentioned anywhere in the curriculum (e.g., learning outcomes, lectures, elective components), resulting in a 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.

**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.
<b>0</b>	<b>This topic was not covered.</b>

The relationship between extreme weather events on individual health and/or on healthcare systems is not explored in any lectures, learning outcomes or elective components, resulting in a 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.

**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.
<b>0</b>	<b>This topic was not covered.</b>
<p>There is a lecture on Principles of Communicable Disease by Dr Jake Lewis in Year 2 where factors affecting the spread of infectious disease are discussed. It is delivered as a face-to-face lecture as well as a recorded lecture. Despite in-depth discussion around the influence of the environment, such as water systems, on the spread of infectious disease, there was no clear link with climate change and its effects. Elective components do not include this topic. Therefore, this metric scores a 0. This topic could be incorporated into the curriculum within a lecture (such as the aforementioned lecture) or workshop.</p>	

<b>5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?</b>	
3	This topic was explored in depth by the core curriculum.
<b>2</b>	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p>There is a recorded lecture from 2019 on Environmental Health by Dr Michael Crooks which is delivered in The Development of Cardiorespiratory block for Year 2 students. The learning objectives covered in the lecture were: identifying the major effects of the environment on health in developing world, the relationship between air quality and respiratory health as well as identifying agencies in the UK with a responsibility for the environment and health. The lecture focuses specifically on the relationship between particulates and air pollution and lung disease. Occupational lung disease was also discussed in detail. However, there is no discussion of the link between these topics and climate change. Elective components also do not address this topic. This topic is associated with testable learning objective and the lecturer spent a fair amount of time discussing through the air pollution and respiratory health. However, effect of climate change was not covered, therefore score of 2 is awarded.</p>	

<b>6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?</b>	
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.
<b>0</b>	<b>This topic was not covered.</b>
<p>Although the link between respiratory health and air pollution was thoroughly discussed, there was no mention of the cardiovascular health effects of climate change in any lectures, learning outcomes or elective components. This results in a 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.</p>	

<b>7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?</b>	
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.
<b>0</b>	<b>This topic was not covered.</b>
<p>There is a lecture on Diversity and Mental Health by Dr Julie Seymour in Year 1 where the prevalence of mental health issues in different populations and potential contributing factors are discussed. It is delivered face-to-face and is also available as a recorded lecture. However, there was no explicit link between climate change and its multifaceted mental health impacts. Elective components of the course do not cover this topic. The best way to incorporate this into the curriculum is to deliver this topic within lecture (such as the aforementioned lecture) or a workshop.</p>	

<b>8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?</b>	
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.
<b>0</b>	<b>This topic was not covered.</b>

After considering learning outcomes, lectures and elective components of the course, there is no mention about relationship between health, individual patient food and water security, ecosystem health, and climate change. This resulted in a 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>

There are several lectures in Year 1 considering social inequalities in health. For example, there is a recorded lecture considering Social Inequalities in Health delivered by Dr Paul Whybrow. One of the associated learning outcomes is “Explain the relationships between socioeconomic position and health.” However, there is no discussion of the impact of climate change on marginalised population, resulting in a score of 0 for this metric. Elective components also do not cover this topic, which could be incorporated within lectures and elective components.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>

There is a recorded lecture entitled ‘Global Determinants of Disease’ by Dr Helen Elsey in Year 2 which discussed about the importance of global health and its key determinants. There is also an SSIP topic for Year 1 students on Health Inequalities by Dr Paul Whybrow which explores health inequalities and examines the role of medicine in improving health equity and inclusion. However, there was no discussion of the effects of climate change exacerbating health inequalities or the effects of climate change on different populations, resulting in a 0 for this metric. This topic could be incorporated into lectures, learning outcomes or elective components of the curriculum.

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

<b>11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?</b>	
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.
<b>0</b>	<b>This topic was not covered.</b>
<p>Although the link between respiratory health and air pollution was thoroughly discussed, there was no mentioning of the reproductive health effects of industry-related environmental toxins. Elective components also do not cover this topic, resulting in a score of 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.</p>	

<b>12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?</b>	
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.
<b>0</b>	<b>This topic was not covered.</b>
<p>There is a Year 2 SSIP entitled 'Urbanisation: Threat or Catalyst to improve Global Health' by Dr Helen Elsey which discusses how more deprived populations are the most vulnerable in urban areas and facing the burden of communicable and non-communicable diseases (including being exposed to human-caused environmental threats). This SSIP does not consider the university's surrounding community.</p> <p>There are two Year 2 Health and Society lectures called 'Global determinants of disease' by Dr Helen Elsey and 'Environmental Health' by Dr Michael Crooks which include the consequences of travel and migration on diseases and the relationship between air quality and UK agencies that have a responsibility for health and the environment, but no discussion of the university's surrounding community.</p> <p>The lecture 'Global determinants of disease' lecture incorporates specific learning outcomes related to defining global health, discussing key determinants and ethical dilemmas and understanding the roles of medical professionals in global health.</p>	

The learning outcomes associated with the lecture ‘Environmental health’ are discussed in question 14. This resulted in a score of 0 for this metric.

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

3	Indigenous knowledge and value systems are integrated throughout the medical school’s planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>

There are no core curriculum topics from years 1-4 or elective components that discuss indigenous communities. This is therefore lacking throughout the entire curriculum.

**14. 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, Indigenous populations, and older adults?**

3	This topic was explored in depth by the core curriculum.
<b>2</b>	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.

This topic is mentioned briefly in Health and Society lectures in pre-clinical years such as the Year 2 topic “Environmental Health” by Dr Michael Crooks which addresses how toxins in the environment affect some socio-economic groups more than others. The learning objectives covered in the lecture were: identifying the major effects of the environment on health in developing world, the relationship between air quality and respiratory health as well as identifying agencies in the UK with a responsibility for the environment and health. However, the topic is not discussed in detail and is not associated with a testable learning objective, resulting in a score of 2 for this metric.

**15. 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.
<b>0</b>	<b>This topic was not covered.</b>

HYMS does not mention the environmental and health co-benefits of a plant-based diet in its curriculum. It is not mentioned in lectures, learning outcomes or elective aspects of the course throughout years 1-5. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum within a lecture or workshop.

**16. Does your medical school curriculum address the carbon footprint of healthcare systems?**

3	This topic was explored in depth by the core curriculum
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>

The environmental effect of healthcare systems, associated harms and potential solutions are not discussed within the curriculum (e.g., learning outcomes, lectures, elective components), resulting in a 0 for this metric. It may be covered in small group teaching on clinical placements, but as this is not standardised there is no way to assess this. This topic could be incorporated into the curriculum as a lecture or workshop.

**17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (1 point each)**

1	Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.

1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions
1	The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK.
1	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
<p>Aspects of multiple of the above topics are discussed within the HYMS curriculum, such as over-prescribing, over-medicalisation and the benefits of non-pharmaceutical management for some conditions. Examples include:</p> <ul style="list-style-type: none"> <li>• Avoiding over-medicalisation is discussed in a Year 2 lecture ‘Understanding the patient’s story: Indigestion’ by Professor Robin Bunton where a learning outcome is ‘examining medicalisation’ and considering the patient perspective to try and find a diagnosis without over-investigation.</li> <li>• Avoiding over-prescribing is briefly mentioned in the Year 2 lecture ‘Ethics of rationing health care’ by Professor Karen Bloor but it is not in the case of causing climate health harm and does not mention the environmental benefits of avoiding over prescribing.</li> <li>• The health benefits of non-pharmaceutical management of conditions is scattered around the curriculum from lectures. One example is in a Year 3 lecture ‘Type 2 diabetes and obesity’ by Professor Thozhukat Sathyapalan where diet and exercise is mentioned as a form of management. However, environmental benefits are not addressed.</li> </ul> <p>As the environmental importance and benefits are not discussed, this metric has been scored a 0 overall.</p>	

*Curriculum: Clinical Applications*

<b>18. In training for patient encounters, does your medical school’s curriculum introduce strategies to have conversations with patients about the health effects of climate change?</b>	
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	<b>No, there are not strategies introduced for having conversations with patients about climate change</b>
There is no teaching for conversations with patients about the health effects of climate change in the form of lectures, elective components, clinical skills or workshops throughout the curriculum.	

<b>19. In training for patient encounters, does your medical school’s curriculum introduce strategies for taking an environmental history or exposure history?</b>	
2	<b>Yes, the core curriculum includes strategies for taking an environmental history.</b>
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>The core curriculum implements an environmental history in weekly clinical skills teaching in Year 1, which is reinforced through clinical skills teaching throughout all years of the curriculum. For instance, medical students are taught to ask about environmental risk factors such as asbestos exposure and living situation, and this skill is developed through simulated patient consultations.</p> <p>In clinical skills in first year, students are taught how to take a full social history in terms of exposure to environmental and occupational hazards. During clinical assessments, students are penalised for failure to ask about these hazards. Throughout teaching of specific diseases, social factors and environmental harms are covered. Therefore, this metric is scored a 2.</p>	

*Curriculum: Administrative Support for Planetary Health*

<b>20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?</b>	
4	<b>Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.</b>
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 recently recruited an honorary lecturer (Dr Emma O'Neill) to teach planetary health content in Phase 1. She will also be delivering the first planetary health taught sessions in Phase 2, which are scheduled for March 2022. In addition, there are new seminars, lectures and assessments on planetary health in development, and a new MSc on Environment and Healthcare. There are also plans for a new elective component (SSIP) focusing on planetary health. This is part of a broader update to the curriculum which includes a specific focus on planetary health.

**21. 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	<b>Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).</b>
0	There is minimal/no education for sustainable healthcare.

In the Phase 1 curriculum, there is a stand-alone lecture addressing the effects of air pollution on respiratory health (the Year 2 lecture 'Occupational and environmental health as related to lung disease; by Dr Michael Cooks). There are multiple elective components, such as 'Introduction to global health: concepts and controversies' by Hannah Jennings, 'Global health and palliative care' by Joseph Clark, and 'Urbanisation: threat or catalyst to improve global health?' by Helen Elsey which cover planetary health topics, either directly or implicitly. However, there is no direct link to planetary health integrated throughout the curriculum, despite good integration of global health topics throughout the curriculum.

**22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?**

1	Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	<b>No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.</b>

HYMS have a faculty member (Paul Whybrow, Academic Lead for Health and Society) who is responsible for the Health and Society curriculum, which includes epidemiology and global health topics. However, planetary health/ ESH is not currently a formal part of this job role.



<b>Section Total (15 out of 69)</b>	<b>15</b>
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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.*

# 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?	
3	<b>Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability.</b>
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.

HYMS and the University of York created a team of researchers led by Professor Paul Kaye (Professor of Immunology Head of Centre for Infection and Immunology at the University of York), with the Department of Biology to search for an effective vaccine for the ‘neglected topical disease – Leishmaniasis’. This was a highly successful effort providing the testing of a “third generation” vaccine.

The University of York has multiple research institutes considering planetary health, including:

1. [Stockholm Environment Institute](#) at York
2. [Sustainability Institute Waste Network](#)
3. [The Centre for Urban Research \(CURB\)](#)
4. [York Environmental Sustainability Institute](#)
5. [Fix our Food](#) – Partnership with the University of York Business School, HYMS and Health Sciences.

At the University of Hull, the Energy and Environmental Institute is dedicated to bringing leading interdisciplinary academics to “tackle global issues surrounding climate change and its consequences on livelihoods”.

[Fix our Food](#) is a Yorkshire based project and research consortia aiming to transform the food system so that it benefits population and planetary health. It works in partnership with local and national stakeholders, with a focus on improving school food systems.

This metric is awarded 3 points due to the involvement of HYMS researchers in the Fix Our Food project and research. This joint appointment means that faculty members at HYMS have a primary focus in planetary health.

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

<b>3</b>	<b>There is at least one dedicated department or institute for interdisciplinary planetary health research.</b>
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:

1. Stockholm Environment Institute at York
2. York Environment
3. Sustainability Institute Waste Network
4. The Centre for Urban Research (CURB)
5. York Environmental Sustainability Institute
6. Fix Our Food

The University of Hull has the Energy and Environmental Institute.

Therefore, 3 points are awarded for this metric, as there are institutes that are dedicated to interdisciplinary planetary health, with multiple individuals dedicated to each institute.

**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?**

<b>3</b>	<b>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.</b>
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>Within the <a href="#">Fix our Food</a> project and research consortia, there is scope for school children aged 6-16 to influence research policy and priorities through the Leaders for Change Group. This programme includes many children from socially deprived backgrounds affected by food and health inequality and gives them the opportunity to co-design interventions and contribute to bi-annual events. Therefore, this metric scores 3 points.</p>	

<b>4. Does your institution have a planetary health website that centralizes ongoing and past research related to health and the environment?</b>	
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	<b>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.</b>
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.
<p>On the HYMS website there is no dedicated page that displays campus resources related to health and the environment.</p> <p>On the other hand, The University of York has a comprehensive <a href="#">website</a> which outlines:</p> <ol style="list-style-type: none"> <li>1. The University’s position as a sustainable institution</li> <li>2. The Sustainability plans</li> <li>3. What you can do to live more sustainably</li> <li>4. Updates on what the university is doing to become more sustainable</li> </ol> <p>The University of Hull also has a <a href="#">website</a> that centralises various campus resources related to health and the environment. It outlines the universities:</p> <ol style="list-style-type: none"> <li>1. Plan to carbon neutral by 2027</li> <li>2. Policies and strategies</li> <li>3. Staff and student engagement</li> <li>4. Sustainable food and Fairtrade</li> <li>5. Sustainable procurement</li> <li>6. Lift share</li> </ol> <p>We awarded 2 points as the websites are easy to use/navigate and provide resources on upcoming events, leaders in planetary health, but does not include relevant funding opportunities.</p>	

<b>5. Has your institution recently hosted a conference or symposium on topics related to planetary</b>
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health?	
4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
<p>The Hull York Medical School hosted a conference ‘Climate Crisis and Health: Reflecting on COP26’ in November 2021, where a range of expert speakers have been invited to speak following the COP26 Global Climate Summit. This is a first for HYMS, therefore this conference is extremely promising and hopefully is the start of greater engagement with health and climate.</p>	

6. Is your medical school a member of a national or international planetary health or ESH organization?	
1	Yes, the medical school is a member of a national or international planetary health or ESH organization
0	No, the medical school is not a member of such an organization
<p>HYMS has joined the Global Consortium on Climate and Health Education but is not yet a part of the Planetary Health Alliance.</p>	

Section Total (16 out of 17)	16
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*Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# 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.*

<b>1. Does your medical school partner with community organizations to promote planetary and environmental health?</b>	
<b>3</b>	<b>Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.</b>
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>The medical school has partnered up with <a href="#">Humber, Coast and Vale Green Social Prescribing</a> programme. It is one of seven ‘test and learn’ sites in England that will examine how health and care services, working with communities and local organizations, can connect more people with nature and nature-based activities to improve their mental health and wellbeing. Funding has been received from the Department for Environment, Health and Rural affairs, NHS England and NHS Improvement, which will be used to strengthen existing green social prescribing networks and examine the effect on the mental health and wellbeing of the region. This programme began on the 01/04/2021, and more information can be found <a href="#">here</a>.</p> <p>HYMS is also partnered with <a href="#">Fix our Food</a>, a project which aims to transform the food system to a regenerative food system with environmental and social benefits. This project includes working closely with school children from 7 schools in Yorkshire to run sessions about regenerative food systems, as well as helping prioritise food sustainability work and involvement of the school children in co-design of interventions and evaluations. There is also a focus on regenerative farming and hybrid business models which co-ordinate food production to consumption in an economical and regenerative way. These partnerships result in a score of 3 for this metric.</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	<b>The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.</b>
0	The medical school has not offered such community-facing courses or events.

At the University of York, there are community-facing online courses around sustainability topics, such as [‘Tackling environmental challenges for a sustainable future’](#). There are also public facing talks which discuss planetary health topics, such as [‘YorkTalks’](#), which for the 2022 agenda contains talks on topics such as ‘Fixing our food system’ by Dr Maria Bryant and ‘Indoor air pollution: the dirty secret lurking on our homes?’ by Professor Nicola Carslaw.

No similar public facing planetary health events can be found easily online at the University of Hull. While HYMS holds community facing talks and courses, such as HYMS Pathway to Medicine to support school students interesting in medicine, no evidence can be found of any community facing courses or events about planetary health and sustainable healthcare. Therefore, this metric scores a 1.

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	<b>Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.</b>
0	Students do not regularly receive communications about planetary health or sustainable healthcare.

HYMS produces a weekly student newsletter named ‘The Rounds’. Planetary health and sustainable healthcare is not a regular feature but has been included in communications. For example, in the 01/12/2021 newsletter a summary of the ‘Climate Crisis and Health: Reflecting on COP26’ was included with a link to the recording. However, this planetary health and education for sustainable healthcare could be formalised as a regular feature.

The Academic of Primary Care Department in HYMS also has a newsletter that goes out to the local GP practices. Recently there was a section that discussed the need for recycling in healthcare, written by a HYMS research fellow.

**4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?**

2	Yes, the institution or main affiliated hospital trust offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
1	<b>Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers</b>
0	There are no such accessible courses for post-graduate providers

The medical school currently has all CPD and short-courses on hold due to the COVID-19 pandemic, with no links to online alternatives. However, the University of Hull offers a [Climate Change Essentials CPD course](#) which provides a foundational understanding of climate change, its impacts and solutions. This module is part of a BSc (Hons) in Critical Care. There are no planetary health/ education for sustainable healthcare CPD courses at the University of York.

It is worth noting that an MSc in Health and Climate Change is in development, but information about this is not currently available on the HYMS, University of Hull or University of York websites.

Overall, this results in a score of 1 for this metric.

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

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	<b>No affiliated medical centers have accessible educational materials for patients.</b>

- Hull University Teaching Hospitals NHS Trust: Little to no online patient resources on environmental health exposures. There is a patient information leaflet discussing use of [antibiotics](#) and multiple on specific diets, such as following bariatric surgery.
- Northern Lincolnshire and Goole NHS Foundation Trust: No online patient resources on environmental health exposures.
- York and Scarborough Teaching Hospitals NHS Foundation Trust: No online patient resources on environmental health exposures.
- South Tees Hospitals NHS Foundation Trust: No online patient resources on environmental health exposures.



There may be patient information leaflets physically in specific hospital departments, but this is difficult to evaluate. None of the affiliated hospitals, or HYMS itself, provide patient education on environmental health exposures, resulting in a score of 0 for this metric.

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

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
<b>0</b>	<b>No affiliated hospitals have accessible educational materials for patients.</b>
<p>Hull University Teaching Hospitals NHS Trust, Northern Lincolnshire and Goole NHS Foundation Trust, York and Scarborough Teaching Hospitals NHS Foundation Trust and South Tees Hospitals NHS Foundation Trust do not have any online patient resources on climate change and its health impacts. There may be patient information leaflets physically in specific hospital departments, but this is difficult to evaluate. None of the affiliated hospitals, or HYMS itself, provide patient education on climate change and health, resulting in a score of 0 for this metric.</p>	

<b>Section Total (6 out of 14)</b>	<b>6</b>
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*Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# 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/QI project?	
2	<b>Yes, the institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.</b>
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 and there is no requirement to participate.
0	No, the institution does not offer opportunities or support for sustainability initiatives or QI projects.
<p>The University of Hull has a <a href="#">webpage</a> dedicated to students who are looking to get involved with sustainability initiatives. It offers the opportunity to support the Student Union and the University’s sustainability agenda. Moreover, students are encouraged to contact the relevant members of staff if they wish to take part or have a project idea which needs assistance.</p> <p>The University of York also has a <a href="#">webpage</a> for students to get involved in sustainability initiatives. The university offers practical and administrative support with this, provides knowledge of the funding landscape and liaises with funding bodies and institutions to progress proposals. University of York also encourages sustainability within departments through its <a href="#">Green Impact</a> Scheme, which rewards staff’s sustainability and allows students to be involved as an auditor or project assistants.</p> <p>This results in a score of 2 for this metric. However, the medical school itself offers minimal support for quality improvement projects/ sustainability initiatives within healthcare. There is a quality improvement project in the Year 3 curriculum, which could have a focus on sustainability/ require sustainability considerations within it.</p>	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
2	The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.

1	<b>There are research opportunities for students to perform research related to planetary health/sustainable healthcare but these require student initiative to seek these out and carry them out in their spare time.</b>
0	There are no opportunities for students to engage in planetary health/sustainable healthcare research.
<p>There is a Research Opportunities section on the online student portal which includes information about different research projects students can get involved with, which does include a project for 2021 ran by Dr Laura Sadofsky considering the effect of microplastics on human health. Furthermore, students can use the school's research pages to identify any tutors that share those research interests and get in touch, creating a pathway for involvement in research in planetary health and sustainable healthcare.</p> <p>However, as there is no specific research programme for planetary health/ sustainable healthcare research, this metric achieves a score of 1.</p>	

<b>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, <u>current initiatives</u> underway at the medical school and/or contact of information of potential mentors.</b>	
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	<b>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.</b>
0	There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.
<p>HYMS does not have a webpage where students can find specific information related to planetary health. However, the student portal has a section dedicated to mentors who have provided their contact details and are willing to mentor students. Some of these mentors are researchers in fields with strong planetary health links, such as global health and population health. However it lacks a planetary health focus and key information relating to planetary health or sustainable healthcare, such as current initiatives or projects achieved and an explicit focus on planetary health, resulting in a score of 1 for this metric.</p>	

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

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

Hull York Medical School has a Students for Global Health Society which is a student- led society aiming to tackle global and local health inequalities through education, advocacy and community action. This society receives a high level of support from faculty advisors, especially with the planetary health report card itself where multiple faculty members have been available throughout the year to talk through strengths, weaknesses and solutions at HYMS.

<b>5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?</b>	
1	<b>Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.</b>
0	No, there is no such student representative.

There is an Environmental and Sustainability officer within the Hull Student Union whose role includes participating in university and union working groups on the topic of sustainability and environmental impact, as well as informing students on issues of environmental impact and sustainability issues locally, regionally and nationally. They also organize and run campaigns to lobby for change. Further information is available on the [Hull University Student Union website](#).

The Environment and Ethics Officer at the University of York is responsible for representing the interests of Union members in lobbying for sustainable and fair practices. Further information is available on the [University of York Student Union website](#).

Due to the institutional representation, this metric scores a 1. However, there is currently no student representative or liaison within the medical school representing sustainability interests at HYMS. This is particularly important for curriculum reform and sustainability practices within the medical school. Going forward, one of the elected student representatives could formally represent sustainability.

**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	<b>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.</b>
1	<b>Panels, speaker series, or similar events related to planetary health that have students as an intended audience.</b>
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	<b>Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)</b>
<p>The University of York has many societies that aim to increase awareness of environmental issues:</p> <ul style="list-style-type: none"> <li>• Outdoor Society- runs weekly walks in the British countryside</li> <li>• Environment Society- hold events such as beach clean ups and promote sustainability</li> <li>• Gardening Society- creates a green space on campus and uphold a key no dig, non-intensive, all organic philosophy, with the aim to bring students closer to the source of their food</li> <li>• Student co-operative- non-profit shop at the university, supplying ethical and locally sourced goods largely without plastic</li> </ul> <p>The University of Hull also has some relevant societies:</p> <ul style="list-style-type: none"> <li>• Hull University Gardening Society- hold workshops and activities which encourage students to get involved with nature</li> <li>• The Wilderness Medicine Society- this society takes trips around the country, hiking and exploring the wilderness, as well as lectures and workshops on wilderness medicine</li> </ul> <p>Hull York Medical School hosted the ‘Climate crisis and health: reflecting on COP 26; conference in November 2021. There were multiple talks regarding the effect of climate change on health and how we, as students and healthcare professionals, can get involved. The PHRC was also mentioned to raise awareness of the project and to allow staff and students to get involved.</p> <p>Therefore, this metric scores a 3.</p>	

<b>Section Total (10 out of 15)</b>	<b>10</b>
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# 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	<b>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.</b>
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

The University of Hull (UoH) has an [Energy and Environmental Team](#) which ensures the university operates as sustainably as possible. There are several individuals involved in the team who have a variety of research interests as outlined on their [website](#). This team aims to leverage partnerships and accelerate innovation pathways to ensure their research provides the evidence base for policy makers and sets new research agendas There are several ongoing projects, including: a living lab for sustainable drainage; predicting evolution of future flood hazard; offshore wind library, and microplastic workshops. It is unclear based on information available online whether there is any specific member of staff for sustainability at the medical school.

University of York (UoY) has a dedicated sustainability operation, which can be contacted through multiple platforms such as Email, Twitter and Facebook. Additionally, the university has introduced an Environmental Sustainability Academy as of 2021. This aims to form a collaboration between research, teaching, policy and campus operations relating to creating a more environmentally friendly York. This will also involve partners locally, nationally and globally. The academy itself has been established and projects are now being undertaken, as per information is from the [Environmental Sustainability Academy website](#).

Both the University of Hull and University of York have dedicated teams committed to promoting sustainability across the universities. However, there does not appear to be a designated staff member for sustainability at the hospital and/or medical school. This metric is therefore awarded 2 points.

**2. How ambitious is your medical school/institution’s plan to reduce its own carbon footprint?**

4	<b>The institution has a stated goal of carbon neutrality by 2030 or earlier and the medical school / institution has a well-defined and adequate plan in place to achieve this goal.</b>
3	Yes, there is a stated carbon neutrality goal by at least 2040 and the medical school/institution has a well-defined and adequate plan in place to achieve this goal.
2	Yes, there is a stated carbon neutrality goal by at least 2040, but the medical school/institution 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.

The University of Hull has stated it aims to become carbon neutral by 2027. It has a [Carbon Neutral Plan](#) which outlines the progress to date, and the next steps to be carried out. This plan covers all parts of the university, including the medical school. Hull University has already reduced carbon emissions by 31%, and the University has a well-defined plan to reduce this further by:

- Transitioning to renewable sources of energy to fuel the campus
- Making further energy efficiencies on campus by optimising estate and campus infrastructure
- Increasing recycling rate and reduce waste
- Reducing single-use plastics
- Reducing water consumption
- Embedding sustainable procurement
- Increasing levels of biodiversity on campus
- Helping colleagues to consider sustainability when making travel choices

University of York is dedicated to reaching carbon neutrality by 2030, and a clear [Sustainability Plan 2021-2030](#) has been made framed around the UN Sustainable Development Goals. The plan outlines clear goals and targets that the university want to achieve. There are many action plans in place, some of which are:

- Establish an internal sustainable investment fund for sustainability
- Reduce waste volumes from campus by 33% (by weight)
- Increase waste recycling rates to 80% by weight
- Development of accommodation blocks dedicated to practicing and developing more sustainable lifestyles
- Begin planting a new managed woodland of up to 50,000 trees to complement the northern forest initiative
- One planet week 2021, pool bike, green impact and student switch off schemes are already lowering carbon footprints

Both institutions have well-defined and adequate plans to achieve a carbon neutrality goal by 2030. This would be awarded 4 points.

<b>3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?</b>	
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	<b>Medical school buildings source &gt;20% of energy needs from off-site and/or on-site renewable energy.</b>
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

The University of Hull Carbon Neutral Plan outlines aims for transitioning to renewable sources of energy to fuel the campus. There is a small amount of on-site electricity generated through solar panels on four buildings, along with two Combined Heat and Power plants on campus which supply some energy to power the Allam Medical Building. According to peopleandplanet.org, the UoH scores as follows: 45/45% for using combined heat and power energy; 17.5/35% for generating some of its own electricity; 20/20% for buying some or all of its electricity from renewable sources. This is based on information from 2019 and may be outdated.

Currently, the University of York is generating 26,000 kWh/ year solar energy through 80 solar panels installed across the university campus. Using data from peopleandplanet.org as of 2019, UoY scores 45/45% for using combined heat and power energy, scores 35/35% for generating some of their own energy and scores 0/20% for buying some or all of its electricity from renewable sources.

Based on the above information this would score 1 point. Information specifically related to the medical school is scarce therefore this information has been sourced from peopleandplanet.org which is at least 2 years out of date.

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



At the University of Hull, refurbished and new buildings are required to achieve a Building Research Establishment Environmental Assessment Method (BREEAM) Excellent or Very Good rating, depending on the existing building design. This is detailed in the ‘further energy efficiencies on campus’ section of the [Hull Carbon Neutral Plan](#). Older buildings are being refurbished to become more energy efficient. This includes a phased replacement of inefficient gas boilers, fluorescent lighting, windows and pipes. It is difficult to quantify how many older buildings have been retrofitted to be more sustainable based on the information available online, and whether the buildings mentioned are directly used by the medical school.

Faithful and Gould oversaw 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%.

Across both Hull and York campuses it appears new and old buildings are being constructed and remodeled, respectively, to promote sustainable building practices. This would score 3 points.

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

2	Yes, the medical school has implemented strategies to encourage and provide environmentally-friendly transportation options such as safe active transport, public transport, or carpooling and these options are well-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
1	<b>The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.</b>
0	The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

The University of Hull has implanted a Liftshare scheme to encourage carpooling. However, there are only 82 current members of this scheme, despite employing over 2500 staff and having 16,000 students. A new travel provider has been introduced to improve carbon reporting and help to reduce the University’s carbon footprint. Electric vans are used by the university, replacing older petrol and diesel equivalents. A travel and transport strategy is underway but not yet available to view.

The University of 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

While the York campus promotes a range of environmentally friendly transportation options, the Hull campus has transport strategies that are unsatisfactorily accessible or advertised. Hull York Medical School itself no longer provides dedicated coaches to placement in pre-clinical years but does not actively encourage environmentally-friendly forms of transport. Therefore this metric 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	<b>The medical school has either recycling or compost programs accessible to students and faculty, but not both.</b>
0	There is no compost or recycling program at the medical school.

The University of Hull ensures no waste from campus is taken to landfill. All dry mixed recycling is taken to a recycling centre for sorting and processing and all general waste goes to Energy Recovery Centre where it is converted to energy. There is currently no information available online about a composting scheme that is available to students and faculty.

None of the main waste from University of York is sent to landfill, instead 54% of main waste was recycled and 14 tonnes of waste was reused through the University Warp It Reuse scheme. Domestic waste is disposed via recycling, general and mixed waste bins which are accessible to both student and staff. The statistics here are for 2018/2019, which is the most recent available information.

Waste disposal from Hull York Medical School is processed through the respective University's programmes, and there are a range of recycling points at both the York and Hull University which are easily accessible for students and staff. This results in a score of 1 point for this metric due to the lack of evidence of a composting scheme.

**7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?**

3	Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.

<b>1</b>	<b>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.</b>
0	There are no sustainability guidelines for food and beverages.
<p>The University of Hull has agreed upon Fairtrade and Sustainable Food policies, and steps are being taken to move the agenda forward in these areas. The University gained the Soil Association Food for Life Catering Bronze award (Staff House) – these included points such as no GM ingredients, seasonal menus, and meat from farms satisfying UK welfare standards. The University of Hull is currently working to become a Fairtrade University -this has not yet been achieved. There are currently no meat-free days or no ‘no red meat’ policies. The Sustainable Food Policy available online appears outdated as the aims mentioned in this document were to be achieved by 2012/2013. The document states it should be reviewed and updated on an annual basis from March 2012 but these updates do not appear to be available online.</p> <p>As part of the University of York sustainability plan 2021, the university plans to undertake formal baseline sustainability assessment, and then annually undertake reviews to ensure sustainability performances are improving. According to the <a href="#">UoY Sustainability website</a>:</p> <ul style="list-style-type: none"> <li>● The restaurants/ cafes serve Fairtrade or Rainforest Alliance coffee and tea as standard</li> <li>● Most fruit and vegetables supply is regional and seasonal</li> <li>● Environmentally responsible suppliers are appointed where possible</li> </ul> <p>University of York also has joined with NETPositive Futures to introduce a NETPositive tool for suppliers to generate their own bespoke sustainability plan. This helps suppliers to form a sustainability analysis of their business impacts and create a plan too with business-relevant sustainability information. There is also a food waste reduction scheme.</p> <p>There is no available information for the food and beverage selection within medical school-specific buildings, and no available information on the engagement of the medical school with sustainability in this area. Despite fairly robust guidelines, this metric has scored a 1 due to the lack of focus on a plant-based diet at the institutions and the lack of evidence of engagement of the medical school/ institution to try to implement this. Plant-based food is notably absent from York’s Sustainability Plan or Hull’s Carbon Neutral Plan.</p>	

<b>8. Does the medical school or associated institution apply sustainability criteria when making decisions about supply procurement?</b>	
<b>3</b>	<b>Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.</b>
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>The University of Hull published guidelines on <a href="#">Sustainable Procurement</a> last updated in March 2018. This includes methods such as thoroughly assessing the need for the product to be purchased, considering environmental policy in the award of contracts and ceasing trading with suppliers showing consistent disregard for important environmental, ethical and social concepts. These are currently under review according to the University of Hull Carbon Neutral Plan. It is difficult to say how well enforced these aims are based on information available online.</p> <p>University of York are a part of the North Eastern Universities Purchasing Consortium (NEUPC). NEUPC alongside Sustainable Procurement Centre of Excellence produced a sustainable procurement policy which university of York is subscribed to. Examples of the university practicing sustainable procurement include:</p> <ul style="list-style-type: none"> <li>● York Print Plus project which replaced personal printers with multi-functional devices shared by offices to reduce paper, consumables and power usage</li> <li>● Business travel service encouraging the use of a single supplier to enable us to accurately measure our carbon footprint from business travel</li> <li>● An e-purchasing system which reduces paper transactions and is building up a chosen supplier base with known sustainability credentials</li> <li>● Use of FSC certified paper and water-based inks for printed materials</li> </ul> <p>Hull York Medical School partners with the universities for procurement, which have robust policies for supply procurement and systems for reviewing and updating them. Therefore, this metric has scored 3 points.</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.
<b>0</b>	<b>There are no sustainability guidelines for medical school events.</b>
<p>The University of Hull partners with ‘Beyond Events’ to bring conference and event venues under one distinctive brand. Beyond Events has an <a href="#">environmental and sustainability agenda</a> which is considered when planning events, including public transport, recycled toiletries, and discouragement of paper signage. It is unclear whether this is also used by the medical school.</p> <p>No information on sustainability requirements or guidelines for events could be found for University of York.</p> <p>Currently, there are no sustainability guidelines for medical school events and no clear evidence of the medical school using the University of Hull’s partner for events. Therefore, this metric scores a 0.</p>	

**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	<b>There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.</b>
0	There are no efforts at the medical school to make lab spaces more sustainable.

University of York has a target to create a code of practice for sustainable research, with key performance indicators developed and demonstrating a reduced environmental burden of research activity to complement carbon and broader sustainability targets of the University strategy. They also have a lab plastics recycling project as of 2018.

No information could be found online about any efforts to improve lab sustainability at University of Hull, and the medical school itself has no such guidelines available online. Due to the efforts at the University of York, this metric has scored a 1.

**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 or has made a commitment to fully divest, but currently still has fossil fuel investments.
1	<b>The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.</b>
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

Divestment action at the University of Hull has been called for in 2019 but there has not been an update on outcome. There is an active student Facebook page, ‘University of Hull Fossil Free’ which advertises a petition to divest Hull university from fossil fuels which currently has 736 signatures. 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.

However, due to lack of evidence of divestment from fossil fuels at University of Hull, this metric can only score a 1.

Section Total (18 out of 31)	18
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Back to summary page [here](#)

*Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# Grading

## Section Overview

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

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

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

## Planetary Health Grades for the 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.

Section	Raw Score	Letter Grade
<b>Planetary Health Curriculum (30%)</b>	15 / 69 = 21.74%	D-
<b>Interdisciplinary Research (17.5%)</b>	16 / 17 = 94.12%	A
<b>Community Outreach and Advocacy (17.5%)</b>	6 / 14 = 42.86%	C-
<b>Support for Student-led Planetary Health Initiatives (17.5%)</b>	10 / 15 = 66.67%	B
<b>Campus Sustainability (17.5%)</b>	18 / 31 = 58.06%	C+
<b>Institutional Grade</b>	<b>52.32%</b>	<b>C</b>

# Report Card Trends

## Section Overview

This graph demonstrates trends in overall and section grades for the years in which Hull York Medical School has participated in the Planetary Health Report Card initiative.

### Planetary Health Report Card Trends for Hull York Medical School

