

Planetary Health Report Card:

University of Cambridge, School of Clinical Medicine

2021-2022 Contributing Team:

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Summary of Findings

Overall CCurriculum C+

• The University of Cambridge does include planetary health content in the curriculum, but it severely lacks integration across the course and multiple important topics lack substantive engagement (such as cardiovascular health impacts, infectious disease spread changes, the impact of climate change on nutrition).

• Recommendations:

- Planetary health could be integrated across the whole curriculum beyond the Improving Health lectures.
- The School of Clinical Medicine could employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare throughout the course.
- There is a lack of teaching about introducing conversations about planetary health into conversations with patients. This could be introduced in clinical skills, or early in GP. There could be more student-selected projects relevant to planetary health.

Interdisciplinary Research

D-

- This year the School of Clinical Medicine joined the Global Consortium on Climate and Health Education.
- **Recommendations**: The School of Clinical Medicine could set up a resource for students to contact academics to source projects on planetary health, work more closely with the Global Consortium on events and contributions, and organise a conference directly related to Planetary Health.

Community Outreach and Advocacy

F

- Some student societies such as Cambridge University Science and Policy Exchange (CUSPE) do exist which allow for community outreach and advocacy work in partnership with the local government.
- **Recommendations**: The School of Clinical Medicine could consider partnering with local organisations to run outreach programs on environmental health harms. Opportunities for students to get involved in such work could also be made.

Support for Student-Led Initiatives

C-

- The Living Lab, part of the wider University, has opportunities for student-led projects. However, the School of Clinical Medicine has a student representative on its Climate Change and Sustainability Working Group.
- **Recommendations**: The medical school could introduce and advertise student-selected projects on sustainability/quality improvement and liaise with the relevant research groups from across the University to ensure the projects can happen.

Campus Sustainability

B-

- The School of Clinical Medicine makes efforts to retrofit buildings and all new buildings are in line with sustainable building codes. Green lab initiatives are also taken up by many of the research institutes under the School of Clinical Medicine.
- **Recommendations**: Compost bins should be made widely available for staff and students to use. Event guidelines on sustainability should be enforced if possible.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many 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 colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among 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 centred 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 analysing 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 mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.

- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- Clerkship: This is a term used in the USA to refer to placements that medical students go on e.g.
 Paediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations or
 placements.

Other considerations:

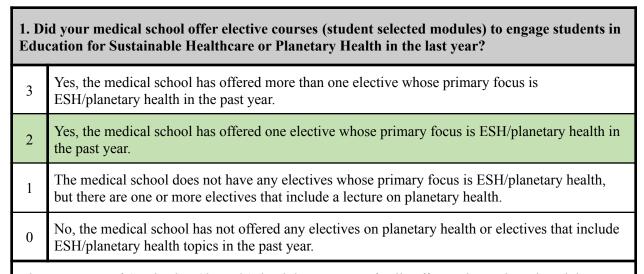
• If there are more than one "tracks" at your medical school with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as example).

Added to our resources this year, the Planetary Health Report Card <u>Literature Review by Metric</u> 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

<u>Section Overview:</u> 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



The University of Cambridge Clinical School does not specifically offer student-selected modules or electives on any topic. All material is considered core, with the exception of Student-Selected Components (SSCs) that are student-led research topics on a topic of the student's choice. No taught electives specifically on Planetary Health were therefore offered over the past year. Student Selected Components (SSCs) in Year 4 previously focussing on Planetary Health and Sustainable healthcare have looked at sustainability of inhalers (3 students) and one project looking at indigenous mental health and climate change. There is an opportunity to support students more with SSCs on the topic of climate change.

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.0 This topic was not covered.
- This topic is covered in passing Year 1&2 through an optional ethics (SECHI) lecture on Climate Change and Health and in Biology of Disease (BOD) lectures on how fungal toxins are often more common in warmer climates (although this is not specifically linked to climate change). In Year 4 this is covered in more detail in Dr James Smith's lecture on Environmental Change and Health as part of the Improving Health course. This lecture talks about direct health effects such as heatwaves and health-related illnesses, and also talks about how the most vulnerable are affected by extreme heat. The lecture goes so far as to present a case of a patient suffering from extreme heat, educating medical students on approaching patients directly impacted by extreme heat. In Year 5&6 a lecture on prematurity mentions decreased ability to regulate heat in premature babies: increased mechanisms of heat loss and decreased heat production (although a link to climate change is not made and it's more about hypothermia than hyperthermia). A Global Health Seminary on Migrant and Refugee Health by James Smith covered extreme temperature and dehydration during displacement.

More content can always be added given the clear relevance of this topic across multiple courses (eg. geriatrics - one area of missing content).

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.

This topic is briefly covered in the lecture by Dr James Smith on Environmental Change and Health in Year 4, as part of the Improving Health course. Extreme weather events and how they can impact mental health are covered. The impact on island nations as a whole are also covered, but not on healthcare systems. The lecture also discusses the disproportionate impact on the most vulnerable and poor. Additionally this is covered in a Year 5 seminar on migrant health by a guest lecturer: a case study on displacement in Somalia where drought contributed to part of the complex emergency (alongside conflict, locusts, lack of healthcare facilities and Covid-19). Another case study in the same lecture is presented on internal displacement in Pakistan: super floods in 2010 as a cause of displacement of peoples. Further opportunity still exists to cover these impacts across the preclinical curriculum in particular.

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

This topic was explored in depth by the core curriculum.

This topic was briefly covered in the core curriculum.

This topic was covered in elective coursework.

This topic was not covered.

This topic is covered only briefly: in Year 1&2 the BOD course (disease) has one line on fungi and heat (although not specifically linked to climate change). In Year 4 in the Environmental Change and Health lecture there's one slide on spread of infectious diseases and link to climate change. The topic is not mentioned during the week-long Infectious Diseases placement during Year 5.

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

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

In Year 1&2 the ethics course (SECHI) and physiology course (HOM) note briefly that air pollution contributed to respiratory damage. In SECHI this is linked to racial inequality. In Year 4 this topic is by the core curriculum, particularly in Dr James Smith's Environmental Change and Health lecture. Premature deaths due to air pollution are looked at in detail, and the lecture covers how air pollution differentially impacts different groups such as children and the most vulnerable or lower socio-economic groups. Particulate matter pollution is also covered alongside nitrogen dioxide pollution, with links made to asthma, diabetes, lung cancer, dementia and low birth weight. There are several other lectures and clinical pathological conferences (CPCs) on respiratory health which provide ample opportunity to introduce climate change and air pollution. In Year 5 & 6 there is no mention of air pollution. There is the opportunity to talk about the case of Ella Kissi-Debrah e.g. in paediatrics, but this opportunity isn't taken at the moment.

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

- This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.

0 This topic was not covered.

This topic is not covered in Year 1&2 in the physiology courses or elsewhere. In Year 4, the Environmental Change and Health lecture by James Smith briefly looks at the impact of air pollution on cardiovascular health in one slide, but not at all in depth to warrant a higher score. However, cardiovascular health is extensively covered in several other lectures and clinical pathological conferences (CPCs), so there is ample opportunity to introduce climate change within the core curriculum. This topic is not covered in Year 5 or 6.

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

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

This topic is not covered in Year 1&2. In Year 4 it is mentioned in the Environmental Change and Health lecture by Dr James Smith, looking at the effect on incidence of dementia of pollution, as well as how extreme weather events made more likely by climate change impact on mental health, such as causing PTSD, depression, and anxiety. But mental health and climate change are not addressed as a topic on their own, such as via a standalone lecture in the Year 4 core curriculum, and more detail could be provided on the mentioned topics. In Year 5 & 6 this is not covered at all (there is not much content on MedEd - the school's virtual learning environment). There is an opportunity to cover this more in regional teaching.

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

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

A lecture within the Improving Health course in Year 4 does mention the health and cost benefits of sustainable plant-based diets in some detail, and an optional lecture in Year 1 as part of the society & ethics course (SECHI) mentions the physical risks of climate change relating to food security. This content is however relatively brief, and there is more opportunity to cover this in detail across multiple courses (such as HOM in Year 1, BOD and HR in Year 2) to score more points here.

- 9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of 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.
- 0 This topic was not covered.

In the Environmental Change and Health lecture in Year 4, reference is made to how lower SES groups, children and older adults are more likely to be negatively impacted by pollution, as well as about the importance of including the interests of indigenous groups. An invitation to do a Student-Selected Component (SSC) on the impact of climate change on mental health in indigenous communities is also shown in the lecture but this does not appear to have been taken up by any Year 4 students in the current year. The SECHI course in Year 1 briefly mentions the link between air pollution exposure and racial bias, but this is not a discussion of climate change.

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

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

The Environmental Change and Health lecture in Year 4 looks at how lower socio-economic groups are more impacted by climate change and pollution, with cases of regional disparity in the US and within Cambridge being presented, as well as the plight of small island states being discussed. In the clinical curriculum lecture on migration, there is perhaps an opportunity to mention unequal regional health impacts, but this is missed. More content can generally be added on regional disparities across the course.

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

- 11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?
- 3 This topic was explored in depth by the core curriculum.

This topic was briefly covered in the core curriculum.
This topic was covered in elective coursework.
This topic was not covered.

The Environmental Change and Health lecture in Year 4 looks at the link between particulate pollution and low birth weight in one slide, but this is insufficient to be considered "briefly covered". The mention of the link between famine and reproduction patterns in the Year 2 Human Reproduction course is also insufficient to be considered as "briefly covered".

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

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

The Environmental Change and Health lecture in Year 4 covers in one slide what needs to be done in the local Cambridgeshire area to meet the net zero targets, including the need to convert housing to low carbon heating, electrifying transport, sustainable farming in the surrounding rural areas, etc. However, specific human activity in the Cambridgeshire area that has resulted in detrimental environmental impacts is not discussed in great detail, for example, discussion on water extraction issues and River Cam pollution. Further content on this could be added across courses to gain 3 points (e.g. on environmental toxins common in Cambridgeshire/UK cities).

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

- Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education
- Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
- Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
- 0 This topic was not covered.

While the Improving Health course in Year 4 makes reference to a Student-Selected Component (SSC) that was completed in the past looking at the impact of climate change on mental health in Indigenous communities, only one slide is included on this topic. It needs to be covered in more detail across the

course before points can be awarded here (although it is notable that the UK does not have significant populations of indigenous communities that would be of clear relevance to consider when interacting with the health of the local community. Global indigenous knowledge is, of course, still relevant to cover).

envi	14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
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 is mention in the SECHI course in Year 1 on the differential exposure to air pollution in communities of colour in the UK. Otherwise, this is not covered in detail apart from the Improving Health lecture in Year 4 by Dr James Smith looks at who makes up "marginalised" or vulnerable populations, but the specific impact of anthropogenic environmental toxins is not looked at. Therefore, not enough is taught to consider this "briefly covered".

Curriculum: Sustainability

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. O This topic was not covered.

The environmental and the health co-benefits of a plant-based diet were covered within the Improving Health lectures on "Nutrition and Planetary Health" and "Environmental Change and Health". The main points covered were the reduction in premature mortality due to shifting to a more plant-based diet, the environmental benefits in terms of emissions reductions, the inefficiency of animal agriculture and the resulting risk of antimicrobial resistance. Outside of these lectures in Year 4, the only mentions on the topic were on veganism leading to vitamin B12 deficiency in Biology of Disease and a brief mention in James Smith's optional SECHI lecture of vegetarian diets being less carbon intensive. This was allocated two points since this was not mentioned in great detail.

16. Does your medical school curriculum address the carbon footprint of healthcare systems? This topic was explored in depth by the core curriculum. This topic was briefly covered in the core curriculum. This topic was covered in elective coursework. This topic was not covered.

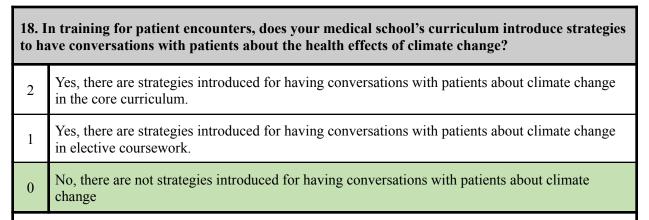
In Year 6, students are given a 90 minute seminar on Sustainable Healthcare. This used the case study of a tonsillectomy and how the entire pathway could be streamlined and in the process reducing the carbon footprint. This discussed how patient centred care and prevention of surgical management as key strategies in reducing overall numbers of surgeries. The use of reusable and hybrid equipment was also covered in depth. The net zero targets of the NHS are mentioned in the Year 4 Environmental Change and Health lecture.

The carbon footprint of healthcare systems is also briefly mentioned in James Smith's optional SECHI lecture in the context of the NHS. In Year 4, a direct reference to the carbon footprint of healthcare systems is not made, specifically what proportion of the UK's emissions are due to the NHS. However, the net zero targets of the NHS are mentioned and the distribution of emissions across various sectors of the NHS is covered in one slide in the Environmental Change and Health lecture.

	17. Does your medical school curriculum cover these components of sustainable clinical practice in the <u>core</u> 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 fulfil this metric.	
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes 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.	

The impact of inhalers on the environment and social prescribing were extensively discussed by James Smith during his lectures on Physical Activity and Environmental Change & Health. During the Year 6 lecture on Sustainable Healthcare the use of anaesthetic gases were covered extensively in a case study on tonsillectomies. This lecture also covered waste management in healthcare and the health co-benefits of avoiding over-medicalisation and over-treatment.

Curriculum: Clinical Applications



There is currently nothing present in the curriculum on communicating with patients on the health effects of climate change. Preliminary conversations with the Clinical Communications Skills team have begun.

19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?

- 2 Yes, the core curriculum includes strategies for taking an environmental history.
- 1 Only elective coursework includes strategies for taking an environmental history.
- 0 No, the curriculum does not include strategies for taking an environmental history.

In Year 4, students are taught the Calgary-Cambridge model for history taking through the Clinical Communication Skills course. Within this, students are taught to ask about allergies, medication and occupational history as well as social history, which includes exposure to occupational hazards such as asbestos. However, this doesn't cover specific environmental hazards such as pesticides or asking about air pollution in the context of respiratory history taking.

Curriculum: Administrative Support for Planetary Health

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

- Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
- 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.

The School of Clinical Medicine recently released the Health for All initiative, where students currently have the opportunity to develop resources relating to health inequalities including planetary health issues but also ethnicity, gender, etc. The aim of Health for All is to eventually integrate these topics across the curriculum. The environmental justice theme currently has a link to the Planetary Health Alliance, the UK Health Alliance on Climate Change, as well as an article from the UK Health Security Agency on the health effects of climate change; however, this is currently a page with resources for interested staff and students to use to independently further their knowledge.

Improvements are being made in content taught by the School of Clinical Medicine, especially within the Improving Health course. Notably in Year 4, improvements have been made in the coverage of planetary health topics, especially in the Environmental Change and Health, Nutrition and Planetary Health, and the Physical Activity lectures. However, to score more highly, the school should consider how improvement can be sustained, accelerated and resourced. This may involve employing a member of staff to engage in cross-curriculum integration of 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.
- 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).
- There is minimal/no education for sustainable healthcare.

The vast majority of the content covering Education for Sustainable Healthcare and Planetary Health Education is delivered within the Improving Health lectures delivered by James Smith during the clinical Years 4, 5 and 6. Very little content is delivered during pre-clinical Years 1 and 2. To score more highly on this metric, other courses should integrate relevant planetary health and/or Education for Sustainable Healthcare content.

22. Does your medical school employ a member of faculty to specifically oversee and take

responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

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

No specific person is employed; a lot of the work on integrating planetary health topics into the clinical curriculum has been done by Dr James Smith, who is not employed to work solely on Planetary Health topics.

Section Total (38 out of 69)	38
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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 emphasised.

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school? Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability. 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. There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school. No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

There is a department of Public Health and Primary Care which has researchers whose primary focus is on climate change and sustainability. 'Global Health' and 'Sustainability' are one of 4 cross-cutting themes in the research of the Cambridge Public Health department. A score of 2 is given as there are only several faculty members whose focus is on healthcare sustainability or planetary health research. THiS institute is currently recruiting for an environmental sustainability fellowship, so this score has scope to increase in future years (if this role is adequately integrated into the clinical school).

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution? There is at least one dedicated department or institute for interdisciplinary planetary health research. 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. 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 Cambridge Public Health department is an interdisciplinary group across the University which has a number of research themes, one of them focusing on the links between nature, health and the built environment. However there is no specific department dedicated to planetary health research.

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?

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

There is no such process to allow disproportionately impacted communities to give input on research agenda at the medical school, hence a score of 0 is given.

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

- There is an easy-to-use, adequately comprehensive website that centralises various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
- There is a website that attempts to centralise various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
- The institution has an Office of Sustainability website that includes some resources related to health and the environment
- 0 There is no website.

There is an institutional website (www.environment.admin.cam.ac.uk) that includes a collection of links to potential funding opportunities, and university efforts for sustainability, but its focus is not planetary health. Cambridge Zero (https://www.zero.cam.ac.uk/) is a university-wide website that has some information on planetary health through blog posts etc., but has no dedicated section on planetary health and associated resources.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health? Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted a conference on topics related to planetary health in the past three years. The institution has not hosted any conferences directly, but they have provided financial support

The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.

No, the institution has not hosted a conference on topics related to planetary health in the past three years.

In 2021, Cambridge Zero, a new climate change initiative at the University of Cambridge, hosted a series of research symposia on their themes of research for zero carbon living, including one on their theme of Health and Society.

Planetary Health was also the theme for the Annual Public Health@Cambridge Showcase in 2019, which included presentations of local Planetary Health research, as well as external speakers such as Sir David King, who was permanent Special Representative for Climate Change for the Foreign Secretary from September 2013 until March 2017.

Since its foundation in 2017, the Cambridge Climate Lecture Series has taken place annually. According to its webpage, 'its principal aim is to increase dramatically the level of public interest and engagement on the topic of climate change.' The group also initiated a podcast series on Climate Change in 2020. However, this was not included in our evaluation as while it is run by some academics of the University, it is not technically part of the University itself.

Overall we are offering a score of 0 here due to there being no single university organised event that was dedicated to the topic of planetary health (specially through the medical school itself). Planetary Health has of course been mentioned across a myriad of other events, but this does not warrant a score above 0 on the scoring metric.

[Note that this question changed since last year, hence the score downgrade due to stricter criteria]

6. Is your medical school a member of a national or international planetary health or ESH organisation?	
1	Yes, the medical school is a member of a national or international planetary health or ESH organisation
0	No, the medical school is not a member of such an organisation

The School of Clinical Medicine is currently a member of Global Consortium on Climate and Health Education.

Section Total (4 out of 17)	4

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Community Outreach and Advocacy

<u>Section Overview:</u> 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 colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

1. Does your medical school partner with community organisations to promote planetary and environmental health? Yes, the medical school meaningfully partners with multiple community organisations to promote planetary and environmental health. Yes, the medical school meaningfully partners with one community organisation to promote planetary and environmental health. The institution partners with community organisations, but the medical school is not part of that partnership. No, there is no such meaningful community partnership.

The School of Clinical Medicine itself has no direct involvement with community organisations to promote planetary and environmental health. However, student groups such as the Cambridge University Science and Policy Exchange (CUSPE), run by and for early-career researchers, engage with the Cambridgeshire County Council on Policy Challenges, some of which have involved working on issues of climate change and planetary health. Cambridge Zero, a university initiative also helps connect a range of local organisations, such as CUSPE and the Cambridge Institute for Sustainability Leadership, a significant proportion of whom work on issues concerning planetary and environmental 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.

The medical school has not offered such community-facing courses or events.

No such courses are offered by the medical school.

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

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

Clinical students currently receive such communications as part of the "Health for All" section in the newsletter. In the weekly communications newsletter, information on an area of health inequality is provided, one of which is sustainability. A score of 1 is provided as this is not dedicated specifically to sustainability.

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

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

Continuing Professional Development (CPD) courses do not contain content on planetary health and sustainable healthcare. E-learning For Health courses, which includes statutory & mandatory training (SMT) such as fire safety, do include an Environmentally Sustainable Healthcare (ESH) course but this is not part of the SMT and is not delivered by Cambridge University Hospitals but rather via the NHS.

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

- 2 Yes, all affiliated hospitals have accessible educational materials for patients.
- 1 Some affiliated hospitals have accessible educational materials for patients.

0 No affiliated medical centres have accessible educational materials for patients.

No relevant patient information leaflets or materials are provided.

	6. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about climate change and health impacts?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.	
1	Some affiliated hospitals have accessible educational materials for patients.	
0	No affiliated hospitals have accessible educational materials for patients.	
No re	No relevant materials are provided for patients.	

Section Total (2 out of 14)	2
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Back to summary page <u>here</u>

Support for Student-Led Planetary Health Initiatives

<u>Section Overview:</u> 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? Yes, the institution either offers grants for students to enact sustainability initiatives/QI projects or sustainability QI projects are part of the core curriculum. 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. No, the institution does not offer opportunities or support for sustainability initiatives or QI projects.

The Cambridge Green Challenge sustainability team does offer sustainability QI projects with support from the Living Lab (https://www.environment.admin.cam.ac.uk/living-lab), with case studies showcased here:

https://www.environment.admin.cam.ac.uk/getting-involved/living-laboratory-sustainability/projects
However, where funded, these projects tend to be paid internships rather than grants, and sustainability
QI projects are not part of the core curriculum, so 2 marks cannot be awarded.

The text for 1 mark states "medical school encourages" rather than mentioning the wider institution. The QI projects available are via the university, rather than the medical school, and the medical school itself does not directly encourage or mention such projects within the curriculum. However, due to the wider accessibility of these projects to students, 1 mark has been given.

	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.	
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 cout in their spare time.	health/sustainable healthcare but these require student initiative to seek these out and carry them	
0	There are no opportunities for students to engage in planetary health/sustainable healthcare research.	

The MBPhD programme, which takes place between Years 4 and 5 of the six-year undergraduate medicine courses, does offer students to carry out funded research with any of the Clinical School departments, a biological sciences-related university department, or affiliated institutions such as the Sanger Institute in the same field. However, none of these organisations work directly on planetary health and sustainability.

Within the Student Selected Components (SSCs) of Year 4 of the undergraduate medicine course, 6 weeks is given to do a research project of interest with a mentor chosen from a list available on the Clinical School virtual learning environment (VLE). Only one of these mentors, Dr James Smith, who Healthy Planet Cambridge works with, mentions "Climate Change" and "Sustainable Healthcare" in their list of interests, so not many opportunities are available for students. Furthermore, Dr Smith also reports that apart from an SSC focused on the environmental impact of inhalers, there has not been much interest in planetary health-focused SSCs, perhaps because of a lack of interest or lack of awareness due to the curriculum not including planetary health topics.

- 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.
- 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.
- 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.
- There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

The medical school has recently launched a "Health For All" website but at the moment it does not contain much information on planetary health/sustainable healthcare projects.

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

<u>Healthy Planet Cambridge</u> is a student group that receives faculty support and engagement, and which campaigns for greater inclusion of planetary health and climate change in the medical school curriculum. Healthy Planet Cambridge has been involved in the "Health For All" initiative, which includes a sustainability theme.

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?

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

There is a student representative that sits upon a Climate Change and Sustainability Working Group of the School of Clinical Medicine. However, this has only recently been established (in Q4 2021) and a regular meeting schedule/decision making governance framework is yet to be established. However, the role is not a "student liaison" allowing for the student body to get in touch. The appointment of the student representative also has not been advertised to the student body, so I point cannot be awarded.

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)

- 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.
- Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
- 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.
- Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
- Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
- Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)

The Living Lab, part of the university-wide sustainability team, does offer support for academic and voluntary projects, which in the past have included projects on sustainability food growing in the past.

Within the Student Selected Components (SSCs) of Year 4 of the medical course, there is scope for engaging in projects related to sustainability and planetary health, however, according to Dr James Smith, one of the faculty members Healthy Planet Cambridge liaises with, there have not been any relevant SSCs due to a lack of research groups to work with.

Cambridge Zero and the societies it engages with have regularly run events for students on sustainability issues.

Several student societies exist focusing on outdoor activities including the Cambridge University Wilderness Medicine Society.

Section Total (6 out of 15)	6
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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 endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

1. Does your medical school and/or institution have an Office of Sustainability? Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school. 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. There are no salaried sustainability staff, but there is a sustainability task force or committee There are no staff members or task force responsible for overseeing campus sustainability

The University of Cambridge has a <u>Sustainability Team</u> consisting of a number of full-time staff. Each department in the University has a volunteer Energy and Environment Coordinator, who attend central sustainability meetings, share the sustainability information received from the centre and lead on green impact. Within the School of Clinical Medicine, there will be between 12-15 individuals.

There is an Energy & Sustainability Manager for Cambridge University Hospitals, which is the hospital associated with the medical school. Despite scoring full points for this metric, as far as the writers of this report card could tell, however, there are no staff members specifically responsible for the sustainability of the medical school.

2. How ambitious is your medical school/institution's plan to reduce its own carbon footprint? 4 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. 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 announced a net zero target of 2038 in October 2020, but the medical school is yet to announce a specific plan to reach that goal. However, in October 2021, the medical school announced a climate emergency as a part of the Health Declare initiative (https://healthdeclares.org/), and committed to "set up a Climate Change and Sustainability Working Group to coordinate the School of Clinical Medicine's response to the global climate emergency": https://www.medschl.cam.ac.uk/climate-emergency-declaration/

The School of Clinical Medicine does not manage any investments.

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

The School of Clinical Medicine is supplied by a green tariff using renewables generated offsite but gas is used to generate the steam used for heating. An average of 52% of renewable energy was used to power the School of Clinical Medicine over the period of August 2018 - July 2021.

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

- Yes, sustainable building practices are utilised for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
- 2 Sustainable building practices are utilised 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.
- O Sustainability is not considered in the construction of new buildings.

The Cambridge School of Clinical Medicine is comprised of a large number of buildings on the Addenbrooke's Biomedical Campus, most of which are research institutes. All new buildings are in line with the <u>University policy</u> that all must reach Building Research Establishment Environmental

Assessment Method (BREEAM) Excellent standards or equivalent approval. The BREEAM certification encompasses a rating system for assets related to 'energy, water, health and well-being, pollution, transport, materials, waste, ecology and management processes'. The University's policies are applicable to buildings on the medical school campus

The School of Clinical medicine underwent large scale retrofitting 5 years ago and within the last academic year all windows have been replaced with double or triple glazing. All buildings use LED for lighting and automatic switches. Many of the research institutes on campus have been retrofitted within the past 10 years.

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

- 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-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
- The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
- The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

During clinical school years, Cambridge medical students are allocated time in Addenbrooke's hospital in Cambridge as well as at District General Hospitals (DGHs) in East Anglia. The transport options available during both placements differ significantly.

When based at Addenbrooke's hospital, students can use the Unibus service which has a discounted fare of £1 per journey for students. Cycle parking is also widely available for students at the hospital. Voi electric scooters have been approved for use by university members. Car parking at the hospital is generally not available for medical students, but allowances are made for disabled students.

The DGHs where students are based are a driving distance between 40 minutes to 1 hour 20 minutes from Cambridge. Reimbursements are available for students who commute by car when an appropriate insurance policy is provided. Carpooling is incentivised due to a greater sum being reimbursed for more passengers. The number of students with cars at each placement is hugely variable.

Students are encouraged to stay at the free hospital accommodation while on placement but students often commute back for weekends and some choose to commute daily, which is not covered. Public transport is also reimbursed but taxi fares are not reimbursed. Public transport links between DGHs and Cambridge are generally poor and time-consuming with train stations often being far from hospitals. Therefore, we award one point for this metric.

6. Does your medical school have an organics recycling program (compost) and a conventional

recycling program (aluminium/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.

Buildings associated with the medical school regularly have recycling bins available, though no sustainable options for disposing of food waste etc. are currently provided.

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)?

- 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.
- 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.
- 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.

The catering company CH&co are committed to increase food and beverage sustainability. They have an ISO 14001 accreditation of sustainability. The hot food available alternates between meat and vegan/vegetarian but there are a range of options available. Meat is available daily in sandwiches, therefore, we award one point.

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

- Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
- 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.
- 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.
- There are no sustainability guidelines for supply procurement.

The Clinical School follows the commitment to the University's Green Impact programme, which states that sustainability should be considered as part of all procurement. The University aims to meet ISO 20400 standards for Sustainable Procurement, with purchases that have 'the most positive environmental, social and economic impacts possible over [their] entire lifecycle' (ISO20400). Items purchased at the Clinical School in bulk such as paper and cups are 100% recycled and often recycled itself, this applies also to the Clinical School Cafe. These remain as guidelines.

Some of the equipment used for clinical skills training is procured via Cambridge University Hospitals trust, as it is the same equipment used in the hospital. The sustainability of this equipment's procurement is therefore not considered directly in this report, however it is noted that the Clinical Skills Lab has minimal policies on reuse of clinical skills equipment e.g. reusing of packaging and equipment for practising clinical skills on mannequins.

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.
- The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
- 0 There are no sustainability guidelines for medical school events.

The School of Clinical Medicine states that all events requiring catering must use the services provided by CH&co, the in-house caterers, who, as outlined previously, make efforts to minimise food and packaging waste. Parking is also not provided on site for attendees.

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

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

<u>Green Impact</u>, the university environmental accreditation scheme, was introduced during the 2021 Cambridge Climate Festival. This recognises departments and buildings for efforts made to increase sustainability. There were seven <u>Green Impact group award winners</u> in 2021 that were affiliated with the medical school.

The Green Labs initiative, which helps labs across the University reduce the carbon-footprint of their work, is also continuing. There are guidance documents, action frameworks, and funding for energy-efficient equipment. This year there has been the introduction of the <u>Laboratory Efficiency</u> <u>Assessment Framework (LEAF)</u> to further inform labs on how to improve their carbon footprint. LEAF

also calculates the carbon and financial savings of the work. This is a University-wide initiative that extends to all labs, including those associated with the medical school. While it is not a program specifically rolled out by the School, the sustainability team reports a good but varied take-up of the initiative by different labs of the School. We have therefore awarded 2 points for this metric.

11. I	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.	
The institution has not divested from fossil-fuel companies, but faculty and/or studen conducting organised advocacy for divestment.		
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.	

In October 2020, Cambridge announced a divestment plan

(<u>https://www.cam.ac.uk/news/cambridge-to-divest-from-fossil-fuels-with-net-zero-plan</u>), with a net zero target by 2038. They announced a plan to:

- 1. Withdraw investments with conventional energy-focused public equity managers by December 2020.
- 2. Build up significant investments in renewable energy by 2025.
- 3. Divest from all meaningful exposure in fossil fuels by 2030.
- 4. Aim to achieve net zero greenhouse gas emissions across its entire investment portfolio by 2038, in line with the broader targets of the University.

As of January 2022, the CUEF has no direct exposure to fossil fuel companies. However, since the target to divest from all meaningful exposure in fossil fuels is quite far away, only 2 points can be awarded.

The Cambridge University Endowment Fund (CUEF) has an ongoing issue over lack of transparency, however did provide some information in a recent Q&A session in January 2022. However, they cannot list fund managers or investments due to apparently having confidentiality agreements in place - information was not provided on why such confidentiality agreements were necessary and the question remains if universities like Edinburgh can be transparent about investments then why not the CUEF? There is extensive student support for divestment, particularly via the Zero Carbon society (http://zerocarbonsoc.soc.srcf.net/press/).

It is also important to add that the CUEF does not include the colleges' endowments, with almost half of colleges having no commitments to tackle the climate crisis via divestment, and the remainder having goals to partially divest ranging from 2020-2030. Unfortunately, only 10, about a third, of the colleges have commitments to fully divest from fossil fuels. While this might merit a point of 1 rather than a 2, the wider university's plans and progress, despite the limited transparency, probably would merit a score of 2.

Information on college divestment:

https://xrcambridge.org/university-divestment

Section Total (20 out of 31)	20
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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%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

^{*}Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-4%) receives a "--". For example, a percentage score of 78% would be a B+.

Planetary Health Grades for the University of Cambridge School of Clinical Medicine

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

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	$(38/69) \times 100 = 55\%$	C+
Interdisciplinary Research (17.5%)	(4 / 17) x 100 = 24%	D-
Community Outreach and Advocacy (17.5%)	(2 / 14) x 100 = 14%	F
Support for Student-led Planetary Health Initiatives (17.5%)	(6 / 15) x 100= 40%	C-
Campus Sustainability (17.5%)	$(20/31) \times 100 = 65\%$	В-
Institutional Grade	41%	C-

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which the School of Clinical Medicine, University of Cambridge has participated in the Planetary Health Report Card initiative.

PHRC Trends for the School of Clinical Medicine, University of Cambridge

