Planetary Health Report Card:

Oxford University Medical School

2020-2021 Contributing Team:

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Summary of Findings

Curriculum	C -

- A very positive start has been made in introducing Planetary Health (PH) and Education for Sustainable Healthcare (ESH) into the curriculum. Our disappointing score reflects the fact that major progress has been made in the last 8 months, including 2 faculty wide workshops to introduce ESH into the curriculum. Based on commitments made by staff members this section's score will increase by at least 11 points next year.
- A lot of this progress has been student led with a few key very supportive faculty members (notably Dr Richard Harrington and Dr Ruchi Baxi). For this momentum to be maintained long term, it is imperative that a paid post is created, dedicated to ensuring PH and ESH teaching and assessment is achieved, as well as their wider remit of engagement within the medical school and community.

Interdisciplinary Research	B -

- The university has a wide range of sustainability focused research such as the Oxford Martin School and the Oxford Environmental Change Institute, and both the Nuffield Department of Primary Care and Nuffield Department of Population Health are engaged with PH research and public engagement. Furthermore, students are able to engage with this research for special study modules, however it must be with their own initiative.
- The medical school lacks direct engagement with the majority of these departments and has no formal relationship with them in terms of student programmes. There are only a few people within the medical school division that have primary research related to PH.
- We recommend the medical school engage more formally with the expertise already available within the university to set up more formal partnerships for research as well as teaching.

Community Outreach and Advocacy	F

- This is the university and medical school's weakest area. There is lack of community engagement from the institution, medical school and hospital trusts.
- We propose the medical school to engage with community climate focused groups in Oxford, and initiate discussions with local trusts to make available materials regarding climate change and PH for patients.We suggest events are communicated to the student body as a means to encourage engagement and advocacy.

Support for Student-Led Initiatives	C +

- The medical school currently supports quality improvement projects, the Green Impact Scheme and the wider institution has many co-curricular sustainability opportunities. We advise that there is more support given for student-led PH initiatives; creating grant opportunities, providing stipends for short research projects to further encourage students and faculty wide research to engage in PH.

Sustainability	C +

- There is a lot of progress within Oxford University in improving the university's sustainability. At the institution level there are lots of sustainability protocols, divestment from fossil fuel commitment and they are currently running a member consultation aiming for biodiversity net gain and net zero carbon by 2035, to improve on their current target of a 50% reduction by 2030.
- We recommend the development of sustainability policy at the medical school level to achieve higher marks.

Statement of Purpose

Planetary health is human health.

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

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

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

Planetary Health Curriculum

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

For clarification, there are two separate streams at Oxford medical school:
SEM = standard entry medicine, with entry at undergraduate level
GEM = graduate entry medicine
We have indicated where the scores between the two courses differ and for the final grade taken an average.

Curriculum: General

1. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3*	**Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.**
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.

Oxford offer 'student selected modules' (SSM) in 4th and 6th year of the standard entry course or 4th year of the Graduate Entry course at the Centre for Sustainable Healthcare in Oxford. The module is 4 weeks in 4th year and 2 weeks in final (6th) year. Students have the opportunity to explore an area of ESH that interests them as well as having group teaching on the core principles. Students are able to undertake both student selected modules with very different content and therefore we have allocated this a 3 - more than one elective course.

In addition, Helen Christian, the organiser of the third year Final Honours Scheme projects, is currently actively seeking supervisors for ESH projects at this stage of the course too where there is an elective element to the course. Hopefully this will be in place for the students next year.

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	**This topic was covered in elective coursework.**
0	This topic was not covered.
This topic is mentioned in the Centre for Sustainable Healthcare (CSH) special study module (SSM), but is not covered in the core curriculum for the graduate or the undergraduate course.	

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 mentioned in the CSH SSM, but is not covered in the core curriculum for the graduate or the undergraduate course.	

4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
SEM pre-clinical: The impact of climate change on patterns of infectious disease is not mentioned in the core syllabus. It would be possible to integrate such teaching in the second year Principles of Pathology lectures and it was discussed with the module lecturer but no immediate changes are planned.	

GEM pre-clinical: Previously this has not been included however Dr Sussanna Dunachie is keen to include this in future 'Infection and Immunity' lecture series.

3rd year elective teaching: The 'Infection' module offered in Final Honour School does not mention vector distribution and climate change. However, Dr Richard Wheeler has agreed to discuss the potential for increased malaria and leishmaniasis in his teaching starting from next year.
Clinical course: This is not mentioned in the core syllabus.

5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?	
3	This topic was explored in depth by the core curriculum.
2	**This topic was briefly covered in the core curriculum.**
1	This topic was covered in elective coursework.
0	This topic was not covered.

SEM pre-clinical: In first-year medical sociology lectures, the global burden of disease attributable to air pollution was highlighted on a slide. Dr Paul Dennis briefly mentioned the link between air pollution and asthma during his second-year 'Pharmacology of Asthma' lecture.

GEM pre-clinical: Dr Nick Talbot and Dr Ruchi Baxi delivered a public health session on COPD, air pollution & asthma for GEM Y1. The concept of planetary health was explored and data discussed demonstrating the impact of air pollution on COPD.

6. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**

This is not currently covered, but, following an email, pilot teaching has already been introduced into the psychiatry course by organiser, Prof Kate Saunders. This is a morning of teaching on climate change and mental health and it is formally going on the curriculum for the 2021-22 academic year.

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

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

SEM pre-clinical: Material around this subject is covered in the Introduction to Medical Sociology lecture delivered by Michele Peters, through discussing the Ecosystems Health Model.

GEM pre-clinical: This was covered in a lecture 'Climate Change as a Public Health Crisis' where Kate Raworth's 'Doughnut' concept of planetary boundaries was mentioned in the context of health.

8. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?	
3	This topic was explored in depth by the core curriculum.
2	**This topic was briefly covered in the core curriculum. (GEM)**
1	**This topic was covered in elective coursework. (SEM)**
0	This topic was not covered.

SEM pre-clinical: This is not covered in the medical sociology course for the undergraduates, but the organiser is keen to include this in the future during the existing lecture about ethnicity and health.

GEM pre-clinical: This was briefly discussed in the 'Climate Change as a Public Health Crisis' with Dr James Smith.

This topic is mentioned in the CSH SSM.

9. Does your medical school curriculum address the unequal health impacts of climate change globally?	
3	This topic was explored in depth by the core curriculum.
2	**This topic was briefly covered in the core curriculum. (GEM)**
1	**This topic was covered in elective coursework. (SEM)**
0	This topic was not covered.

SEM pre-clinical: It is not currently covered in the undergraduate sociology course, but Michele Peters is planning to address it a lot more from next year.

GEM pre-clinical: In the graduate course one of the stated learning outcomes of the syllabus is to "examine the relationship between healthcare inequalities and climate change". The inequalities arising from climate change and disproportionate impact on countries in the Global South was briefly explored in the 'Climate Change as a Public Health Crisis' lecture with Dr James Smith. *This topic is mentioned in the CSH SSM.*

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

10. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
GEM pre-clinical: This is not currently covered in the core curriculum. *SEM pre-clinical: This is not currently covered in the core curriculum although the relevant lecturer, Professor Clive Wilson, is keen to include it in next year's 'Fertility and Infertility' core lecture.* *Clinical teaching: This is not currently covered in the Women's and Reproductive Health (WRH) rotation .* *However, Jane Moore who organises the WRH course and the GEM preclinical course is keen to introduce this next year.*	

11. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
This is not currently covered in medical school teaching.	

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
This is not currently covered in medical school teaching.	

13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
This is not currently covered in medical school teaching..	

Curriculum: Sustainability

14. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?	
3	**This topic was explored in depth by the core curriculum. (GEM)**
2	**This topic was briefly covered in the core curriculum. (SEM)**
1	This topic was covered in elective coursework.
0	This topic was not covered.
GEM pre-clinical: In a lecture on obesity in the Public Health course for 1st years by Dr Asha Kaur the Global Syndemic of climate change, obesity and undernutrition was discussed including details of excess meat consumption being a common driver of the syndemic. This was followed by details of the Lancet Healthy, Sustainable diet as a common solution. *SEM: Plant-based diets were not explicitly mentioned in the curriculum or in lectures. Lectures on nutrition are delivered in first and second year as part of Biochemistry, Medical Sociology and Applied Physiology and Pharmacology by Dr Leanne Hodson, Dr Aurora Perez-Cornago, and Dr Dimitrios Koutoukidis. These lectures mention the benefits of a reduction in meat consumption in relation to obesity and cancer risk, and mention the importance of consuming fruits, vegetables and whole grains*	

as part of a varied diet. The lecturers have agreed to include slides about sustainable diets e.g. the Planetary Health diet and the environmental benefits, and agreed to help with discussions on adding a lecture on these topics to the curriculum.

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	**This topic was covered in elective coursework.**
0	This topic was not covered.
This is currently not covered on the core curriculum, but a Green Impact Scheme and results from a QIP will be used to highlight the waste generated by the healthcare system and recycle equipment used in the skills lab for medical students' teaching. It is covered in the student selected module at the Centre for Sustainable Healthcare as the main theme of their course. *In the graduate course, Dr Ruchi Baxi is planning to include this in the lectures for the Public Health course from next year.*	

Curriculum: Clinical Applications

16. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	**No, there are not strategies introduced for having conversations with patients about climate change**
This is currently not covered in medical school teaching.	

17. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?	
2	**Yes, the core curriculum includes strategies for taking an environmental history.**
1	Only elective coursework includes strategies for taking an environmental history.

0	No, the curriculum does not include strategies for taking an environmental history.
Students are trained to take a full social history, which includes asking patients about exposures to environmental and occupational hazards as well as smoking. Students must explicitly ask patients about smoking and occupation due to its potential relationship with certain conditions in order to prevent possible point deductions on practical OSCE exams. History taking is taught in a variety of places within the medical school curriculum including on clinical Wednesdays in the GEM course, the MedEd course in 4th year of the standard entry undergraduate course and in standalone introductory lectures at the beginning of clinical years.	

Curriculum: Administrative Support for Planetary Health

18. Is your medical school currently in the process of improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	**Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.**
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.
0	No, there are no improvements to planetary health education in progress.
Oxford held a faculty workshop on 13.10.20 to try and initiate teaching on Education for Sustainable Healthcare at the medical school. This was organised by two medical students alongside two members of staff Dr Harrington and Dr Baxi, who are now named faculty leads to instigate ESH. It was requested that pilot teaching started immediately following the workshop and a second workshop is to be held on April 20th 2021 to follow this up and identify major areas for further improvement.	

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	**Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).**
0	There is minimal/no education for sustainable healthcare.
In the graduate entry 1st year there has been notable effort to integrate planetary health teaching across multiple lectures within the Public Health module. However, we felt this was insufficient to award 4 points as a reflection of the entire medical school teaching, but we are optimistic given the progress during the 2020/2021 academic year, 4 points will be a realistic possibility.	

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?	
1*	Yes, the medical school has an incentive program.
0	**No, the medical school does not have an incentive program.**

Section Total (24 out of 58)	**24**

SEM = 22
GEM = 25

An average of the two courses is noted as the section total.

Interdisciplinary Research

Section Overview: ***This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and broader institution.*** *Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, medical schools should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasized.*

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?	
4	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
3	**Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability.**
2	Yes, there are individual faculty members at the School of Medicine who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus
1	There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.
There are researchers within the Medical Sciences Division undertaking planetary health research. For example, Peter Scarborough in Population Health and Susan Jebb in Primary Care – their research is focussed on sustainability in relation to food production and diet. However, there is no focused research on healthcare sustainability. *There are also researchers outside the Medical School where sustainability and planetary health are the primary focus. For example, there are those in the Oxford Martin School.*	

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?	
3	**There is at least one dedicated department or institute for interdisciplinary planetary health research.**
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.

1	There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.

There are multiple departments/organisations within the University of Oxford dedicated to interdisciplinary planetary health research. The Martin School, a research organisation aiming to improve the wellbeing of people across the planet, and planetary health, through finding answers to challenges in the areas of health, society, environment and economics. The Rockefeller Foundation Economic Council on Planetary health is part of the Martin School and focuses on economic and policy solutions to achieving planetary health. Oxford Environmental Change Institute is a centre for interdisciplinary research on the causes and impact of environmental change. Environmental research group Oxford (ERGO), the department for Health Environment and Development, and Oxford Networks for the Environment focus on areas related to planetary health such as the effects of climate change in relation to communicable diseases and risks, to human populations, associated with biodiversity loss and climate change.

3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your medical school?	
3	Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	**No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.**
0	There is no process, and no efforts to create such a process.

Oxford has a strong track record of Public and Patient involvement regarding input into a research agenda in certain departments associated with the medical school and within the medical sciences division. Examples include the Nuffield Department of Primary Care Health Sciences and Oxford Biomedical Research Centre. However, these groups do not have any significant interaction with people disproportionately affected by climate change and there are no current plans to change this. They have mentioned a general recognition of the impact climate change has on health and health services, and will cover this topic on a Masters Degree on Health Leadership, currently in development.

The Rockefeller Foundation at the Martin School has confirmed that they do not engage with members of the wider community, as their research is focussed on the economic / policy aspect of climate change. LEAP (Livestock, Environment and People) is an Oxford University-funded research group. Public engagement is an important facet of their research - link here - they hold various public engagement events throughout the year in order to promote awareness and exchange knowledge with members of the Oxford community.

4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?	
3	There is an easy-to-use, adequately comprehensive website that centralizes various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	**The institution has an Office of Sustainability website that includes some resources related to health and the environment.**
0	There is no website.
The office of sustainability website is comprehensive, though is lacking in specific resources related to planetary health or health and the environment. There are resources related to nutrition, and laboratory-related sustainability.	

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	**Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.**
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
Oxford Climate Society runs an eight week programme on a termly basis to 'bring together a diverse group of participants and provide them with a comprehensive education in the core issues underlying climate change, as well as the most promising solutions that have emerged across the world to address it'. They also host speakers on interdisciplinary topics related to climate change - link here.	

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?

2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.
0	**No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.**
Neither the medical school nor the University of Oxford are members of either of these organisations. However, the heads of the medical school have agreed that it would be good to consider and have agreed for a proposal to be submitted to the medical school committee for consideration as it is a decision that needs to go through them.	

Section Total (12 out of 19)	**12**

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 color. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

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

Oxford University has established links with community groups in Oxford, including Oxford Hub and Good Food Oxford. However, the medical school has no direct partnership with any of these groups.

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

3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	**Students do not regularly receive communications about planetary health or sustainable healthcare.**
Currently the medical school does not have an official communication stream dedicated to planetary health or sustainability. They are open to the possibility of changing this and initial discussions are in progress.	

4. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	**No affiliated medical centers have accessible educational materials for patients.**
There are no such resources available for patients at the moment.	

5. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	**No affiliated hospitals have accessible educational materials for patients.**

Section Total (1 out of 12)	**1**

Support for Student-Led Planetary Health Initiatives

Section Overview: ***This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*** *Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

1. Does your institution offer support for medical students interested in enacting a sustainability initiative?	
2	Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
1	**The medical school encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available.**
0	No, the institution does not offer opportunities or support for sustainability initiatives.
Quality Improvement projects are a compulsory part of the primary care block in the clinical years and SusQI projects are not compulsory but supported and increasingly so. The medical school has also supported other sustainability projects such as the Green Impact Scheme, which is currently underway in the clinical skills laboratory. However, there is no funding available for these projects.	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
3*	The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare.
2*	The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.
1	**There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.**
0	There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.
Within the medical school course there are opportunities to undertake unfunded research projects related to planetary health/sustainable healthcare, for example through the student selected components at the Centre of Sustainable Healthcare, in the FHS projects in 3rd year and in the sustainability Quality Improvement projects that can be undertaken in the community course in 5th year. Research is also encouraged throughout the course in students' free time and students are well	

supported to connect with mentors in areas of interest if that is something they want to do and there are plenty of potential mentors in this area within Oxford university.

3. Does the medical school have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.	
2	The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	**There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.**
There is no medical school specific webpage.	

4. Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
2	**Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.**
1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.
A student group called the Oxford Healthcare and Environment Society was set up by Sarah Peters in 2019. This is a registered society with Osler House, which provides support, development, improvement and promotion of the academic and non-academic experience of clinical medical students in the University of Oxford including funding to societies that apply for it. The Oxford Healthcare and Environment Society received modest funding last year but that was due to lack of requesting more rather than due to refusal. When approaching faculty we have also received support for our ideas thus far.	

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

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

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	
1	**Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.**
1	**Panels, speaker series, or similar events related to planetary health that have students as an intended audience.**
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	**Cultural arts events, installations or performances related to planetary health that have students as an intended audience.**
1	**Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.**
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.

Section Total (8 out of 14)	**8**

Campus Sustainability

Section Overview: ***This section evaluates the support and engagement in sustainability initiatives by the medical school and/or institution.*** *The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.*

1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school.
2	**There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability.**
1	There are no salaried sustainability staff, but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
There is an Office of Sustainability for Oxford University that is very active at the institution level with initiatives and resources. However, there is no specific medical school staff member representative. There are staff members within the hospital with sustainability roles such as Rebecca Cullen in the Oxford University Hospital trusts but her role is not involved in the medical school or university decision making specifically even though some hospital decisions may indirectly impact the student learning environment. Hence the score for this is a 2.	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	**There is a CO2 emission reduction goal, but it is not one of carbon neutrality.**
0	There is no stated goal for reduction of CO2 emissions.

Oxford University is committed to a 50% reduction from their peak by 2030 as explained here but have no stated goal of carbon neutrality. They are in the process of approving an Environmental Sustainable Strategy aiming for net zero carbon and biodiversity net gain by 2035 but not yet approved.

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?	
3*	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	**Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.**
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

Oxford university purchases 100% renewable electricity (windpower) and is increasing on-site generation including over 2,000 solar panels, combined heat and power and ground source heat pumps – website here. However, heating is provided by natural gas boilers and the Office of Sustainability state currently the university is approximately 55% from both on and off site renewables.

4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published rating system or sustainable building code/guideline?	
3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
2	**Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.**
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.

Any new university buildings (since 2017) at Oxford use the Passivhaus methodology to inform projects. There is Passivhaus certification. There is also a Sustainability Design Guide document and implementation of the university Carbon Management Strategy in all builds and refurbishments. Details can be found here. However a significant number of old buildings used for medical students are not yet conforming to a published rating system or sustainable building guideline.

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

of commuting?	
2	**Yes, the medical school has implemented strategies to encourage and provide environmentally-friendly transportation options such as safe active transport, public transport, or carpooling and these options are well-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.**
1	The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
0	The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.
At Oxford almost all students walk or cycle due to the city infrastructure. During hospital placements in different cities hospital accommodation is provided and students are only reimbursed for one journey each way to try to discourage commuting. In addition there is the Green Travel Fund which supports departments to encourage sustainable travel.	

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?	
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	**The medical school has either recycling or compost programs accessible to students and faculty, but not both.**
0	There is no compost or recycling program at the medical school.
The Medical School does have a conventional recycling programme, but currently no compost recycling (although the medical school does generate very little organic waste since most staff use different research buildings to purchase food and drink, and some of these do have separate organics recycling).	

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?	
3	Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.
1	**There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.**

0	There are no sustainability guidelines for food and beverages.

The medical school itself does not directly have food and beverage offerings. Many of the research buildings and associated cafes for Oxford University are supplied by the Compass Group, which is committed to being sustainable, and this Group do have sustainability guidelines. However, the medical school itself does not seem to be engaged in efforts to increase food and beverage sustainability. Osler house is the one medical school building which has got a canteen solely for medical students. It has unfortunately been closed since the pandemic started and prior to that the canteen had been closed for a period of time. However, it did not have sustainability guidelines prior to closing. It did provide recyclable cups for the free tea and coffee machine but it could be argued that this is insufficient and students could easily provide their own cups for the free machine. This is an area that could be relatively easily improved upon when reopening Osler House.

8. Does the medical school or associated institution apply sustainability criteria when making decisions about supply procurement?	
3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
1	**There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is not engaged in efforts to increase sustainability of procurement.**
0	There are no sustainability guidelines for supply procurement.

Oxford University has a sustainability procurement strategy that can be viewed here. In their current form they are encouraged rather than enforced and due to this they have not fulfilled the requirements for the top marks. On top of that the medical school procurement is extremely intertwined with the OUH Trust procurement, which currently has no sustainability focus in its strategy so overall a score of 1 was awarded.

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

There are no sustainability guidelines in place for events at the medical school.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
2	**Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.**
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are no efforts at the medical school to make lab spaces more sustainable.
In the preclinical teaching labs, the work to assist making lab spaces more environmentally sustainable is carried out by the Estates Directorate Environmental Sustainability Team. This Team has visited the building several times to find opportunities to improve the environmental efficiency of the building and teaching labs. *Recently, initiatives including the Green Impact Scheme have also been introduced in the Medical School's Clinical Skills lab, with recycling policies put in place where possible.*	

11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
4	The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.
3	**No, the institution is entirely divested from fossil fuels.**
2	The institution has partially divested from fossil-fuel companies.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.
Oxford University announced divestment from fossil fuels in April 2020. The university has also committed to reinvesting in businesses that conform to the Oxford Martin principles (here) to request evidence of net zero business plans across Oxford's entire portfolio of investments but this is not at the stage yet to fulfill level 4. *We acknowledge that this divestment is at institution level and is not true of all Oxford colleges. However to maintain consistency for the PHRC we have kept all answers at institution level especially as the medical school is not linked with all colleges. For example, funding for student initiatives are consistently available at college level but not institution level so we have not given credit for this in earlier questions where it may have been applicable.*	

Section Total (16 out of 29)	**16**

Grading

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

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

Planetary Health Grades for the Oxford Medical School
The following table presents the individual section grades and overall institutional grade for the *Oxford Medical School* on this medical-school-specific Planetary Health Report Card. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics.

Section	Raw Score	Grade
Planetary Health Curriculum (30%)	24 / 58 = 41%	C -
Interdisciplinary Research (17.5%)	12 / 19 = 63%	B -
Community Outreach and Advocacy (17.5%)	1 / 12 = 8%	F
Support for Student-led Planetary Health Initiatives (17.5%)	8 / 14 = 57%	C +
Campus Sustainability (17.5%)	16 / 29 = 55%	C +
Institutional Grade	**44%**	**C -**