

# Planetary Health Report Card (Medicine):

## University of Leeds



2024-2025 Contributing Team:

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### **Summary of Findings**

Overall Grade		
Curriculum	C+	
Leeds medical school provides in-depth teaching in second year about the importance of planetary health direct impacts on health outcomes as part of the Individual and Populations module. Beyond second year remaining opportunities to engage with planetary health teaching are within elective components of the as the Extended Student Research and Evaluation Projects (ESREP) research projects that run throughout and 5. <b>Recommendations</b> : The medical school should focus on integrating planetary health longitudinally throughout course. They could add some basic modules into the first year teaching that could be built upon throughout course. They should work in collaboration with the Nuffield centre who are a part of the University of L run the Msc in International health to share educational resources.	n and its r the course such at years 4 ughout the but the eeds and	
Interdisciplinary Research	С	
The University of Leeds is the base for the Nuffield Centre for International Health and Development which is situated within the school of medicine. The Nuffield centre has a team of international health researchers, teachers and consultants that work in collaboration with the World Health Organisation on research and capacity strengthening of health policy, governance and services. The University also hosts the annual Student Sustainability Research Conference for the 'twelve member institutions of Yorkshire Universities', including University of Sheffield, York and Hull. <b>Recommendations</b> : The University of Leeds should focus on strengthening their links with the Nuffield centre. The Nuffield Centre could also offer ESREP projects for students to participate in years 4 and 5 with a focus on planetary health. The Medical school could increase its involvement with the Student Sustainability Research		
Community Outreach and Advocacy	D	
The University of Leeds connects with a range of third party organisations, known as positive impact partners, to establish long-term sustainable research and education opportunities within the local community. This partnership involves several state schools and charitable groups. <b>Recommendations</b> : Whilst the institution offers both courses and events surrounding the topics of sustainability and being environmentally friendly, no such courses or events are offered regarding planetary health. Increasing the opportunities for courses and events focused on planetary health would strengthen the university's community outreach and advocacy score.		
Support for Student-Led Initiatives		
Across the university, there are several opportunities for students to be supported in enacting sustainability initiatives. The University of Leeds Student Union supports student-led societies which include Sustainability Society for the Faculty of Environment and Leeds Student Sustainability Consultancy. Students for global health society has been run predominantly by medical students for the past 10 years and has run talks and events focusing on planetary health. <b>Recommendations</b> : Support for student-led initiatives mostly comes from the wider university rather than the medical school. We recommend that the medical school offers increased support to students interested in sustainable initiatives for example by advertising opportunities for students relating to planetary health and prioritising grants		

for related research.

Campus Sustainability	<b>B</b> +
The university of Leeds has made good progress to become a more sustainable campus in conjunction w wider university, including fossil fuel divestment and using fully renewable energy on site, to setting acl goals for carbon neutrality in the future. They have a dedicated 28-person team for sustainability throug have put in place plans to improve many of the buildings on campus so that they are environmentally fri university has set a target of net zero greenhouse gas emissions by 2030 according to their Climate Plan the UN Sustainable Development Goals.	rith the nievable h which they endly. The , in line with

**Recommendations**: We recommend that they create some time-specific goals and deadlines so that the plans that are currently being made come to fruition and there are further improvements made.

### **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 health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional 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 "the health of human civilisation and the state of the natural systems on which it depends." 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.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- 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 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/Department vs. Institution: When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. 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 students 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. Please be as specific as possible when providing evidence for this metric.
- 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.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- Clerkship / Outreach: This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- Clinical rotation: This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- Climate justice: The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivisim:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- Low socioeconomic status (SES): An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- Low and Middle-Income Countries (LMIC): Countries that have lower degrees of economic affluence.
- Anthropogenic: Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

#### **Other considerations:**

• If there are more than one "tracks" at your institution 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 examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a <u>Literature Review by Metric</u> is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

### **Planetary Health Curriculum**

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

#### Curriculum: General

**1.1.** Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?

Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)

Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)

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. (1 points)

No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)

2

Score Assigned:

Score explanation: The main elective components of the Leeds MBChB curriculum take place within years 4 and 5, including an elective placement and ESREP (Extended Student Research and Evaluation Project) projects. Between years 4 and 5 of the MBChB at Leeds, students are able to undertake an elective placement of their choice. The university offers a number of affiliated electives, none of which had any relevance to planetary health. Students are able to organise their own electives which can be self designed and include a research project or audit of their choosing. At the start of year 4 of the MBChB, students begin an ESREP project. This is an opportunity for students to undertake a research project in pairs across years 4 and 5 of the MBChB. These projects can either be self designed, or students can select a pre-existing project from a portfolio. The portfolio for the academic year 2024-2025 included one project with relevance to planetary health. This was an audit of the environmental impact of a GP practice in Leeds, which aimed to allow the practice to become more sustainable.

Curriculum: Health Effects of Climate Change

**1.2.** Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?

This topic was explored in depth by the core curriculum. (3 points)

This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1	point)
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	2

Score explanation: This topic was covered as part of the Individuals and populations module in year 2 of the MBChB. The E-learning package 'Planetary Health and the Climate' discussed the relationship between climate changes and extreme heat. The effects of this on human health are briefly discussed, including the increased risk of stroke, acute kidney injury and the relationship to deterioration of heart disease.

1.3. Does your medical school curriculum address the impacts of extreme weather events on
individual health and/or on healthcare systems?

This topic was explored in depth by the core curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in elective coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

Score explanation: The impact of extreme weather events is discussed briefly in the e-learning package 'Planetary Health and the Climate', which is delivered during year 2 of the MBChB. This discusses the relationship between extreme weather events and individual health, but does not cover the impact of these events on healthcare systems.

2

**1.4.** Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?

This topic was explored in depth by the core curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in elective coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation: This is discussed in the lecture 'Introduction to Planetary Health' and covered in more depth in the e-learning packages 'Planetary Health and the Climate' and 'Planetary Health and Ecosystem Transformations', all delivered as part of the year 2 module 'Individuals and populations' module. Points of discussion included the impact of climate change on vector distribution and how this can increase infectious disease burden, and the melting of permafrost which has the potential to release new infectious diseases into our environments. There is also an in depth discussion on the animal origins of newer diseases such as COVID-19 and Ebola, which highlight how the emergence of these diseases is directly related to climate change.

## **1.5.** Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?

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.

Score Assigned:

Score explanation: The lecture 'Introduction to Planetary Health, and the e-learning package 'Planetary Health and the Climate' both briefly mention the effects of climate change on respiratory health, including an increased number of deaths due to air pollution, and the increased rates of Asthma in populations experiences higher air pollution levels. The e-learning in particular highlights the case of Ella Kissi-Debrah, the first person in the UK to have air pollution listed as a cause of death on their death certificate.

2

## **1.6.** Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat

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.

Score Assigned:

Score explanation: This topic is mentioned in the e-learning package 'Planetary Health and the Climate', delivered in the year 2 module 'Individuals and Populations'. The cardiovascular effects of climate change are discussed in relation to extreme heat, including stroke and the deterioration of heart disease.

2

1.7. Does your medical school curriculum address the mental health and neuropsychological

effects of environmental degradation and climate change?

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.

Score Assigned:

Score explanation: This topic is very briefly mentioned on one slide of the lecture 'Introduction to planetary health', delivered to year 2 MBChB students in the 'Individuals and populations' module. There is a further mention in the e-learning package 'Planetary Health and the Climate', in relation to the mental health effects of flooding and climate displacement. Positive mental health effects of increasing green spaces are also briefly mentioned in the e-learning package 'Planetary Health and Ecosystem Transformations', also delivered in Individuals and populations.

2

## **1.8.** Does your <u>medical school</u> curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

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.

Score Assigned:

Score explanation: This topic is explored in depth in the module 'Individuals and populations', in year 2 of the MBChB. The e-learning package 'Planetary Health and Ecosystem Transformations' explores the issues of water security, and discusses the health and climate impacts of meat overconsumption and livestock. In the e-learning package 'Planetary Health and the Climate', food insecurity is also discussed. For both of these e-learning packages, changes to food and water systems as a result of climate change are mentioned in the learning objectives and have extensive discussion within the packages.

3

1.9. Does your <u>medical school</u> curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?

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 <b>not</b> covered.		
Score Assigned:	3	

Score explanation: The unequal effects of climate change on marginalised groups are explored in depth in the module 'Individuals and Populations', delivered in year 2 of the MBChB. In the lecture 'Introduction to Planetary health' and the e-learning packages 'Planetary Health and the Climate' and 'Planetary Health and Ecosystem Transformations', recognising the impact of planetary health on health inequalities is listed as a learning objective. This material covers how Indigenous populations are much more prominently affected by climate change, despite being the main groups protecting biodiversity. There is a section on the unequal effects of climate change on children, specifically air pollution, citing the case of Ella Kissi-Debrah. There is also mention of how climate change unequally affects women, including the effects of water scarcity. No mention of unequal effects to communities of colour, homeless populations or older adults is made in this teaching material.

## **1.10.** Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?

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.

Score Assigned:

Score explanation: The unequal effects of climate change is discussed at length in all of the material relating to planetary health within the year 2 module 'Individuals and Populations'. This includes the lectures 'Introduction to Planetary Health' and 'Solutions for Planetary Health' and the e-learning packages 'Planetary Health and the Climate' and 'Planetary Health and Ecosystem Transformation'. This includes discussion of climate injustice and the higher rates of consumption in countries with a higher SES, as well as the unequal effects of food and water insecurity, changing coastlines and extreme weather events.

3

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

**1.11.** Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?

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.

Score Assigned:

Score explanation: This topic is not covered in the Leeds MBChB curriculum.

**1.12.** Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

0

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.

Score Assigned:

Score explanation: Human-caused environmental threats to the community surrounding Leeds Medical school are frequently mentioned in lectures in all years, however the depth of this content is often limited. For example, in the Introduction to Planetary Health lecture given in MBChB2 as part of the Individuals and Populations module, the human-caused environmental effects were mentioned, such as cardiovascular disease, antimicrobial resistance, and mental health, but the lecturer did not explain the pathophysiology or much further. The human-caused environmental threats are further discussed in the The Planetary Health and the Climate e-learning package, as part of the Individuals and Populations module for year 2 MBChB students. However, this was not discussed in relation to the University's surrounding community. As part of MBChB2, students were required to attend a lecture on inclusion healthcare, which looked at minority populations that are often excluded from healthcare and have poorer health outcomes, such as: homeless, refugees and asylum seekers, and transgender groups. The students participated in active discussions in tutorials to try and understand the barriers and stigma increasing the disparities in healthcare these groups faced, which can be regarded as human-caused environmental threats. This teaching is specific to the University's surrounding community, due to the mention of Bevan healthcare, a homeless healthcare facilitator based in Bradford. Moreover, students have the opportunity to have a placement in MBChB3 at Bevan Healthcare in Bradford, to experience inclusion healthcare and see the effects of human-caused environmental effects first-hand.

2

In Year 1, students did not have the opportunity to explore human-caused environmental threats to health, unless they electively chose to explore this through the Students for Global Health society, which delivered a talk on the social determinants of health, considering the environmental effects presenting as health conditions in GP practices in different areas in Leeds. However, in Year 2, students were required to complete The Planetary Health and the Climate e-learning package, as part of the Individuals and Populations module, which did discuss the human-caused environmental effects on health in general terms. However, this was not made specific to the university's surrounding community. Therefore, I deem this topic to be briefly covered in the core curriculum, as the surrounding community was not directly addressed in any teaching or lectures.

**1.13.** To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

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.

Score Assigned:

Score explanation: This was not covered in any years of the MBChB course in Leeds. In year 3 there was the opportunity for students to partake in a seminar as one of the student selected ethics modules that was focused on race. Differences in health outcomes due to race were discussed, including the importance of addressing a power imbalance in consultations between majority ethnic doctors and minority ethnic patients.

0

In MBChB3 students had the opportunity to take an ethics workshop titled Trust, Race, and Medical Outcomes to emphasise the importance of engaging minority communities in health research as an essential component of advancing healthcare. This discussion could be extended to planetary healthcare, but was not in this instance, so this is a suggestion for future years.

The medical school did not emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health, so I have assigned the score of 0.

1.14. Does your <u>medical school</u> 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?

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.

Score Assigned:

Score explanation: The Planetary Health and the Climate e-learning package, as part of the Individuals and Populations module for year 2 MBChB students, explored how children are particularly vulnerable to air pollution, and stated how 83% of the London schools exposed to unacceptable levels of air pollution are in deprived communities, highlighting the inequality of health outcomes from air pollution, specifically referencing NO2 gas.

2

Students in year 2 of the MBChB course did attend an online three-person panel event, where one of the speakers talked about the impact of pollution on health and referenced the impact of air pollution in causing the death of Ella Kissi-Debrah, a child, so this could be classified as the

impact of environmental toxins on a marginalised population, but this was not correlated in effect to the rest of the general population, so is limited.

The optional ethics workshop titled Trust, Race, Medical outcomes, available to students in year 3 of MBChB as part of the Ethics strand of the Campus to Clinic module, explores healthcare disparities in race but this does not cover the specific aspect of environmental toxins impact.

In MBChB2 Individuals and Populations there was a 2-part lecture series titled Understanding inequalities in health and illness, which discussed how social structures enhance healthcare disparities, but did not go into enough depth to discuss disparities in health outcomes related to environmental toxins specifically.

The medical school curriculum briefly addressed the outsized impact of anthropogenic environmental toxins on marginalised populations, including those with low SES, women, communities of colour, children, and homeless populations. However, this topic was only discussed briefly in The Planetary Health and the Climate e-learning package in MBChB2. It was later addressed by a speaker as part of a wider planetary health panel event, although they used a specific example of a marginalised individual, a child, rather than making a more generalised point. The other instances where inequalities in health outcomes between marginalised populations were mentioned failed to directly relate this difference to environmental toxins, so does not support a higher score in this category.

#### Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?

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.

Score Assigned:

Score explanation: The Planetary Health and the Climate e-learning task and the Solutions for Planetary Health e-learning task, as part of the Individuals and Populations module for year 2 MBChB students, briefly mentioned the changes you can make to reduce your carbon footprint, including a vegetarian diet, but health co-benefits of this were not explored. However, reducing farming of livestock and promoting more sustainable agriculture practices to improve environmental health was suggested, so this could be considered a support for a plant-based diet.

2

The crossing of planetary boundaries was mentioned as part of the Introduction to Planetary Health lecture as part of the Planetary Health Strand of the Individuals and Populations module, where it explored the use of land for agriculture, again supporting a plant based diet, although this was not referenced specifically.

In addition to this the planetary health 3-person panel event offered in MBChB2 as part of the Planetary Health strand of the Individuals and Populations module included a speaker talking about food insecurity, and the risk this poses with natural disasters. It could be argued that food

insecurity is worsened through inefficient land use for live stock. However, the speaker did not specifically reference this point, so I have not included its utility as part of the overall score, instead I have included it to highlight the wider discussions that were had in the medical school relating to food and planetary health.

The environmental and health co-benefits of a plant-based diet were discussed as part of the Planetary Health and the Climate e-learning task and the Solutions for Planetary Health e-learning task, as part of the Individuals and Populations module for year 2 MBChB students. However, this was only covered in brief, and does not form part of the curriculum in the other years of the medical school.

## **1.16.** Does your <u>medical school</u> 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.

Score Assigned:

Score explanation: The Planetary Health and the Climate e-learning package, as part of the Individuals and Populations module for year 2 MBChB students, explored how the NHS makes up 4-5% of the UK carbon footprint, looking specifically at the role of inhalers and anaesthetic gases in their contribution, and also at the contribution of supply chains and NHS facilities.

3

Students also explored ways of reducing the carbon footprint of healthcare systems through their MBChB2 IDEALS (Innovation, Development, Enterprise, Leadership and Safety) module. In this module students were required to complete a teaching series on the platform TOP HAT, where students had to reflect on sustainable healthcare, and what changes they would like to see in healthcare in the future. Students were then required to attend tutorials to collaborate in groups on the Innovation and Leadership Project. The learning outcomes expected to be achieved upon completion of this project included:

- Demonstrate entrepreneurial skills incl. creativity, problem solving, leadership and team working
- Describe a range of NHS working practices which have a negative impact on the environment.
- Begin to identify factors that contribute to positive partnership working with NHS colleagues, patients and communities
- To present an innovation or intervention that contributes positively to the environmental impact of the NHS and therefore the health and wellbeing of individuals or populations

The e-learning package and TOP HAT tasks set the foundations for addressing the carbon footprint of healthcare systems as part of the medical school curriculum, so this can be considered to be covered in depth. The Innovation and Leadership Project required students to actively engage with this taught material, expanding on what they have learnt and facilitating a further in-depth coverage of this topic.

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)		
The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment (2 points)		
The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (2 points).	0	
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> 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. This is commonly known as social prescribing in the UK. (1 point)	1	
Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0	
The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)		
The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)		
<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)		
Score explanation: As part of the MBChB2 IDEALS (Innovation, Development, Enterprise, Leadership and Safety) module students were required to collaborate on the Innovation and Leadership Project, which required students to suggest a new sustainable healthcare practic could be incorporated as part of the Leeds Teaching Hospital Trust in either a primary or secondary care setting. Students could research any area they were particularly passionate a and then were required to present for 15 minutes and answer any questions. They had to con- stakeholders and any barriers to implementation. As each project was unique, the exact cover each of these points will vary for each student, as it will depend on their choice of innovation project and the projects they were presented by their peers.	e which about asider ering of n	
<ul> <li>Over-mealcalisation and over-treatment         <ul> <li>University of Leeds' curriculum doesn't directly teach the impact of over-medicalisation and over-treatments related to health and environment.</li> </ul> </li> <li>Over-prescribing and how to deprescribe         <ul> <li>Deprescribing has not been discussed in the context of environmental benefit</li> <li>Social prescribing</li> <li>Social prescribing has been introduced during the MBChB course, especial within primary care as non-pharmacological treatment options.</li> </ul> </li> <li>Surgical healthcare impact</li> </ul>	ìts. ly	

Any association between surgery and impact on planetary health is not explored during the curriculum.

- Anaesthetic gases
  - The impact of anaesthetic gases on the NHS carbon footprint was discussed as part of the The Planetary Health and the Climate e-learning package, as part of the Individuals and Populations module for year 2 MBChB students. However, methods of reducing this impact and alternative gases were not discussed.
- Inhalers (dry-powdered versus aerosols)
  - This is taught in MBChB4 and MBChB5 as part of the GP teaching series. Encouragement of simple environmental considerations to make when completing prescriptions.
- Waste production and single-use items
  - The core curriculum does not cover the wastage produced during clinics and methods to try and reduce this.

#### **Curriculum: Clinical Applications**

**1.18.** In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?

Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)

No, there are **no** strategies introduced for having conversations with patients about climate change. (0 points)

0

Score Assigned:

Score explanation: Leeds medical school does not introduce any strategies to have conversations with patients about the health effects of climate change, so scores 0 points in this category.

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?

Yes, the core curriculum includes strategies for taking an environmental history. (2 points)

Only elective coursework includes strategies for taking an environmental history. (1 point)

No, the curriculum does **not** include strategies for taking an environmental history. (0 points)

Score Assigned:

Score explanation: The Communication Skills sessions in Years 1, 2 and 3 train students to take a full history, which includes asking about environmental (e.g. travel, home environment) and occupational exposures (e.g. occupational hazards and toxins). This is done through several practice simulations with actors or volunteers acting as patients. Year 4 MBChB focuses more on teaching students the management plans and escalation pathways after identifying a potential environmental exposure. For example, you are taught the asthma escalation pathway, which you

2

may be more likely to enact if you suspect a patient has been exposed to an environmental trigger, including high-levels of air pollution over time.

Leeds medical school's curriculum does introduce strategies for taking an environmental or exposure history across each year of the MBChB, focussing on more on the specific aspects of the history in the first 3 years and then the management plan from this history in the final years. Therefore, the core curriculum does cover this, so scores 2 points.

Curriculum: Administrative Support for Planetary Health

**1.20.** Is your <u>medical school</u> 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. (4 points)

Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)

No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:

Score explanation: Our Planetary Health lead has set up student-staff sustainability partnerships to facilitate conversation throughout the year on ways to improve the curriculum. Currently the University of Leeds is undergoing revisions to the core curriculum for the year 2027, with increased consideration of planetary health and sustainable teaching. Discussions with Nuffield Centre are being had to incorporate more integrated teaching for planetary health. The plans are to involve students and staff in improving planetary health education. The findings from this PHRC will be considered in this process.

2

**1.21.** How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?

Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)

**Some** planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)

Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s). (2 points)

There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:

Score explanation: Some planetary health topics are included in the core medical curriculum. In particular, the effects of environmental toxins on reproductive health and fertility are well documented from preclinical to clinical years. There is also good mention of the impact of

2

environmental factors affecting respiratory health, and the importance of integrating this knowledge while taking patient histories. Other specialties which need to make reference to the impact of climate change on health within core lecture content include cardiology, rheumatology, neurology, gastroenterology, psychiatry, and surgery amongst others.

**1.22.** Does your <u>medical school</u> 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. (1 point)

No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)

Score Assigned:

Score explanation: Leeds School of Medicine has appointed a lead for all planetary health teaching on the MBChB course.

1

Section Total (43 out of 72)

59.7%

Back to Summary Page here

### **Interdisciplinary Research**

<u>Section Overview:</u> This section evaluates the quality and quantity of interdisciplinary planetary health research at the 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, institutions 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.

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?

Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)

Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)

There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)

No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)

3

Score Assigned:

Score explanation: The Nuffield Centre for International Health and Development works within the University of Leeds School of Medicine. One of their 'five interrelated research themes' is 'One Health' which encompasses the 'Planetary health' research theme led by Prof Lea Berrang Ford. This theme explores "climate change and health', 'resilience' and 'sustainability'. Details of this can be found on the University Website.

**2.2.** Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)

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. (2 points)

There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 points)

There is **no** dedicated department or institute. (0 points)

Score Assigned:	0
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Score explanation: Although the Nuffield Centre for International Health and Development conducts research into planetary health and offers an International Health MSc Intercalated degree, there is no dedicated department or institute for interdisciplinary planetary health research at the University of Leeds School of Medicine. This is because they work across a range of different departments. Details of this can be found on the <u>University Website</u>.

**2.3.** 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 institution?

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. (3 points)

Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)

No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points)

0

There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:

Score explanation: Leeds School of Medicine has no such process yet. This is because their engagement in this area of research is relatively nascent. However in other areas, they engaged heavily with a range of stakeholders. Details can be found on the <u>University Website</u>.

**2.4.** Does your <u>institution</u> 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. (3 points)

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. (2 points)

The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)

There is **no** website. (0 points)

Score Assigned:

Score explanation: The Nuffield Centre for International Health and Development has a webpage dedicated to listing its research activities and partnerships, which includes ongoing planetary

2

health research. It is not fully comprehensive as it does not include information about upcoming events or funding opportunities. Details can be found on the <u>University Website</u>.

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to
planetary health?

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)

Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)

The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:

Score explanation: The University of Leeds has hosted an annual Student Sustainability Research Conference since 2021. The institution holds this event for the 'twelve member institutions of Yorkshire Universities', including University of Sheffield, York and Hull. Details of this can be found on the <u>University Website</u>. The most recent conference took place on Wednesday 6 March 2024. This years themes 'addressed all aspects of the Sustainable Development Goals (SDGs)' and featured research covering the following themes; 'Climate Resilence and Adaptation', 'Net Zero Carbon', 'Justice, Equality and Inclusivity', 'Protection of Nature and Biodiversity', 'Education for Sustainable Development' and 'Innovation, Industry and Infrastructure'. There is also an annual symposium as part of the Individual and Populations module, where international experts are invited to speak. This is open to all staff and students in the medical school.

4

### **2.6.** Is your <u>institution</u> a member of a national or international planetary health or ESH/ESV organisation?

Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 points)

#### No, the institution is **not** a member of such an organisation. (0 points)

Score Assigned:

0

Score explanation: Leeds School of Medicine is not a member of any planetary health organisation in the UK or Internationally.

Section Total (9 out of 17)

52.9%

Back to Summary Page here

### **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.

**3.1.** Does your <u>institution</u> partner with community organisations to promote planetary health?

Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)

Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)

The **institution** does not partner with community organisations, but has participated in community focused events relating to planetary health. (1 point)

1

No, there is **no** such meaningful community partnership. (0 points)

Score Assigned:

Score explanation: The University of Leeds connects with a range of third party organisations, known as positive impact partners, to establish long-term sustainable research and education opportunities within the local community. This partnership involves several state schools and charitable groups- Wakefield District Sight Aid, International Mixed Ability Sport (IMAS) and Hyde Park Source. As of September 2024, the University of Leeds has collaborated with 'Community Streets Leeds', a new community-level initiative with focus on improving the local environment. They run several events and workshops to promote community cohesion, sustainable waste management, food security and protection of green spaces, while encouraging residents to take ownership of their neighbourhood. This is a relatively new organisation so there is not yet any long standing evidence for the meaningful nature of this partnership. Details of this can be found on the <u>University Website</u>.

The institution promotes many environment-conscious events and volunteering opportunities, accessible to both students and the wider community. For instance, community waste clean-ups, local street mural competitions, gardening and repair cafés (to encourage reuse of materials) Residence Life, the university's support site for resident students, also shares several community events focused on sustainability, as well as guidance for more sustainable living whilst living at university. For example, North Hill Well Wood Volunteers aim to enhance outdoor spaces on university grounds, while Wild Work Days encourages similar activities in collaboration with Yorkshire Wildlife Trust. Details can be found at the <u>Residence Life Website</u>. In the medical school curriculum, medical students collaborate with several local charities and organisations to increase their awareness of community cohesion. These partnerships do not directly target planetary health, yet some have a general contribution to environmental awareness. Whilst there seem to be many

opportunities for sustainability within the community as shared by the University of Leeds, the vast majority of these links do not directly relate to planetary health.

## **3.2.** Does your <u>institution</u> offer community-facing courses or events regarding planetary health?

The institution offers community-facing courses or events at least once every year. (3 points)

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The **institution/medical school** have not offered such community-facing courses or events. (0 points)

Score Assigned:

Score explanation: Whilst the institution offers both courses and events surrounding the topics of sustainability and being environmentally friendly, no such courses or events are offered regarding planetary health.

0

**3.3.** Does your <u>institution</u> 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. (2 points)

Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:

Score explanation: Whilst emails from the Leeds University Union frequently discuss sustainability and being environmentally friendly, planetary health as a specific term is rarely (if ever) mentioned. Also, communications directly from the medical school do not regularly include discussion regarding planetary health.

0

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> 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. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)

1

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

*Score explanation: The University of Leeds is partnered with <u>Leeds Teaching Hospital Trust</u> to provide the GRASP campaign (Green, Recycle, be Aware, be Sustainable for our Patients).* 

3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?

Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)

Some affiliated hospitals have accessible educational materials for patients. (1 point)

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

Score Assigned:

Score explanation: <u>Leeds Teaching Hospitals</u> has a website dedicated to sustainability where there is up to date information about several campaigns such as GRASP (Green, Recycle, be Aware, be Sustainable for our Patients). The trust has also published guidance for their environmental policy, the 'Green Plan' report and summary, as well as their Decarbonisation Strategy, which is openly available for public reading.

1

**3.6.** Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)

Some affiliated hospitals have accessible educational materials for patients. (1 point)

No affiliated hospitals have accessible educational materials for patients. (0 points)

Score Assigned:

*Score explanation:* <u>Leeds</u> and <u>Bradford</u> hospitals all have websites dedicated to environmental health impacts.

1

Section Total (4 out of 14)

28.6%

Back to Summary Page here

### 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.

4.1. Does your <u>institution</u> offer support for 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. (2 points)

The **institution** encourages sustainability QI projects (to fulfil 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. (1 point)

No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)

2

Score Assigned:

Score explanation: Across the university, but not specific to the medical school there are several opportunities for students to be supported in enacting sustainability initiatives. They are the following:

- Student Ideas Fund
  - Not focused on sustainability but an avenue for students interested in sustainability
- Student Sustainability Architects
  - *Part-time paid positions*
  - New ideas and perspectives bought by students to sustainability projects
  - Highly commended at the green gown awards in 2018
  - Examples of outcomes include
    - Planting of Gair wood
      - Swap shops
      - Single use plastics in labs
      - Hedgehog friendly campus programme
- Leeds Living Lab
  - Knowledge, collaboration, engagement and innovation
  - Student staff and city partners
  - Lab can test sustainable ideas
- Sustainable Labs programmes.
  - Reduce the negative environmental impact of labs across campus
  - *Has a sustainable lads resource hub-guidance for waste, energy , water and green chemistry*

**4.2.** Does your <u>institution</u> offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)

There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:

Score explanation: There were no opportunities identified that were specific to the medical school. However there is Leeds Living Lab which serves as a Knowledge, collaboration, engagement and innovation hub for student, staff and city partners.

1

4.3. Does the <u>institution</u> have a web page where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

The institution has a web page with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution web page that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

1

Score Assigned:

Score explanation: Although the medical school does not have a functional website devoted to planetary health or sustainability, the university wide website is accessible to the medical students and offers information for those interested. Details of this can be found on the <u>University Website</u> and through the <u>School of Medicine</u>, however this page lacks information and sign posts back to the University wide page.

4.4. Does your <u>institution</u> 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. (2 points)

Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

2

Score explanation: There are multiple student groups at the University of Leeds that strive to increase planetary health engagement, however the majority are university wide and not specific to the medical school such as:

- Amnesty international
- Enactus
- *Green party*
- Green action
- Students for global health

However, Leeds Healthcare Students for Climate Action is specific to the healthcare schools at the University of Leeds. This society has been supported by the business school in delivering the Carbon Literacy Project this academic year

# 4.5. Is there a student liaison representing sustainability interests who serves on a <u>department</u> <u>or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?

Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)

1

No, there is no such student representative. (0 points)

Score Assigned:

Score explanation:

MSRC, the Medical School Representative Council, has a student sustainability representative whose role is to "improve the implementation of environmental sustainability in all modules across the MBChB, and coordinate sustainability events within the school. As this is a new role, executive members of the committee will be in continuous contact with the elected representative to provide relevant information and guidance."

Leeds University Union (LUU) has student leaders who represent student interests in both University and Union decision-making. Though LUU students are represented on several <u>Committees of the University</u>, such as the Health, Safety and Wellbeing Committee and Digital Transformation Strategy Board, and in relevant groups such as the <u>Net Zero Delivery Working</u> <u>Group</u>.

4.6. In the past year, has the <u>institution</u> 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.	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.	0	
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)	1	
<ul> <li>Score explanation: Leeds University has various initiatives for students:</li> <li>Repair cafe <ul> <li>Volunteers help fix broken items such as clothes, electronics and appliances.</li> </ul> </li> <li>Wilderness medicine <ul> <li>A society that encourages medical students to partake in wilderness or outd activities</li> </ul> </li> <li>Sustainability service volunteering opportunities <ul> <li>A volunteering hub alerting students to opportunities to volunteer in univers community volunteering activities that promote sustainability such as garde littering picking and mending broken items</li> </ul> </li> <li>Sustainable garden <ul> <li>An urban agriculture project located on the University Campus, with the opportunity to garden and grow plants, herbs and vegetables.</li> </ul> </li> </ul>	oor sity and ning,	

- Collaborates with the University of Leeds which offer opportunity to partake in wilderness/wildlife programmes, such as wild work days in which volunteers help clear scrubs, plant trees and learn about and combat climate change ramifications
- Many events within the Priestley Centre for Climate Futures
  - Hosted many events intended for students audiences in which field experts in planetary health and sustainability speak.of which some discuss the health ramifications of climate change.
- Leeds living lab-local members involved
  - brings together local community members, student and staff to collaboratively work on research that strive to promote environmental justice

Section Total (12 out of 15)

80%

### **Campus Sustainability**

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the 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.

#### 5.1. Does your 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. (3 points)

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 hospital sustainability. (2 points)

There are **no salaried sustainability staff**, but there is a sustainability task force or committee. (1 point)

There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)

Score Assigned:

Score explanation: The University of Leeds has a dedicated 28-person team for Sustainability according to the <u>University of Leeds Sustainability Website</u>. There are staff Sustainability Architects around the University who act as ambassadors and promoters for sustainability across all schools. There are also student sustainability representatives as part of the Leeds University Union who act to promote sustainability. However, there is no student ambassador representing the medical school specifically for Sustainability, and there is no member of staff designated in a full-time role to oversee sustainability specifically for the entire medical school.

2

5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?		
The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)		
The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)		
The institution has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b> (1 point)		
The institution/medical school does <b>not</b> meet any of the requirements listed above (0 points)		
Score Assigned:	5	

Score explanation: The University has set a target of net zero greenhouse gas emissions by 2030 according to their Climate Plan, in line with the UN Sustainable Development Goals. The plan was approved by the University Council in November 2021 according to the Sustainable Curriculum Website on the <u>University of Leeds website</u>.

There will be investment of over £150 million to achieve the goal, according to the Climate Plan. They have a detailed and clear plan to work towards net zero in 2030. It explores the current impact that the University has, and identifies specific time targets within which they will focus on creating the infrastructure and change needed to reach the target. The plan identifies areas within the institution that can be targeted, including construction, IT hardware and food and catering. Interventions that will be implemented include installing low carbon technologies and solar power across the campus, with the aim to increase electrification of campus. They also identify how the plan will overcome the increased energy use through investing in a renewable energy facility off-site to balance out the actions.

They identify overreliance on offsetting greenhouse gas use as negative, but aim to prioritise projects within the University, or the local area, to provide community engagement to work towards the goal.

Finally, the <u>Net Zero plan</u> actions of suppliers in total emissions, and pledges to review future contracts to emphasise the importance of the target, as well as engaging in dialogue with current contract holders to improve engagement with the Net Zero plan.

## **5.3.** Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?

Yes, institution buildings are 100% powered by renewable energy. (3 points)

Institution buildings source >80% of energy needs from off-site and/or on-site renewable energy. (2 points)

Institution buildings source >20% of energy needs from off-site and/or on-site renewable energy. (1 point)

Institution buildings source <20% of energy needs from off-site and/or on-site renewable energy. (0 points)

0

Score Assigned:

Score explanation: According to a representative from the sustainability team at the University:

- There is very little renewable energy produced onsite
- The University purchases a large percentage of renewable energy through green tariffs, where some or all of the energy used by the institution is matched in renewable energy production by the energy companies supplying the energy.
- The Worsley Building (the medical school) currently uses no renewable energy to power the building.
- Assessment for geothermal energy is currently being undergone, but is not being utilised currently.

5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</u> 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 institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)

Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

2

Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:

Score explanation:

The University has a Sustainable Construction Procedure. It is a sustainable construction standard for all new building developments and refurbishments with a value over £2 million and a sustainable construction standard for all new buildings and refurbishments with a value between £100,000 to £2 million. The procedure must be used from the very start of the project to ensure that it is fully integrated. <u>The document</u> also outlines sustainability requirements for projects under £100,000 - must meet energy and efficiency and climate change mitigation, minimise use of of materials and optimise sustainable sourcing, biodiversity must be protected and any changes to biodiversity projects must be inline with the biodiversity standard, air quality must be protected meaning that diesel generators must not be used on site, and tracking progress must be undertaken. In summary, the associated standards which specify the requirement, regulations and technical guidance making sure that buildings are safe, efficient and sustainable.

The Worsley Building (the Medical School) will have a new heat recovery ventilation system installed which is predicted to save over 1,000 tonnes of CO2e. It is currently being developed and will reduce the need for heating systems to keep the building at a suitable temperature. Solar panels will also be installed in 2024/2025 which will support the energy needs of the building and reduce electricity needed from the national grid.

The Engineering building is being considered for use of geothermal energy to power the buildings in this area, however it is currently in the early stages, and is not/will not be in practice by the evidence deadline of this report. The Brownlee Centre has been fully electrified, with electrical vehicle charges on site, and air source heat pumps are being used. The project was completed September 2024. However, the majority of buildings do not have projects such as the one being undertaken at the Medical School, and therefore this does not suggest the majority of old buildings have been retrofitted with sustainable technology.

5.5. Has the <u>institution</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

Yes, the institution 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. (2 points)

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

2

Score Assigned:

Score explanation: The University pledged to encourage use of electric vehicles through providing only electric vehicles by mid 2020s. Additionally, investment in increasing electric car charging points and incentivisation of electrical vehicles was planned, as well as increasing shower facilities on campus along with improving the affordability of electric bikes to encourage individuals to cycle into the university instead.

*Evidence of action:* 

- The Bike Hub: this is a service funded by the University to provide support in hiring bikes and repairing current bikes to encourage cycling for staff and students.
- Showers: Showers are provided free of charge at the Edge Sportshall before midday, and are £1 outside of this.
- *Cycle facilities: The University provides large numbers of bike racks across the university, which are frequently utilised by staff and students.*
- Leeds City E-Bikes: there are clearly visible docking stations around the University, along Blenheim Terrace specifically, which encourage bike use from students and local individuals.

See the Active Travel and Bike Hub section of the Sustainability Section of the University of Leeds Website to find out more information

5.6. Does your <u>institution</u> have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the medical school. (0 points)

Score Assigned:

2

Score explanation: The University has recycling bins with multiple options for separating different materials such as paper, metal, general waste, glass, plastics. There is a clear A-Z recycling guide on where to dispose of a large variety of materials across campus allowing staff and students to easily understand how to recycle across campus. There are food waste bins in kitchens and recycling areas on campus. There is a reuse@leeds service which aims to facilitate recycling of items such as mattresses. According to a representative from the Sustainability Team, there are designated bins for food waste in kitchens and around food areas in the Institution. It is then collected by an external waste contractor who composts that waste and reports back to the University.

5.7. Does the <u>institution</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

Yes, the institution has a**dequate** 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. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

2

There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:

Score explanation: There is a Sustainable Food Standard for the University of Leeds which is reviewed bi-annually. It applies to all catering sites and conferencing facilities onsite, and in catered residences. The principles of the guidance include provenance (sourcing locally when possible, reviewing menus against environmental criteria, exclusion of fish species identified at risk by Marine Conservation Society), Climate Change Mitigation (raising awareness of environmental impact of meat through veggie options, sustainable sourcing of palm oil), Animal Welfare (protection of animal welfare), promotion of health and wellbeing in the community, minimisation of waste and Fairtrade and Organic Certification. Great Food at Leeds website states that the University takes part in the NUS Fairtrade University pilot and are part of a cross-institutional Fairtrade Committee with members influencing across campus. They also pledge to review their accreditation for certificates such as Fairtrade and the Sustainable Restaurant Association. There are named roles that are expected to uphold these standards:

- *Head of Retail Catering*
- Procurement Team
- University Suppliers
- Sustainability Team
- Residence Managers and Head Chefs
- Conferencing Staff

65% of food at the University is sourced within 40 miles of the University. Great food at Leeds have been awarded a three star award by the Sustainable Restaurant Association as part of their 'Food Made Good' sustainability rating. There are no meat free days, and guidelines are not mandatory, and therefore this reduces the benefit of the other sustainability measures.

## **5.8.** Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

3

Score explanation: The University has a sustainable procurement standard which outlines the commitments the University has made to achieve this standard. They have committed to ensuring that sustainability is embedded throughout the procurement process, and making sure to identify risks and opportunities for sustainability. They have committed to enabling all members of the procurement team to have sufficient knowledge to incorporate sustainability throughout the process. They commit to including at least 15% of weighting for sustainability components across categories within the evaluation process. They will annually review and report on the sustainability impact of the procurement, and will always seek to improve the sustainable procurement process. They have also outlined that they will ensure suppliers are aware of the requirements, and have practices within their supply chain that align with the Universities sustainability aims, including achieving Net Zero by 2030. There is a clear procedure which names different job titles within the process who are responsible for upholding the sustainable process, and must report any breaches to the sustainability criteria when reviewing procurements. Different areas in the procurement process are rated either Green, Amber or Red, which highlights the importance of considering sustainability, and the risk to breach of procedure if sustainability is not considered, and prioritised. Examples of these areas are vehicles which are categorised in red, whereas workshop supplies are categorised as green. These highlight that the University has an adequate sustainable procurement procedure and is actively prioritising sustainability in the decision making.

#### 5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

Score explanation: The University has been awarded Gold Standard for several of their venues under the travel and hospitality sector's Green Tourism scheme evidencing that they are mindful of sustainability considerations. They uphold reduce, reuse, recycle method to minimise waste generated by events held on campus, evidencing sustainability practices. They state that only suppliers who uphold values in line with the University's Climate Plan will be worked with. On the Events and Conferences website, it states that the in-house catering service focuses on ethical and sustainable procurement, although this is not mandatory. The Sustainable Food Standard document states that conferencing staff will consider and mitigate negative impacts on sustainability, and will offer sustainable options as standard, but this does not provide a clear cut and definitive procedure that must be followed.

1

5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:

Score explanation: The University of Leeds has a Sustainable Labs programme that is set up to support staff and students to improve sustainability in labs. A Sustainable Labs Resource Hub has been created to educate staff and students about ways to reduce waste, save water, reduce energy usage and practice green chemistry. The University utilises the Laboratory Efficiency Assessment Framework developed by University College London to allow quantification of sustainability measures that have been implemented, and allow identification of areas to focus on. This highlights that the University is actively evaluating the sustainability of their labs, and is identifying areas to focus on for improvement. Any lab that joins the LEAF initiative will be audited by a group of Peer Auditors, and will then receive a personalised certificate to display in the lab, to incentivise faculties and schools to engage with the programme.

2

#### 5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?

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. (4 points)

The institution is **entirely divested** from fossil fuels. (3 points)

The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)

The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)

Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)

Score Assigned:

Score explanation:

• The University has drawn up a Climate Active investment strategy. This details that since 2019 there are no shareholdings in any company whose primary business is the extraction of fossil fuel, or one which draws significant revenue from extraction.

4

• The Tomorrow's World strategy: aiming to partner with companies which tackle social concerns and provide balanced investment portfolios for present and future generations.

The University only has investment in companies and bonds which support sustainable social and economic development, and does not invest in companies materially engaged with industries such as thermal coal, extraction of fossil fuels from tar sands, oil and gas extraction, production or refining.

- The University will use its investment manager's, Sarasin & Partners, Sustainability Impact Matrix to determine if investments are sustainable, and if there is a 'red flag' scored in the environmental category, an investment will not be made and the company will not be engaged with.
- The University has a clearly outlined policy on Responsible Investment which was approved in 2022. It outlines 7 key areas that the University expects company engagement to take into account. Environment is the first of these. It specifies that companies will be judged on the quality of their environmental policies, efficient use of natural resources, waste production, resilience to climate change in line with the Paris Climate Accord and it's overall impact on the environment globally.
- According to the Net Zero Delivery Plan made by the University, a key priority is investment into renewable energy. Initially they pledge to match the current usage of electricity on campus, saving nearly 2,000 tonnes of CO2e, but will increase as energy usage increases.

Section Total (25 out of 32)

78.1%

Back to Summary Page here

### 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	
А	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 Leeds School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(43/72) \ge 100 = 59.7\%$	C+
Interdisciplinary Research (17.5%)	(9/17) x 100 = 52.9%	C-
Community Outreach and Advocacy (17.5%)	(4/14) x 100 = 28.6%	D
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100= 80%	А-
Campus Sustainability (17.5%)	(25/32) x 100 = 78.1%	B+
Institutional Grade	(59.7x0.3 + 52.9x0.175 + 28.6x0.175 + 80x0.175 + 78.1x0.175) = 59.9%	C+

### **Report Card Trends**

#### **Section Overview**

This graph demonstrates trends in overall and section grades for the years in which University of Leeds has participated in the Planetary Health Report Card initiative.

