



Planetary Health Report Card (Medicine): *Brighton and Sussex Medical School*



2022-2023 Contributing Team:

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Summary of Findings

Overall	B+
<u>Curriculum</u>	A-
<ul style="list-style-type: none"> Throughout the curriculum, Planetary health and sustainable healthcare is covered in varying degrees of detail. Core content in years 1 and 4 is notable for its breadth and depth of coverage, with multiple sessions in these years that are dedicated to learning about planetary health, climate change and its intersection with healthcare. Recommendations: It should be noted that the bulk of the points scored can be attributed to a small number of core sessions. Our recommendation, like last year's report, would be to focus on incorporation of planetary health more longitudinally. The obvious targets for this would be years 3 and 5 where there is a relative lack of planetary health content. 	
<u>Interdisciplinary Research</u>	A+
<ul style="list-style-type: none"> BSMS continues to score excellently for research. This is primarily thanks to its sustainable healthcare group, annual conference and dedicated webpage. BSMS has a dedicated Sustainable Healthcare Group and the group's academic contacts and research activities are centralised in a comprehensive webpage. BSMS also co-hosts the Sustainable Healthcare Academic Research and Enterprise (SHARE) Conference annually. Recommendations: The medical school should establish further links with environmental justice communities who can provide input in the medical school's research agenda. 	
<u>Community Outreach and Advocacy</u>	B-
<ul style="list-style-type: none"> There has been some recent improvement in community outreach at BSMS. Specifically, regarding widening participation and the affiliated hospital trust "Environment week". Recommendations: BSMS should carry this momentum forwards to foster partnerships with community organisations, and advocate for creation of educational resources for patients regarding environmental health exposure and the health impacts of the climate crisis. 	
<u>Support for Student-Led Initiatives</u>	A
<ul style="list-style-type: none"> Overall, there is good support for student-led initiatives at BSMS and the wider institution. Student Sustainability Representatives are present to ensure sustainability can be incorporated into various aspects of the course. Recommendations: BSMS offer increased support to students, for example by establishing dedicated funding for relevant student-led research. 	
<u>Campus Sustainability</u>	B-
<ul style="list-style-type: none"> The University of Sussex and the University of Brighton, BSMS's parent institutions, have both made good progress to improve their campus sustainability, including fossil fuel divestment, utilising sustainable building practices, and incorporating sustainability criteria into their supply procurement. However, such changes are still greatly limited. Recommendations: Both universities need to take further steps to improve their campus sustainability. As a first step, we recommend that sustainability criteria be formed and made a requirement for all events. Establishing a clear programme and/or initiative in lab sustainability would also improve this criteria for BSMS. 	

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “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 Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (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. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

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

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

1. Did your <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?	
3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>Score explanation:</i></p> <p>BSMS has offered multiple relevant elective components or student selected components (SSC) during academic year 2020/21 and the first term of 2022/23:</p> <p>Year 1</p> <ul style="list-style-type: none"> - Module 104 (2021/22): Topic featured in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?' <p>Year 2</p> <ul style="list-style-type: none"> - Module 202: SSC Advocacy, Activism and Inclusion Healthcare (session 3) – Dr Fionnuala Finnerty and Dr Marina Boulton - Module 203: SSC: Climate change and health: how can healthcare be more sustainable? – Dr Anna Jones <p>Year 4</p> <ul style="list-style-type: none"> - Core teaching seminars during Global Health Conference day as part of Year 4's Base Week 2: <ul style="list-style-type: none"> ○ Global safe surgery ○ Snake bites: A neglected tropical disease ○ Pharmaceutical industry corporate social responsibility projects, volunteering and community work ○ Primary care around the world 	

- o The biology of malaria eradication
- o Vaccination beyond hesitancy
- Independent Research Project (IRP) options available (2022/23): Each 4th year student is required to complete a research project from a given list of options. There is also scope for students to have input and design their own project if they arrange something with a supervisor. The list of IRP available this year related to planetary health were:
 - o Menstrual health, human rights and environmental sustainability: where do they meet?
 - o The carbon footprint of surgical skin clips in elective orthopaedics
 - o Exploring attitudes of consultant educators towards sustainable health care education in the clinical environment
 - o Topics in Philosophy of Medicine, specifically: In a time of unprecedented environmental destruction, do health professionals have a moral obligation to protect the health of future generations as asserted by planetary health advocates?)

Year 5: All year 5 students must undergo an elective.

- The [Green Wellbeing Alliance](#), who provide therapeutic outdoor activities, accepted medical students for their electives this year.
- The green team elective also allowed students the opportunity to lead on developing a sustainability charter for the new premises of a large general practice. One of the supervisors for this IRP is [Dr Anna Jones](#).

Curriculum: Health Effects of Climate Change

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

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

Score explanation:

The relationship between extreme heat, health risks and climate change was covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes infographics which link extreme heat events to poor health.
- 102 Lecture "How cells respond to injury" Briefly mentions the relationship between cell injury risk and temperature/radiation.
- 104 Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 201 (2020/21): Topic covered briefly in core curriculum session ‘Global environmental responsibility’ on how climate change causes extreme temperatures and exacerbate climate-determined disease
- Module 203: Topic covered in SSC ‘Climate change and health: how can healthcare be more sustainable?’- supervisor Dr Anna Jones

Year 4

- Base week 2: Environment and Health Global Health Day (GHD) 2023 discusses heatwaves, climate change and impact on global health
- Base week 2: Principles of Sustainable Healthcare discusses climate change

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

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

Score explanation:

The impacts of extreme weather events on individual health or healthcare systems were covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' briefly includes the health effects of climate change related weather events; storms, floods and droughts.
- 102 Lecture - 'Health Psychology 2' Briefly mentions environmental conditions which can impact an individual's health.
- 104 Topic included in Dr Anna Jones’ Student Selected Component; ‘Climate change and health: how can healthcare be more sustainable?’

Year 2

- Module 201 (2020/21): Topic covered briefly in core curriculum session ‘Global environmental responsibility’ on how climate change impacts air and water quality and security of food and shelter, exacerbating climate-determined disease
- Module 203: Topic covered in SSC ‘Climate change and health: how can healthcare be more sustainable?’- supervisor Dr Anna Jones

Year 4

- Base week 2: Environment and Health Global Health Day 2023 discusses weather changes and impacts on health
- Base week 2: Principles of Sustainable Healthcare by Dr. Anna Jones discusses weather changes and impacts on health

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

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

Score explanation:

The impact of climate change on the changing patterns of infectious diseases was covered in:
Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes discussion on Malaria as an environmental disease but no detail or mention of climate change on changing patterns of disease.
- 102 Symposium - 'Commensalism and Pathogenesis' Briefly discusses the impact of climate change and the changing patterns of infectious disease.
- Module 104 (2021/22): Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?'- supervisor Dr Anna Jones

Year 4:

- Infectious diseases study guide 22-23: Additional learning outcomes "Appreciate the impact of Climate Change and importance of sustainable practice in HIV/GUM"

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

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

Score explanation:

The respiratory health effects of climate change and air pollution was covered in:

Year 1:

- Module 101 Lecture (2021/22) - 'Environment and Health' includes 2 slides on this topic, one with a Public Health England infographic, exploring the short and long term effects of Air pollution on health, the majority of which are respiratory - asthma exacerbation, lung cancer etc. A second slide includes a "clean air for health"

infographic produced by the World Health Organisation. An additional slide in this lecture includes respiratory health as a consequence of climate change. This content is further consolidated in breakout sessions in which the case of [Ella Kissi-Debrah](#) is also discussed.

- In teaching on Asthma in year 1, air pollution is given as a triggering factor for exacerbation. This occurs twice in the year 1 curriculum in lectures T4 L7: Asthma pathophysiology, diagnosis and treatment and T5 L2: Lifestyle and respiratory. Air pollution is not taught as a cause of asthma, only an exacerbating factor, and air pollution is specifically acknowledged as not being as important a factor as allergens, smoking and infection.
- T4 L10: Chronic Obstructive Pulmonary Disorder. Air pollution is listed as a contributor to the development and progression of the disease. Brief inclusion.
- Module 104 (2021/22): Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2:

- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4:

- GP bookend day 3, lecture 'Green Agenda', excess deaths due to air pollution covered as evidence of importance for sustainable thinking in General Practice.
- Base Week 2: Sustainability Across Surgery, Medicine, and Perioperative Care = Good Medicine
- Base Week 2: Wider (or social) determinants of health infographics depict air pollution and impact on respiratory health
- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones, mentions air pollution
- Base week 2: Principles of Sustainable Health by Dr. Anna Jones mentions air pollution

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

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

Score explanation:

The cardiovascular health effects of climate change are covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes a brief overview of cardiovascular disease linked to climate change. Links between air pollution, heart attacks and stroke are also made.
- 104 Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4

- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones,
- Base week 2: Principles of Sustainable Healthcare by Dr. Anna Jones

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

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

Score explanation:

The mental health and neuropsychological effects of climate change was covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes Mental health on an infographic of the health impacts of climate change although there is no elaboration of this material.
- 102 Theme 2 (2022/2023) 'Promoting Health Across the Lifespan' Brief mention across all lectures of mental health and neuropsychological effects of environmental degradation and climate change.
- 104 Topic briefly included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4

- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones, slide 7 impact on mental health

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

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

Score explanation:

The relationships between health, individual patient food and water security, ecosystem health and climate change was covered in:

Year 1:

- 101 Lecture (2021/22) - 'Environment and Health' includes details about global malnutrition, the contribution of food systems to climate change and the [EAT](#) lancet commission's Planetary Health Diet.
- 104 Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 201 (2020/21): Topic covered briefly in core curriculum session 'Global environmental responsibility' on how climate change impacts air and water quality and security of food and shelter
- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4

- Briefly mentions and included in infographics in Base week 2 lecture: Environment and Health Global Health Day by Dr. Anna Jones slides 6,7, 17

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

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

Score explanation:

The disproportionate effect of climate change on marginalised populations was covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes an infographic on heatwaves which includes Elderly and Young people as the most vulnerable to heat. This was not expanded on.
- 104 Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 201 (2020/21): Topic covered briefly in core curriculum session 'Global environmental responsibility' on topic of environmental racism and how it impacts different communities depending on race

Year 4

- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones, slides 13,14 discussing climate and health colonialism and impact on minorities such as indigenous populations

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

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

Score explanation: Insert explanation here.

The unequal regional health impacts of climate change were covered in:

Year 1

- 101 Lecture (2021/22) - 'Environment and Health' includes an infographic of the disproportionate contribution to climate change of the global North i.e Europe and North America, and frames climate as a global health inequality. However, this inclusion is very brief and the topic is not explored any further.
- 104 Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?'

Year 2

- Module 201 (2020/21): Topic covered briefly in core curriculum session 'Global environmental responsibility' on topic of environmental racism, with a map describing waste and climate impacts in different regions
- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4

- Base week 2: Sustainable Healthcare, medical products and PPE by Prof. Mahmood Bhutta slide 13, 16
- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones, slides 10-15.

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

11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?

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

Score explanation:

Year 4

- Base week 2: principles of sustainable healthcare by Dr. Anna Jones, slide 10,11, 13 (infographic)
- Base week 2: sustainable healthcare, medical products and ppe by Prof Mahmood Bhutta - carbon emissions and medical product production waste/pollution.

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

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

Score explanation:

Year 1

- Metric 12 - Although no specific mention to the local environment or community, air pollution is identified as a respiratory health exacerbation in T4 L7: Asthma pathophysiology, diagnosis and treatment and T5 L2: Lifestyle and respiratory disease. Brighton and Hove has three 'Air Quality Management Areas' where air pollution levels are identified as high.

- 102 Lecture - 'Infection Prevention and Healthcare Associated Infections' Includes a diagram of the chain of transmission for infectious disease. As part of this diagram, there is brief mention of the importance of waste disposal and hand hygiene which are relevant to the surrounding community.

Year 2

- Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?' - supervisor Dr Anna Jones

Year 4

- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones
- Base week 2: Principles of Sustainable Healthcare by Dr. Anna Jones. Briefly mentioned human activity/occupational examples of climate harm associated with poor health and environmental factors.

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

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

Score explanation:

Year 4

- Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones slide 13 - Discusses climate colonialism and mentions damage to/solutions from indigenous populations.

14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?

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

0	This topic was not covered.
<p><i>Score explanation:</i></p> <p>Year 1</p> <ul style="list-style-type: none"> - Module 104 (2021/22): Topic included in Dr Anna Jones' Student Selected Component; 'Climate change and health: how can healthcare be more sustainable?' <p>Year 2</p> <ul style="list-style-type: none"> - Module 201 (2020/21): Topic covered in-depth in core curriculum session 'Global environmental responsibility' on topic of environmental racism and how marginalised populations are at most risk of exposure to contaminated air, water, or soil - Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?'- supervisor Dr Anna Jones <p>Year 4</p> <ul style="list-style-type: none"> - Base week 2 lectures provided by Dr. Anna Jones: "Principles of Sustainable Healthcare" and "Environment and Health Global Health Day 2023" 	

Curriculum: Sustainability

15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: Insert explanation here.</i></p> <p>Year 1</p> <ul style="list-style-type: none"> - 101 Lecture (2021/22) - 'Environment and Health' includes details of the Planetary Health Diet, as designed by the EAT Lancet Commissions (although not entirely plant based). The slide discusses how the Planetary health diet can reduce the environmental impact of food and improve health. - 103 T5 L1: Lifestyle factors and Cardiovascular disease - No specific mention to plant-based diet. Red meat intake is listed as a risk factor for cardiovascular disease but not linked to environmental benefits. <p>Year 2</p> <ul style="list-style-type: none"> - Module 203: Topic covered in SSC 'Climate change and health: how can healthcare be more sustainable?'- supervisor Dr Anna Jones <p>Year 4</p>	

- GP bookend day 3, lecture ‘Green Agenda’ – although extremely brief, plant based diets were discussed as action that patients can take to improve their health and has environmental benefits.
- Base week 2 (2022/2023) – Public Health session, topic briefly covered in a core curriculum lecture ‘Principles of Health Promotion and Disease Prevention (slide of a quote from the Lancet about the negative health/ environmental impacts of red meat consumption). Briefly included with infographic in base week 2 lecture - Principles of sustainable healthcare by Dr. Anna Jones slide 13 about decreasing meat consumption and dietary carbon footprint. Briefly included with infographic
- Base week 2 lecture Environment and Health Global Health Day by Dr. Anna Jones about Planetary diet for better individual/community disease prevention and reduction in agricultural carbon footprint.

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

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

Score explanation:

This year, the carbon footprint of healthcare systems was covered in depth on multiple occasions:

Year 1

- Module 103, T4 L7 “Asthma pathophysiology, diagnosis, and treatment” - the carbon footprint of inhaler devices is taught as a consideration for choosing treatment options for asthmatic patients.
- Module 104 (2021/22): Topic included in Dr Anna Jones’ Student Selected Component; ‘Climate change and health: how can healthcare be more sustainable?’

Year 2

- Module 201 (2020/21): Topic covered in core curriculum session ‘Global environmental responsibility’ on topic of medical gloves and how the production and consumption both cause ecological consequences
- Module 202: theme 1 lecture 20 Anaesthetic Drugs slide 22 and 27. Considering impact of inhalational agents/desflurane on environment.
- Module 202: SSC Advocacy, Activism and Inclusion Healthcare (session 3) - focus on campaigns around sustainability in the NHS with a focus on tackling the supply chain

Year 3:

- Module 308: “Sustainable Prescribing” lecture (Dr Anna Jones): The NHS carbon footprint was covered in detail.

Year 4

- Year 4: GP bookend day 3, lecture ‘Green Agenda’: Overview of carbon footprint of the NHS as contributing 4% of all UK emissions
- Module 402 (2021/22): Public Health task on ‘Sustainable Healthcare and Quality Improvement’ as part of Neurology/Neurosurgery/Ophthalmology/ENT rotation, led by Dr Anna Jones. Session is part of core curriculum, however, it is delivered in a small-group setting so content varies across sessions.
- Base week 2 lecture "Principles of Sustainable Healthcare" by Dr. Anna Jones discusses the scale of climate impact of the NHS. Base week 2 lecture "Sustainable healthcare, medical products and PPE" by Professor Mahmood Bhutta which discusses the carbon impact of common surgeries within the NHS and impact of outsourced production of medical supplies/PPE.
- Base week 2 (2022/2023) – Sustainable healthcare session: topic briefly covered in core curriculum lecture ‘Sustainability across surgery, medicine, and perioperative care = good medicine’ (slide on Francis Mortimer’s campaign for greener healthcare)
- Base week 2 (2022/2023)- Sustainable healthcare session: topic covered in core curriculum lecture ‘Sustainability in theatres’
- Base week 2 (2022-2023) Quality improvement session: topic covered in core curriculum lecture ‘Reusable suture kits for the future’

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

2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
2	The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.

1**Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)***Score explanation:*

- 1) The health and environmental co-benefits of avoiding over-medicalisation was covered in:
 - a. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - b. Year 4, Base Week 2 - Sustainable Healthcare session: Carbon footprint of surgery, including reducing waste, covered in detail in core curriculum lecture ‘Sustainable healthcare, medical products and PPE’ by Prof Mahmood Bhutta
Base Week 2 - Sustainable Healthcare session: Topic covered in depth in core curriculum lecture ‘Principles of Sustainable Healthcare’ by Dr Anna Jones (breakdown of carbon footprint of the NHS, sources of greenhouse gas emissions in NHS)
- 2) The environmental impact of pharmaceuticals and over-prescribing was covered in:
 - a. Year 1, module 103, T4 L7 “Asthma pathophysiology, diagnosis and treatment” - the carbon footprint of inhaler devices is taught as a consideration for choosing treatment options for asthmatic patients.
 - b. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - c. Year 4, Base Week 2 - Mentioned about over-prescribing and managing decisions and responsibilities as a clinician in lecture "Principles of Sustainable Healthcare by Dr. Anna Jones.
- 3) The health and environmental co-benefits of non-pharmaceutical management was covered in:
 - a. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - b. Year 4, Base week 2 (2022/2023) – Sustainable healthcare session: topic covered briefly in core curriculum lecture ‘Sustainability across surgery, medicine, and perioperative care = good medicine’ (discusses the positive health impacts of increased physical activity, and also how increased physical activity reduces CO2 emissions and particulates from cars)
- 4) The environmental impact of surgical healthcare was covered in
 - a. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - b. Year 4, Base week 2 (2022/2023)- Sustainable healthcare session: topic covered in depth in core curriculum lecture ‘Sustainability in theatres’ (discussed net zero plan 2040, energy and raw material consumption, anaesthetic gases, materials and waste, the intercollegiate green theatre checklist, and staff attitudes/ barriers)
- 5) The impact of anaesthetic gases on healthcare carbon footprint was covered in:
 - a. Year 2, module 202 T1 L20: Anaesthetic Drugs slide 22 and 27. Considering impact of inhalational agents/desflurane on environment.
 - b. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - c. Year 4, Base week 2 (2022/2023)- Sustainable healthcare session: topic covered in depth in core curriculum lecture ‘Sustainability in theatres’
- 6) The impact of inhalers on healthcare carbon footprint, and the environmental benefit of dry powder inhalers was covered in:
 - a. Year 1, module 103, T4 L7 “Asthma pathophysiology, diagnosis, and treatment” - the carbon footprint of inhaler devices is taught as a consideration for choosing treatment options for asthmatic patients.
 - b. Year 3, module 303, “Pharmaceutical management of respiratory conditions”

- c. Year 3, module 308, “Sustainable prescribing” lecture (Dr Anna Jones)
 - d. Year 4: GP bookend day 3, lecture ‘Green Agenda’
 - e. Year 4, Base week 2 (2022/2023) – General Practice session, topic covered in depth in a core curriculum lecture ‘Therapeutics in General Practice 2’ (discussed the environmental advantage of dry powder inhalers over propellant, also discussed the disadvantages to give a balanced viewpoint)
- 7) The topic of waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
- a. Year 2, module 201 core curriculum lecture ‘Global environmental responsibility’ mentions use of medical gloves that result in significant landfill
 - b. Year 4, Base week 2 (2022/2023) – Sustainable healthcare session: topic briefly covered in core curriculum lecture ‘Sustainability across surgery, medicine, and perioperative care = good medicine’ (slide on the Royal College of Nursing gloves off campaign)

Curriculum: Clinical Applications

18. In training for patient encounters, does your medical school’s curriculum introduce strategies to have conversations with patients about the health effects of climate change?

2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	No, there are not strategies introduced for having conversations with patients about climate change

Score explanation:

Year 3

- Module 308, “Sustainable prescribing” lecture (Dr Anna Jones), which includes social prescribing to discuss with patients about decision making for inhalers and impact on climate change

Year 4

- Base week 2: briefly mentioned amongst actions students can take as health professionals in career in lecture "Environment and Health Global Health Day 2023" by Dr. Anna Jones

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

2	Yes, the core curriculum includes strategies for taking an environmental history.
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1	Only elective coursework includes strategies for taking an environmental history.
0	No, the curriculum does not include strategies for taking an environmental history.
<p><i>Score explanation:</i> Year 4</p> <ul style="list-style-type: none"> - Base week 2: Environment and Health Global Health Day 2023 by Dr. Anna Jones, 5,6,7,8 - Base week 2: Principles of Sustainable Healthcare by Dr. Anna Jones slide 13 - Module 402 (2021/22) - Public Health task as part of Infectious Diseases, HIV/Genitourinary medicine & Health Protection rotation includes a case-based scenario on mercury exposure. 	

Curriculum: Administrative Support for Planetary Health

20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.
0	No, there are no improvements to planetary health education in progress.
<p><i>Score explanation:</i> The medical school is in the process of embedding planetary health education and sustainable healthcare topics in the curriculum across all years. Dr Anna Jones who serves as Project Lead for Sustainable Healthcare Education is currently overseeing the longitudinal curricular integration of these topics. Selections of the Student Sustainability representatives are also working on curriculum topics.</p>	

21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
0	There is minimal/no education for sustainable healthcare.

Score explanation:

Currently, the majority of material related to planetary health and climate change at BSMS is within the Year 1, 2 and 4 curriculums and is covered in multiple settings, including lectures, small-group sessions and SSCs. Though there have been attempts to integrate it into the year 3 curriculum, currently it still significantly lacks coverage of planetary health topics. Sustainability-related electives are offered to year 5 students so that students have the option to explore these topics in detail.

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

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

Score explanation:

[Dr Anna Jones](#) is project lead for Sustainable Healthcare in UG Med Ed.

Section Total (60 out of 72)

83%

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Interdisciplinary Research

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

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?	
3	Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the medical school who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
1	There are planetary health and/or healthcare sustainability researchers at the institution , but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation:

The [BSMS Sustainable Healthcare Group](#) has a core team of 7 researchers who pursue research interests in the sustainability of health systems:

- Professor Mahmood Bhutta (DPhil FRCS) – Research Areas: Environmental sustainability in healthcare systems; labour rights in healthcare supply chains
- Miss Chantelle Rizan (Bsc(Hons) MBCh MRes MRCS(ENT)) – Research Areas: Sustainable surgery
- Dr Anna Jones (MBBS, DTM+H, MPH, FFPH, PGCert Med Ed, FHEA) Research Areas: Public Health, Medical Education, Sustainable Health.
- Dr Arianne Shahvisi (BA, MSc, MSt, PhD) – Research Areas: Reproductive ethics; feminist bioethics; migration; gender; race; scientific methodology; academic freedom.
- Dr Lisa Page – Research Areas: Liaison Psychiatry, Environmental Epidemiology, Sustainability and Health, Self-harm, Suicide, Public Health.
- Dr Mei Trueba (BA, BSc, MA, MSc, PhD) – Research Areas: Occupational Health and Safety; Health risk perceptions and behaviours; health risk management; globalisation and health, Neglected tropical diseases.
- Dr Jonathan Sadler (MBChb, BSc, PG Cert Med Ed) – Research Areas: Medical Education, Playful Learning and Sustainability.

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

3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.

Score explanation:

The [BSMS Sustainable Healthcare Group](#) focuses on research and education relating to environmental, social and financial elements of sustainability in health and healthcare. Its core functions are to:

- Research and influence policy, knowledge, attitudes, and behaviour relating to sustainability in health and healthcare
- Evaluate the environmental and social (including labour rights) impacts of healthcare and develop responses to mitigate these
- Collaborate in development of lean health service design
- Build capacity in teaching and learning on sustainable health and sustainable healthcare

University of Sussex's [Sussex Sustainability Research Programme](#) delivers interdisciplinary research to help achieve the global sustainability goals for humanity and the environment - one of its research areas is [Global Health and Environment](#).

3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your medical school?

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

Score explanation:

BSMS engages with communities disproportionately impacted by climate change and environmental injustice through the [SURFACES](#) project. This is an interdisciplinary project

integrating public health and biodiversity conservation in threatened rainforests in Papua New Guinea (focusing first on neglected tropical skin diseases). The project has developed a long-term collaboration with a remote forest-dwelling community (nine lowland rainforest clans in the [Wanang](#) village) who have established 24 multi-stakeholder agreements to preserve their forest in the face of financial incentives from logging companies. Similar partnerships were also developed with clans up on [Mount Wilhelm](#). These communities actively collaborate with the SURFACES team for the delivery of health-related sustainable development goals linked with forest conservation research in their areas. For example, the Wanang villagers requested the provision of health services, resulting in the construction of a nurse-staff community clinic partly funded by BSMS. The project is funded by the [Sussex Sustainability Research Project](#) and the research team includes Co-Investigators from BSMS ([Jo Middleton](#), [Professor Jackie Cassell](#) and Dr Gavin Colthard).

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

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

Score explanation:

BSMS and both of its parent institutions have web pages that centralise their research relating to health and the environment.

- [The BSMS Sustainable Healthcare Group webpage](#) compiles information about sustainable healthcare, previous events that were recorded, education for sustainable healthcare, and a research repository of publications to date.
- The Sussex "[Creating a sustainable university](#)" webpage outlines its sustainability strategy, and links to research, news, upcoming events, and relevant blog posts.
- The Brighton "[Sustainability](#)" webpage describes its policies, and action points including research.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
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3	Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.

Score explanation:

BSMS co-hosts the sustainable healthcare academic research and enterprise ([SHARE](#)) conference, which takes place yearly, with a theme of sustainable healthcare teamwork: interdisciplinary solutions in action this year.

6. Is your medical school a member of a national or international planetary health or ESH organization?

1	Yes, the medical school is a member of a national or international planetary health or ESH organization
0	No, the medical school is not a member of such an organization

Score explanation:

BSMS is a member of the Planetary Health Alliance (Institutional Liaison: [Jo Middleton](#)) Additionally, BSMS has joined the Global Consortium on Climate and Health Education and is listed as a member institution.

Section Total (17 out of 17)

100%

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Community Outreach and Advocacy

Section Overview: This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

1. Does your **medical school** partner with community organizations to promote planetary and environmental health?

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

Score explanation:

One of BSMS's parent institutions, Brighton University runs the [Community University Partnership Programme \(CUPP\)](#) that promotes planetary health.

- Examples of planetary health related projects include: [Air Alert 2](#) 2006, an air pollution mobile warning system, [Sustainable Living in Social Housing](#) 2013, FutureCoast Youth: [Creative Collaborations for a changing climate](#) 2015.

The other parent institution, Sussex University, also engages in community outreach pertaining to planetary and environmental health, as evidenced in their [annual sustainability report](#):

- Sussex University directly co-funds and executes the [Sussex Kelp restoration project](#)
- The Sussex University charity partner of the year in 2021/2022 was [Surfers against sewage](#).
- Sussex University also runs educational and outreach programmes for local communities. For example, [Rewilding Sussex](#), which is run by Christopher Sandom, a Senior Lecturer at Sussex.

2. Does your **medical school** offer community-facing courses or events regarding planetary health?

3	The medical school offers community-facing courses or events at least once every year.
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2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.

Score explanation:

BSMS engages in several community-facing courses and events.

- BSMS' widening participation programme, [Brightmed](#), runs sessions with the aim of improving access to medicine from traditionally under-represented backgrounds. This year, they ran a full day programme on sustainable healthcare, given to year 12 students, covering climate change and planetary health, health and climate change, healthcare contributions to the climate crisis and sustainable healthcare projects.
- BSMS co-hosts the [SHARE](#) conference, which this year focuses on sustainable healthcare teamwork: interdisciplinary solutions in action. This conference is open to the wider community, although is primarily pitched at healthcare professionals.
- The University of Brighton hosts a programme named '[Responsible Futures](#)' in which it has hosted outreach events with the theme of sustainability and climate change. The programme has been very active between 2018-2022 although no new events have been planned for 2023.

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

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

Score explanation:

BSMS has a student update e-newsletter "Digest", which contains a sustainability column. This is distributed monthly and covers a wide range of topics that varies between editions. For example, in the [January 2023 edition](#), there were opportunities for abstract submission signposted, and the topic of sustainable gifting was explored.

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

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

Score explanation:

The trust e-learning platform that is associated with BSMS’s main affiliated hospitals, [IRIS](#), currently has no courses relating to sustainable healthcare or planetary health.

- However, the trust, University Hospitals Sussex, runs an “[Environment week](#)”. This year is its second, which aimed to improve the sustainability of staff travel, and featured a “gloves off” discussion following the success of the project at Great Ormond Street.
- Additionally, the [SHARE](#) conference that BSMS co-hosts offers continuing professional development (CPD) points for post-graduates.
- Although not mandatory and thus not counted in scoring, staff are encouraged to take an online course in sustainable healthcare produced by Greener NHS. More information can be found [here](#). The medical school is currently exploring whether this course is appropriate to recommend to students.

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

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centres have accessible educational materials for patients.

Score explanation:

The trust that is linked with all of BSMS’ main affiliated hospitals, University Hospitals Sussex, has a website that contains the following resources that are available to patients:

- A page on environment and sustainability which details their “[green plan](#)”. This includes some mention of the health effects of the climate crisis, including air pollution. They also signpost to an [explanatory video](#).
- News articles highlighting:
 - o The [green surgery competition](#) with local innovation.
 - o The findings from a “[green inhaler](#)” project to improve the sustainability of respiratory prescribing.
 - o A [campaign](#) led by a local consultant to bring awareness to air pollution.

Whilst there is educational content that is freely accessible to patients, more explicit educational resources that are more visible to typical website traffic would be preferable e.g. leaflets.

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

2 Yes, **all** affiliated hospitals have accessible educational materials for patients.

1 Some affiliated hospitals have accessible educational materials for patients.

0 **No** affiliated hospitals have accessible educational materials for patients.

Score explanation:

The affiliated trust, Universities Hospitals Sussex, includes a chapter in their '[green plan](#)' on the health impacts of climate change (very briefly) and why sustainable healthcare is important. Although patient facing, climate change and health is not the primary focus of this document and specific documentation could be published for patients.

Section Total (9 out of 14)

64%

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Support for Student-Led Planetary Health Initiatives

Section Overview: *This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*

Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it.

Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

1. Does your medical school or your institution offer support for medical students interested in enacting a sustainability initiative/QI project?

2	Yes, the medical school or institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The medical school or 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.
0	No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation:

- Sustainable QI (SUSQI) is in the core curriculum at BSMS, with every fourth-year student being tasked with conceiving a SUSQI project over their time on their ENT rotation. This is presented and discussed at a mandatory public health session.
- Additionally, the University of Sussex hosts an annual competition “[Pitch for the planet](#)”, which encourages students to propose sustainable improvement ideas.
 - o The winners of each prize receive a share of the £30,000 prize pot and are guaranteed a place on the University’s summer accelerator which provides a platform to launch and grow the initiatives, offering coaching, specialist advice, mentorship from founders, intern support and further funding opportunities. All current undergraduate students at Sussex can apply, hence this scheme is also open to BSMS medical students.

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?

2	The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
1	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.

0	There are no opportunities for students to engage in planetary health/sustainable healthcare research.
<p><i>Score explanation:</i></p> <ul style="list-style-type: none"> - In fourth year, all students are required to complete an individual research project (IRP). This can either be chosen from a list or sought individually. This year, multiple projects were offered regarding sustainable healthcare including a life cycle analysis of sutures vs staples for surgical wound closure. - One of BSMS's parent institutions, the University of Sussex, runs a yearly junior research associate (JRA) scheme. This is open to BSMS students and gives bursaries to engage in research of their choosing over an eight-week period during their summer break, provided they are able to find a supervisor. 	

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

4. Does your <u>medical school</u> have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
2	Yes, there is a student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support .
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.
<p><i>Score explanation:</i></p>	

- [BSMS Students for Global Health](#) is a student-led society which works with national branches to promote sustainable healthcare and advocate with groups disproportionately affected by climate change.

This society exists as part of the medical school Student Union (BSMS MedSoc) and receives annual funding of £150.

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

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

Score explanation:

BSMS has five medical student Sustainability Representatives whose roles include:

- Attending the University of Sussex Students' Union sustainability committee meetings and reporting back to BSMS on relevant topics from these meetings
- Attending relevant academic meetings with BSMS staff
- Working with other representatives and staff to envisage, advocate for, and bring about change at BSMS
- Maintaining regular contact with academic year representatives and representatives from student societies
- Exploring ways to engage with the broader student body and receive and manage input from other students

The term of service is two years, with the option of ending the role after one year. Two students are currently undertaking their second year, with three students having joined the role for this academic year. The role is voluntary and requires a commitment of no more than eight hours per month.

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)

1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.

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

Score explanation:

1. Two schemes were identified, scoring 1 point:

- Roots (Communal Gardening) Society and Sussex Forest Food Garden are student-led communal gardening initiatives at the University of Sussex.
- The University of Brighton, runs the Community University Partnership Programme (CUPP) which has many partnership projects with local community organisations that promote planetary and environmental health, including:
 - o Brighton & Hove Food Partnership
 - o Falmer Vegetable Garden
 - o Darley Road Gardening Project
 - o KTP Project: Spring Barn Farm Park
 - o KTP Project: Farmshop and outlet
 - o Urban wildlife in the UK
 - o Community resilience and changing water environments
 - o Green Spaces Network in Brighton & Hove - Seed Fund
 - o FutureCoast Youth: Creative Collaborations for a Changing Climate- Seed Fund
 - o Hanover Centre Carbon RACE (Reduction, Awareness and Community Engagement)
 - o Waste House
 - o Ban on Fisheries Discard - Seed Fund
 - o Hastings Blue Reef Aquarium - Seed Fund
 - o Tourism for Inshore Fishing, Food and Sustainability (TourFish)

2. The following relevant events were identified, which score 1 point:

- The Sustainable Healthcare Academic Research and Enterprise (SHARE) Conference is an annual conference hosted in partnership between BSMS and the University of Brighton School of Health Sciences. It offers keynote talks and oral presentations on a variety of topics related to the triple-bottom-line of sustainability in healthcare practice. Students are included in a wider intended audience of healthcare professionals.
- The University of Sussex runs sustainability seminars which are aimed at students.

3. No such events were held at each partner university.

4. The following relevant events were identified, which score 1 point:

- Sussex Sustainability Research Programme(SSRP) collaborated with partner school Media, Arts and Humanities(MAH) to host an evening event that illustrated the value of arts and media for sustainability. The [SSRP Week exhibition](#) consisted of an open-lab event curated by SHL co-director and SSRP research fellow, Dr. Alice

Eldrige, which showcased an installation in the SHL garden featuring electronic soundscapes from a freshwater pond, together with short films, imagery by Ecuadorian-based artist Sozapato, and an interactive climate education game.

- Brighton & Hove Food Partnership
- Falmer Vegetable Garden

5. The following volunteering opportunities were identified, which score 1 point:

- [Active Student](#), the University of Brighton's Volunteering Service, supports students to find supported and safe volunteering opportunities in the local area, including opportunities relating to environment, agriculture and sustainability:
 - Plot volunteer - Nurture through Nature
 - East Brighton Food Co-Op Volunteer
 - Beach Cleaning and Fundraising Volunteer - Vol Human Appeal
 - Garden Support Volunteer - Brighton & Hove Food Partnership
 - Grow Season Support Volunteer - The Grow Project
 - Winter Fuel Poverty Programme Outreach Coordinator - BHESCo
 - One Planet Living Practitioner - The Green Centre CIC
 - Social Media and Videographer Volunteer - Magpie Recycling
 - Stanmer park hill clean

6. The following student-led societies organise outdoor programs for students, scoring 1 point:

- [University of Sussex Mountaineering Society](#) organises outdoor climbing trips in the UK and internationally
- [University of Brighton Ecological Society](#) hosts outdoor activities, including visiting local nature reserves for walks and exploring rock pools at local beaches.

Section Total (13 out of 15)

87%

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Campus Sustainability

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

1. Does your medical school and/or institution have an Office of Sustainability?

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

Score explanation:

BSMS is an equal partnership between the University of Sussex and University of Brighton. Each parent university has a dedicated Sustainability Team, and BSMS has a dedicated sustainability steering group with one designated staff member for sustainability and multiple other salaried staff and non-salaried students aiming to improve campus sustainability:

- University of Sussex Sustainability Team
 - o Sam Waugh, Sustainability Manager, s.waugh@sussex.ac.uk
 - o Ruth O'Brien, Senior Sustainability Policy Officer, ro288@sussex.ac.uk
 - o Pamela Linhares, Sustainability Performance Officer, p.linhares@sussex.ac.uk
 - o Martha Knott, Graduate Sustainability Internet (Communications and Engagement), mk581@sussex.ac.uk
 - o Finlay Wilson, Graduate Sustainability Associate, fw92@sussex.ac.uk
 - o Dan Holmes, Graduate Sustainability Associate, dh359@sussex.ac.uk
- University of Brighton Sustainability Team
 - o Ollie Swan, Head of Sustainability, o.swan@brighton.ac.uk
 - o Lucy Lisle, Sustainability and Travel Manager, l.lisle@brighton.ac.uk
 - o Janey Bray, Environmental and EMS Officer, j.b.bray@brighton.ac.uk
 - o Jude Harkins, Sustainability and Energy Analyst, j.harkins@brighton.ac.uk

- Mark Burkill, Logistics and Transport Officer(interim), m.j.burkill@brighton.ac.uk
- Professor Mark Devenney, Professor of Critical Theory, m.devenney@brighton.ac.uk
- BSMS Sustainability Steering Group
 - Dr Anna Jones, Project Lead for Sustainable Healthcare Education, a.jones@bsms.ac.uk
 - Dr Jonathan Sadler, Research Fellow, j.sadler@bsms.ac.uk
 - Julie Wilton, Communications Manager, j.wilton@bsms.ac.uk
 - Matt Bemment, Communications Assistant, m.bemment@bsms.ac.uk
 - Kathy Bog, Student Sustainability Representative, j.bog1@uni.bsms.ac.uk
 - James Chu, Student Sustainability Representative, j.chu1@uni.bsms.ac.uk
 - Jim Lee, Student Sustainability Representative, j.lee3@uni.bsms.ac.uk
 - Jonah Padfield, Student Sustainability Representative, j.padfield1@uni.bsms.ac.uk
 - Dearbhla Mcilroy, Student Sustainability Representative, d.mcilroy1@uni.bsms.ac.uk

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

5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030
3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate
0	The institution/medical school does not meet any of the requirements listed above
	<p><i>Score explanation:</i></p> <ul style="list-style-type: none"> - University of Sussex: The University of Sussex has published a sustainability strategy, called Sustainable Sussex, and has specified the objective of decarbonising the economy. The University has outlined a plan to overhaul its heating, transport and supply chains to achieve a net zero carbon footprint of its entire operations by 2035. - University of Brighton: A sustainability strategic programme (‘Brighton 2025’) is mentioned in the university’s divestment press statement with a goal to reduce carbon emissions to 4000tCO₂e by 2025. The University also outlines their plan to achieve target net-zero carbon emissions by or before 2050. - At least one of the medical school’s partner institutions, University of Sussex, has a stated carbon neutrality goal by 2040 and a well-defined plan to achieve this goal so this metric scores 3/4.

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?

3	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

Score explanation:

- University of Sussex: The energy used on campus ([most recent data from 2018/19](#)) was provided by a mix of power from the university's District Heating System, Combined Heat and Power Plant (CHP) and their solar farm. Heating is mainly provided by natural gas to the best of our knowledge. Approximately 11% of this energy came from renewable sources, such as solar and combined heat and power. From 2020, the university subscribes to a 100% renewable electricity tariff .
- University of Brighton uses 100% renewable electricity, generated mostly from onshore and offshore wind. A proportion of electricity used is also generated by onsite solar panels (nearly 1,500 panels have been installed at Moulsecocomb, Falmer and Eastbourne campuses, and at our Varley Park residences). Heating is provided by natural gas, however, the university uses an Aquifer Thermal Energy Storage (ATES) system and low-carbon Combined Heat and Power (CHP) units to lower the carbon impact of heating and ventilation on campus. Some electric heating and air conditioning has been confirmed to be sourced from PV panels. Information about Brighton's energy usage can be found [here](#).
- Although both universities source their electricity needs from 100% renewable on-site and off-site sources, the main source of heating on both campuses is natural gas. However, since a part of heating in university of Brighton is derived from renewable sources, we have assigned a score of 1 (>20% of energy) based on 2021/22 data from the University of Sussex and University of Brighton, confirmed by sustainability faculty in both universities: Ollie Swan, Head of Sustainability, o.swan@brighton.ac.uk and Pamela Linhares, Sustainability Performance Officer, p.linhares@sussex.ac.uk.

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

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
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2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.

Score explanation:

- University of Sussex
 - All new buildings constructed on the University campus must meet the energy efficiency standards set out in the Building Research Establishment Environmental Assessment Method (BREEAM) ‘Excellent’ environmental standard.
 - The [Energy Efficient Campus](#) section of University of Sussex’s Sustainability Strategy sets out targets and plans for improving the campus’s energy efficiency and reducing energy consumption. This includes energy efficient retrofitting of existing campus buildings. In the report it is outlined that an initial high-level audit of the energy efficiency of all the buildings will be undertaken to identify cost-effective ways of reducing energy consumption. A more detailed audit will then be undertaken of the 20% most poorly performing buildings by 2023 and a detailed investment opportunity analysis of the entire estate by 2030. This audit information will be used to make regular business cases for funding for energy efficiency improvements to our Capital Programmes Committee and external grant funders, e.g. the Public Sector 38 Decarbonisation Scheme so that these improvements can be built into our annual maintenance and project plans each year.
 - Although a plan is in place, this has not been actioned yet, with the exception of residential accommodation which has been brought up to energy performance certificate rating E everywhere, unless tenant ill health or gaining vacant possession has made this work unfeasible.
- University of Brighton
 - University of Brighton have stated they aim to achieve [BREEAM Excellent standard for all new developments](#).
 - The university is also currently working to improve the energy efficiency of older campus buildings through sustainable refurbishment projects, including:
 - A recent installation of efficient lighting at our Aldrich and Falmer Libraries is saving 48 tonnes of carbon a year
 - An Aquifer Thermal Energy Storage (ATES) system – an innovative way of heating and cooling one of our largest buildings, using water from hot and cold wells below the site.
 - Low-carbon Combined Heat and Power (CHP) units - cutting our carbon emissions by generating electricity at the same time as providing heating.

- An extensive building energy management system (BMS) - ensuring our buildings are comfortable places for work and study, while achieving the most efficient use of energy across campus
- Nevertheless, there are still multiple buildings which have not been retrofitted

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

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

Score explanation:

- Both the University of Sussex and the University of Brighton provide good biking infrastructure, including cycle parking (bike racks), free shower facilities for cyclists and lockers. Cycling facilities are easily accessible from the medical school buildings on both campuses.
- Bus travel is encouraged by both universities with student ticket discounts and established bus routes with local bus companies, however, these discounts are not specifically provided from the medical school. The University of Brighton also operates a low-emission free shuttle bus linking different campuses; this is a university-wide service.
- BSMS has a published Student Travel and Accommodation Policy which encourages students to walk, cycle or use public transport where possible and practicable for all journeys. Bus/train fares for any required travel for placements outside of the Brighton and Hove area is reimbursed. Taxi travel is discouraged and not reimbursed unless no public transport is available or placement location is particularly inaccessible.
- Private car travel is reimbursed at a given mileage rate and carpool is encouraged.
- Regular free bus service is provided between the Royal Sussex County Hospital and Princess Royal Hospital for students to attend their clinical placements, however, this service is offered for all individuals employed by the local Trust, rather than specifically from the medical school.
- It is stated that all the above services and travel policies are designed to primarily minimise transport costs, but there have been mentions of the environmental benefits of public transport during orientation days at the beginning of the academic year, albeit briefly covered. Furthermore, they are considered environmentally-friendly transportation options. There have been attempts to make the BSMS Student Travel and Accommodation Policy more accessible to students via the student platform

MyStudies, but they are still difficult to locate for new students and the policies are only mentioned briefly during induction sessions.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.
0	There is no compost or recycling program at the medical school.

Score explanation:

- Both the [University of Sussex](#) and [University of Brighton](#) have conventional segregated recycling bins across campuses, including the medical school buildings, covering all commonly recyclable waste (aluminium/paper/plastic bottles/glass), which are easily accessible to students and faculty.
- The University of Sussex has compost bins in multiple areas on campus and has installed an aerobic digester for food waste, but these services are not yet accessible in the medical school building. Food waste recycling (compost) was introduced to kitchens in East Slope residences in 2019, and an opt-in food waste scheme has been made available to residents in all other residences from Autumn Term 2021.
- Notably, the University of Sussex also provides specialised waste services, such as recycling of TetraPak cartons, duvets and pillows, crisp packets, oral health care products, stationery and cooking oil. These services are accessible to students and staff in specific locations across campus, but not in the medical school building.

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

3	Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is engaged in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

Score explanation:

The catering facilities at the medical school buildings are provided by the University of Sussex and the University of Brighton:

- University of Sussex's catering partner, [SussexFood](#), uses sustainable procurement, including sourcing the majority of its food from local suppliers.
- As outlined in their [Sustainable Food Policy](#), the University of Brighton uses locally grown and seasonal fruit and vegetables, sustainable fish and high welfare meat and they offer a range of vegetarian and vegan options in all their food outlets. Many restaurants at the University of Brighton campuses also take part in 'Meat Free Monday' promotions.

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

3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional . The medical school is not engaged in efforts to increase sustainability of procurement.
0	There are no sustainability guidelines for supply procurement.

Score explanation:

- The University of Sussex's Sustainability Strategy [Sustainable Sussex](#) contains a dedicated Sustainable Supply Chain section. The university has a well-established approach to sustainable procurement through their Supplier Code of Conduct and Purchasing Policy. These policies set out minimum ethical, social, and environmental standards and behaviours expected of suppliers. The university is engaged in efforts to further reduce their current carbon emissions from their supply chain, resulting in the the launch of a new [Sustainable Procurement Framework](#) from summer 2021, which contains nine core sustainable procurement principles that suppliers should be committed to:
 - o Net zero target and action plan
 - o Recycling target
 - o Responsible consumption and production
 - o Equality, diversity and inclusion (EDI) training for staff and supply chain staff
 - o Staff access to wellbeing programmes
 - o Supporting and volunteering in local issues
 - o Initiatives to reduce inequality in the workplace
 - o Real living wage accreditation
 - o Engaging small- and medium-sized enterprises (SMEs) and voluntary, community and social enterprises (VCSEs) in the supply chain

- University of Brighton is currently in the process of updating its sustainable procurement policy. The most recent version is the Procurement Strategy 2015-2019 which includes general sustainable procurement policies, however, they lack detail and they do not form sustainability requirements, hence this metric scores 2/3.

9. Are there sustainability requirements or guidelines for events hosted at the medical school?

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

Score explanation:

- The University of Sussex's [Sustainable Events Policy](#) provides sustainability guidelines for any events taking place on campus, and events hosted at the medical school building on Sussex campus would be covered under this policy. There is no requirement for events to abide by these sustainability criteria and these criteria are not widely accessible to staff and students.
- The University of Sussex's Students' Union also provides a [Sustainability Guide](#) for student-led activities held by student societies, which would cover BSMS student societies. BSMS also has a dedicated students' union (MedSoc) under which its societies fall, however, BSMS MedSoc does not currently provide sustainability guidelines for student society activities.

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

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

Score explanation:

The lab spaces used by BSMS are part of University of Sussex and University of Brighton campuses:

- University of Sussex: Several laboratory teams engaged in lab sustainability in the Life sciences school under the Green Impact Scheme which they were awarded a NUS Green 42 Impact Gold Award for in 2019. This does not include the medical school and Green Impact Scheme did not run this year.

- University of Sussex: Pilot institution for development of the Laboratory Efficiency Assessment Framework ([LEAF](#)). These practices are embedded into the School of Pharmacy and Biomolecular Science Labs, which are used by the medical school, hence this metric scores 1 point.
- BSMS buildings have separate areas for clinical skills sessions. Such spaces have started focusing on reusable equipment, such as cannula extension sets. However, these are not on any websites but internal to the labs.

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

4	The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.
3	The institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

Score explanation:

The medical school is under both University of Sussex and Brighton University's endowment portfolios, as outlined below:

- University of Sussex: Completely divested from fossil fuels as listed on [Global Fossil Fuel Divestment Commitments Database](#), however, the specific announcement could not be retrieved. Although the university has invested in renewable energy companies and campus initiatives since, this was linked to a specific commitment by the University to reinvest the divested funds.
- University of Brighton: Completely divested from fossil fuels as stated in the [divestment press statement](#). There are no specific commitments in policy to invest in renewable energy companies or renewable energy campus initiatives.

Section Total (20 out of 32)

63%

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Grading

Section Overview

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

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

Planetary Health Grades for the Brighton and Sussex Medical School

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(60/72) \times 100 = 83.33\%$	A-
Interdisciplinary Research (17.5%)	$(17/17) \times 100 = 100.00\%$	A+
Community Outreach and Advocacy (17.5%)	$(9/14) \times 100 = 64.29\%$	B-
Support for Student-led Planetary Health Initiatives (17.5%)	$(13/15) \times 100 = 86.67\%$	A
Campus Sustainability (17.5%)	$(20/32) \times 100 = 62.50\%$	B-
Institutional Grade	79.85%	B+

Report Card Trends

Section Overview

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

