Planetary Health Report Card (Medicine):

Brighton and Sussex Medical School

2024-2025 Contributing Team:

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Summary of Findings

Overall Grade	A

Curriculum	A

- BSMS has compiled well-rounded planetary health teaching with all aspects in this section being discussed in the core curriculum. Years 1-4 all receive substantial education in sustainable health.
- **Recommendations**: Some sustainable healthcare topics are primarily discussed in lectures centred around planetary health, and would benefit from better integration into the curriculum, for example the reproductive health effects of environmental toxins.

Interdisciplinary Research	A

- The BSMS Sustainable Healthcare Group is a leading group in research and education relating to environmental, social and financial elements of sustainability in health and healthcare.
- The University of Sussex also provides support for planetary health research through the Sussex Sustainability Research Programme (SSRP), with current efforts on Integrating action and policy on health, biodiversity, and climate in Papua New Guinea (PNG), Bougainville, and across Melanesia.
- **Recommendations**: Current SSRP research is widely impactful across disciplines and nations. However it would be beneficial to have more transparent methods for allocating research funding, to understand how the university is using this research to support those in need and those affected greatest by climate change.

Community Outreach and Advocacy	B+

- BSMS Sustainable Healthcare group works on advocacy through the Sustainable Health Academic Research and Enterprise (SHARE) conference, and also by delivering a session for BSMS' widening participation programme, BrightMed.
- **Recommendations**: To encourage patients to participate in their own care regarding planetary health, it's important to have accessible information about health exposures (e.g. air pollution, food insecurity, heat) and on the health impacts of climate change. This should be done through links with local NHS trusts.

Support for Student-Led Initiatives	A

- Student-led sustainability initiatives at BSMS include a number of year 4 Independent Research Projects (IRPs) and the student society 'BSMS Green Medicine', both receiving support from the institution.
- **Recommendations:** BSMS relies on its parent institutions, the University of Brighton and the University of Sussex, to have a greater selection of environmental societies. So greater institutional support could help to restart the now dissolved BSMS societies: Wilderness medicine, global health and walking society.

Campus Sustainability	B

- BSMS was recognised for sustainable developments in the 'Green Impact Awards', being awarded the 'Gold Award' from the University of Sussex' National Union of Students. This is an annual award, and BSMS is working towards this year's awards, implementing feedback throughout.
- **Recommendations:** The University of Sussex has been heavily criticised by students and the student union, for the new 'West Slope Development' for student housing and educational space, which began construction in 2022. This development has removed the cheapest accommodation on campus (£95 /week, next cheapest £116 /week), destroyed the most biodiverse area of campus (Roots) and 93 trees. We recommend that if the University of Sussex truly wants to fulfill its goal of becoming one of the most sustainable universities in the world it should implement sustainability as a core value for future construction and developments, potentially including sustainable guidelines for new building work.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.

- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.

- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the 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/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to

the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.

- **Core Curriculum:** This refers to taught material that is develiered to the entire cohort of students in one year.

- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

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

Score explanation:
BSMS offers a number of 'Student Selected Components' in years 1 and 2 for students to choose from, currently there is one SSC related to planetary health available in each year.
Year 1:

- *104 SSC "How does human health relate to climate & ecological breakdown?" explores links between human and planetary health, looks at the impact of climate change on physical and mental health and examines the impact of healthcare systems on the environment including how to minimise this impact.*

Year 2:

- *202 SSC "Invisible illnesses: a growing medical challenge" featured a week on "Environmental Toxicity" where students discussed the health impacts of pollutants.*

For students wishing to intercalate, BSMS has recently approved a postgraduate module on the principles of sustainable healthcare.

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?
This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Extreme heat is explored throughout a number of lectures in years 1-4.
Year 1:

- *104 Student Selected component "How does human health relate to climate & ecological breakdown?" by Dr Lisa Page includes the learning objectives: 'How does biodiversity loss impact on human health?' and 'How does climate change impact human health across the planet?'*

Year 2:

- *201 "Sustainable Healthcare" discusses the health benefits of tackling climate change including reduced heat in urban areas, decreasing deaths from extreme heat.*

Year 3:

- *308 'Sustainable Prescribing' describes how some medications increase susceptibility to extreme heat.*

Year 4:

- *Base week 1 "Sustainability in Sexual Health" describes how rising temperatures link to poorer outcomes in reproductive health, particularly with pre-term labour and congenital defects. This lecture also explains how climate change increases rates of unplanned pregnancy, STIs, cardiovascular diseases, in turn increasing stillbirths and intrauterine growth restriction.*
- *Rheum/Derm "Dermatology History Taking and Terminology" has points on living abroad in hotter climates and outdoor working. Outdoor workers have more UV exposure. Living near the equator increases risk of skin cancer.*
- *Base week 2 "The Wider Determinants of Health" slide 49 discusses the number of deaths in heat-period days across East Sussex.*
- *Base week 2 "Sustainable Healthcare" by Anna Jones. Slide 4 explains how climate change increases frequency of heatwaves, and links this to an increase in mortality and morbidity. Slide 5 describes how some medications make people more susceptible to heat-related illnesses.*
- *Base week 2 Global Health Day "Environment and Health" explores the increased frequency of heat waves and their health impacts.*

1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
The impact of extreme weather events is discussed in years 2, 3 and 4, with most of the relevant teaching in year 4.
Year 2:

- *201 "Sustainable Healthcare" shares an image stating that an indirect benefit of combating climate change is a reduction in deaths and injuries due to extreme weather events.*

Year 3:

- *304 "Urology" Slide 8 discusses how climate and geography influence renal stone formation.*

Year 4:

- *Base week 2 "Sustainable Healthcare" slides 6 referred to the impacts of climate change on healthcare systems. Particularly the increasing demand on healthcare systems due to climate change and increased costs from the need for adaptation.*
- *Base week 2 "The Wider Determinants of Health" explains the impact of extreme weather storm events in East Sussex; "From a 1 in 300-year event to 4 times in 1 year"*
- *Base Week 2 "Sustainable Healthcare" discusses the impact of extreme flooding on healthcare services, through the example of Whipps Cross Hospital, London in 2021*
- *Base week 1 "Sustainability in Sexual Health" states how rising temperatures worsens outcomes in reproductive health, including through pre-term labour and birth defects.*

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation:
Years 1, 2 and 4 all have lectures that discuss how climate change alters patterns of infectious disease.
Year 1:

- *102 Symposium "Commensalism and Pathogenesis - Host Factors" explores how climate change, along with factors like population density and herd immunity, influences shifts in disease patterns.*

Year 2:

- *201 "Sustainable Healthcare" shares an image stating that an indirect benefit of combating climate change is a reduced spread of vector-borne diseases to new areas.*

Year 4:

- *Base week 2 "Environment and Health; Global Health Day" slides 12-15 outlined how disease vectors are distributed and discussed how a changing climate increases rates of infectious disease. Slide 14 showed an image explaining the interactions between climate change, greenhouse emissions and health impacts, such as increased vector borne disease.*
- *Base week 1 "Sustainability in Sexual Health" identifies how climate change affects the rates of unplanned pregnancies and STIs.*

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
BSMS assesses this metric in detail across a large volume of teaching throughout all years of their medicine degree.
Year 1:

- *101 "Public Health: Wider Determinants of Health" slide 3, discusses how air and water quality are vital to an individual's physical environment, which is evaluated as a key factor of what makes people healthy.*
- *103 "Lifestyle Factors and Respiratory Disease" states that chemical fumes and pollution are contributing factors to episodes of asthma*
- *110 Personal & Professional Development "Environment and Health" goes into detail exploring the health effects of air pollution, with the case study of 'Ella Kissi-Debrah' the first person to have air pollution listed on her death certificate.*

Year 2:

- *201 Clinical Technical Skills 3 "Wound Assessment/Closure and Inhaled Medications" discusses how air pollution affects respiratory health.*
- *201 "Sustainable Healthcare" covers in detail the health impact of air pollution in the UK and globally, on the respiratory system and also cardiovascular disease, dementia and type 2 diabetes mellitus, with effects exacerbated by socio-economic deprivation. This topic is further explored in small group teaching.*
- *203 "Allergies" addresses the effect of environment and sanitation on developing allergies.*

Year 3:

- *308 "Respiratory Pharmacology" compares the CO2e of DPIs and pMDIs, and encourages students to consider the carbon footprint of inhalers when prescribing.*

Year 4:

- *Base week 2 "Sustainable Healthcare" slide 8 covered the proportion of deaths nationally that have air pollution as a contributing factor. And that a reduction in fine particulate air pollution in England could prevent thousands of cases of asthma and lung cancers.*
- *GP Bookend teaching "Sustainability and General Practice" slide 3 discusses the rationale for NHS green strategy and how this may save lives by improving air quality.*
- *Base week 2 "Chronic Obstructive Pulmonary Disease - End Stage Disease" by Dr Matt Pavitt discusses how outdoor, occupational and household pollution are risk factors of developing COPD.*
- *Base week 2 "Sustainable Respiratory Care" shared an image detailing how climate change impacts respiratory and cardiovascular health, through extreme weather events, biodiversity loss and air pollutants.*

Year 5:

- *"Respiratory" revision lecture discusses how COPD is linked to exposure to air pollution.*

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate

change, including increased heat	
This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
The cardiovascular effects of climate change are explored in years 2, 3 and 4, with an emphasis on the impact of extreme heat.
Year 2:

- *201 "Sustainable Healthcare" covers in detail the health impact of air pollution in the UK and globally, on the respiratory system and also cardiovascular disease, dementia and type 2 diabetes mellitus, with effects exacerbated by socio-economic deprivation.*

Year 3:

- *308 'Sustainable Prescribing' describes how some medications increase susceptibility to extreme heat.*

Year 4:

- *Base week 1 "Sustainability in Sexual Health" considers the effect of poor air quality on cardiovascular diseases, with knock-on effects increasing stillbirth and intrauterine growth restriction. This lecture also considered the risks from rising temperatures, linking them to an increased risk of congenital defects, including congenital cardiovascular defects.*
- *Base week 2 "Sustainable Respiratory Care" shared an image detailing how climate change impacts respiratory and cardiovascular health, through extreme weather events, biodiversity loss and air pollutants.*
- *Base week 2 "Sustainable Healthcare" Slide 5 discusses how some medications increase susceptibility to heat-related illnesses, including heat stroke and cardiovascular collapse.*

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
BSMS explored the neuropsychological impacts of climate change throughout years 1-4, focussing on the psychological benefits of reducing climate change.
Year 1:

- *104 SSC "How does human health relate to climate & ecological breakdown?" by Dr Lisa Page covered the learning objective: 'How does climate change impact on mental health across the planet?'.*
- *110 Personal & Professional Development "Environment and Health" explains how access to green spaces has numerous benefits to mental health, and acts as carbon sinks protecting from air pollution and extreme heat.*

Year 2:

- *201 "Sustainability in Intensive Care" uses an infographic to demonstrate the public health issues resulting from climate change. This included the physical and mental health impact resulting from extreme weather events and poor working conditions.*

Year 3:

- *308 "Sustainable Prescribing" discusses the mental health benefits of having access to green spaces and physical activity, and their use in social prescribing for depression.*

Year 4:

- *Base week 1 "Sustainability in Sexual Health" investigated the neurological effects of rising temperatures, being linked to congenital defects, and poor air quality, linked to intrauterine growth restriction.*
- *Base week 2 "Sustainable Healthcare" explores the mental health benefits of having access to green spaces.*
- *Base week 2 Global health day "Environment and Health" uses an infographic to discuss the mental health impacts of climate change.*

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

This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
Teaching at BSMS approaches this metric through a number of different ways, with lectures covering the relationship between wider determinants of health, obesity, malnutrition and climate change.

Year 1:

- *101 "Public Health: Wider Determinants of Health" slide 3 discusses a wide range of factors that contribute to someone's health. These include access to care, community safety, air and water quality, diet, transport and housing.*
- *101 "Obesity - An Environment to Support Healthy Weight" mentions ways to increase access to tap water by reducing marine pollution/beach litter and plastic waste to promote a healthier lifestyle.*

Year 2:

- *201 "Sustainability in Intensive Care" uses a graph to link food insecurity to malnutrition and gastrointestinal disorders, as well as linking water shortages to dehydration and kidney injury. This graph also discusses infections resulting from poor food and water quality.*

Year 4:

- *Base Week 2 "Introduction to Sustainable Healthcare" slide 10 and "Environment and Health; Global Health Day" slides 8, 9, 15 discuss ways to improve health, improve patient access to food and reduce climate change. This lecture used images to demonstrate how rates of water and fertiliser usage has increased, similarly to increased rates of undernutrition, suggesting climate change as the root cause.*

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:	3

Score explanation:
BSMS explores how climate change has an outsized impact on marginalised populations through focussed teaching in years 1 and 4 covering how climate change affects health and who is at risk of its effects.
Year 1:

- *101 "Public Health: Wider Determinants of Health" slide 3 states how individual safety, diet, air and water quality, housing and transport all contribute to an individual's health.*
- *110 Personal & Professional Development "Environment and Health" describes the outsized impact of climate change on children, contributing to 1.7 million deaths of children under 5 annually.*

Year 4:

- *Base week 1 "Sustainability in Sexual Health" describes how the mental health implications of climate change have a disproportionate effect on people living with HIV.*
- *Base week 2 Global health day "Global Health in an Unequal World" is focussed on this topic throughout. This discusses the origins of global inequality through both colonialism and neocolonialism, and then delves further into their effects on health. This includes in depth analysis of diseases of poverty, occupational health, environmental degradation, healthcare brain-drain, marketisation of health, deliberate destruction of health and how to integrate this into students' medical practice.*
- *Base week 2 Global health day "Environmental Health" explains how climate change exacerbates health inequities through involuntary exposure.*

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.	
Score Assigned:	3

Score explanation:
The unequal global impact of climate change is discussed in lectures in years 2 and 4, which further explore why vulnerable populations are at greater risks of the effects of climate change.
Year 2:

- *201 "Sustainable Healthcare" covers in detail the health impact of air pollution in the UK and globally, on the respiratory system and also cardiovascular disease, dementia and type 2 diabetes mellitus, with effects exacerbated by socio-economic deprivation.*
- *201 "Sustainable Healthcare, Medical Products and PPE" by Prof. Bhutta discusses the exploitative working conditions of migrant workers in Malaysian factories producing NHS disposable gloves, producing large quantities of microplastics and having detrimental effects on the environment.*

Year 4:

- *Base week 2 Global health day "Environment and Health" slide 19 describes the contrast in potential harm due to climate change that different countries may suffer, including factors such as food, water availability, and health. This is compared to the countries producing the most capita of CO2 each year.*
- *Base week 1 "Sustainability in Sexual Health" states "Climate change has a disproportionate effect on low-income countries and vulnerable populations". This slide shows an image saying that climate change causes greater numbers of environmental refugees, increasing forced migration and civil conflict.*

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

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	2

Score explanation:
The reproductive effects of anthropogenic toxins is discussed in one core lecture in year 4.
Year 4:

- *Base week 1 "Sustainability in Sexual Health" discussed the reproductive and sexual health implications from climate change (e.g. Unplanned pregnancy and higher rates of STIs), rising temperatures (e.g. Pre-term labour and congenital defects) and poor air quality (e.g. Stillbirth and intrauterine growth restriction)*

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

This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
Environmental threats to the local Sussex area and to local populations are discussed in detail in years 1 and 4, and discuss ways to support the surrounding community through appropriate waste disposal and managing air pollution.
Year 1:

- *101 "Obesity - An Environment to Support Healthy Weight" mentions ways to Increase access to tap water by reducing marine pollution/beach litter and plastic waste to promote a healthier lifestyle.*
- *102 "Infection Prevention and Control" includes a diagram that shows the transmission of healthcare associated infections and other infectious diseases. The diagram highlights waste disposal and hand hygiene as critical factors in lowering transmission rates within the community.*

Year 4:

- *GP bookend teaching "Sustainability in General Practice" slide 5 mentions an increase in deaths locally, that are likely due to climate change. With particular note of heat, air pollution, diet, damage to essential infrastructure and disruption to supply chain and service provision.*
- *Base week 2 "The Wider Determinants of Health" by Darren Gale explored many environmental threats local to the Sussex area including eutrophication, flooding, chemical air pollution event '2017 Birling Gap Incident", local recycling / landfill sites and air traffic to and from Gatwick Airport. Slide 48 showed a prediction of mass flooding affecting Eastbourne, due to rising sea levels and increased extreme weather. Slide 49 stated the number of excess deaths during heat periods in East Sussex. Slide 51 discussed the impacts of extreme weather storm events in East Sussex; "From a 1 in 300-year event to 4 times in 1 year".*

1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	2

Score explanation:
The use of indigenous knowledge is discussed in year 4 at BSMS.
Year 4:

- *Base week 2 "Sustainable Healthcare, Medical Products and PPE" by Prof Bhutta compares the emissions produced from cataract surgery in the UK and India and explains why India's healthcare has significantly less environmental impact and better clinical outcomes..*

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

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

Score Assigned:	3

Score explanation:
At BSMS, the disproportionate impact of anthropogenic toxins on marginalised populations is discussed repeatedly throughout years 1-4.
Year 1:
- *110 Personal & Professional Development "Environment and Health" explores the health effects of air pollution, with the case study of 'Ella Kissi-Debrah' the first person to have air pollution listed on her death certificate. This teaching emphasises the link between socio-economic deprivation and air pollution.*

Year 2:
- *201 "Sustainable Healthcare" covers in detail the health impact of air pollution in the UK and globally. This lecture teaches that groups most vulnerable to air pollution are children, pregnant people and the elderly, with effects exacerbated by socio-economic deprivation.*

Year 3:
- *303 "The Case of The Bloody Cough" discusses the effect of environmental pollutants on homeless populations, and the importance of understanding that for TB diagnosis.*

Year 4:
- *Rheum/Derm "Sarcoidosis" mentions how there are environmental factors that increase the risk of sarcoidosis and that black individuals are more likely to have worse outcomes.*
- *Rheum/Derm "Autoimmune Rheumatic Disease" explains that those of an ethnic minority with SLE have a higher mortality rate. SLE has environmental risk factors.*
- *Base week 2 Global health day "Environmental Health" discusses the health effects of the anthropogenic toxin lead, and the outsized impact of lead exposure on children particularly in low-middle income settings.*

Curriculum: Sustainability

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	3

Score explanation:
BSMS teaching often explores the benefits of the 'Planetary Diet' on both personal and environmental health.
Year 1:

- *101 "Obesity - An Environment to Support Healthy Weight" discusses the role of a 'Planetary diet' which identifies a plant-based and low saturated fat diet as beneficial for CVD risk*
- *103 "Lifestyle Factors and Cardiovascular Disease" discussed the adverse health outcomes related to red and processed meat consumption*
- *110 Personal & Professional Development "Environment and Health" discusses the benefits of a 'planetary health diet' consisting mainly of fruits, vegetables and grains.*

Year 2:

- *201 "Sustainable Healthcare" covers the climate impact of agriculture and livestock farming, linking red meat consumption to this carbon footprint and a global epidemic of obesity and other non-communicable diseases.*

Year 3:

- *302 "Diabetes Nutrition" outlines the health benefits (improved blood sugar levels, weight loss and decreased risk of major chronic degenerative diseases) from a diet centred on plant-based food.*

Year 4:

- *Base week 2 "Principles of Health Promotion and Disease Prevention" discusses how reducing red meat consumption has environmental and individual health benefits.*
- *Base week 2 "Sustainable Healthcare" slides 9 explains the individual health and environmental benefits of plant-based diets and reducing red meat consumption*

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	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 fulfil this metric. (2 points) .	2
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 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing	1

less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	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) (1 point)	1

Score explanation:

1. ***The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment (2 points)***

Year 3:

- *308 "Sustainable Prescribing" discusses an increase in prescribed medications, resulting from an aging population and increased non-communicable disease prevalence (e.g. obesity). This is linked to the contribution of pharmaceuticals to the NHS carbon footprint.*

Year 4:

- *GP bookend teaching "Sustainability in General Practice" discussed reducing over-medicalisation, over-treatment and over-investigation when discussing the environmental impact of the NHS. Students are encouraged to practise de-medicalisation and non-pharmaceutical advice for mild management cases in a GP setting. This included delayed prescribing etc.*

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 fulfil this metric. (2 points).***

Year 3:

- *308 "Sustainable Prescribing" explains how overprescribing of diclofenac to cattle in India, has lead to critical decline in vultures scavenging cattle carcasses, with subsequent effects on public health.*

Year 4:

- *"Introduction to Sustainable Healthcare" explored when prescribing is inappropriate and when to reduce medications.*

3. ***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 point)***

Year 3:

- *308 "Sustainable Prescribing" discusses non-pharmaceutical treatment options for depression, e.g. tackling wider determinants, talking therapies, social prescribing including access to green spaces and physical activity and avoiding long term SSRI prescribing.*

Year 4:

- *Rheum/Derm "Poly and mono arthritis cases" prioritises non-pharmacological management of osteoarthritis using exercise, footwear, pacing, weight loss, etc.*

4. ***Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)***

Year 2:

- *201 "Improving Sustainability of Surgery" outlines a number of un-sustainable practices in surgery, how these contribute to the total carbon footprint of surgery, and then offers methods to combat them. These methods include reducing disposable items, minimising unnecessary appointments, reusing equipment, optimising sterilisation and recycling.*

Year 4:

- *Base week 2 "Sustainable Healthcare, Medical Products and PPE" by Prof Bhutta analyzes the factors involved in surgery and their contribution to the surgery's carbon footprint, different approaches to hysterectomy and the emissions of each, and the outweighed impact of disposable products on CO_2 production.*

5. ***The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)***

Year 2:

- *201 "Improving Sustainability of Surgery" discusses the types of anaesthetic drugs and their carbon footprint, in an effort to minimise the carbon footprint of surgery.*
- *201 "Sustainable Healthcare, Medical Products and PPE" discusses the importance of reducing nitrous oxide from anaesthetic use.*
- *202 "Anaesthetic Drugs" explores the carbon footprint of anaesthetic drugs, particularly desflurane.*

Year 3:

- *308 "Sustainable Prescribing" states that anaesthetic gases are a large contributing factor to the NHS' carbon footprint.*

6. ***The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)***

Year 3:

- *308 "Respiratory Pharmacology" compares the CO2e of DPIs and pMDIs, and encourages students to consider the carbon footprint of inhalers when prescribing.*
- *308 "Sustainable Prescribing" compares the carbon emissions of pMDIs and DPIs to miles a car could drive to achieve the same emissions (4 miles vs 175 miles).*

Year 4:

- *"Introduction to Sustainable Healthcare" shows sustainable respiratory care and inhalers.*
- *GP bookend teaching "Sustainability in General Practice" covered a list of practical measures to reduce the carbon footprint of a GP, including to reduce medication use, reduce anaesthetic gases, reduce pre-op blood tests and reduce prescribing.*

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

Year 4

- *Base week 2 "Sustainable Healthcare, Medical Products and PPE" by Prof Bhutta analyzes the disposable items used in surgeries and their contribution to the surgery's carbon footprint, different approaches to hysterectomy and the emissions of each, and the outweighed impact of disposable products on CO_2 production.*

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)

No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)

Score Assigned:	2

Score explanation:
BSMS teaches how to discuss the health effects of climate change through a variety of lectures throughout the years.
Year 1:

- *103 "Lifestyle Factors and Respiratory Disease" emphasises the importance of exposure to chemical fumes and pollutants in a history for exacerbations of asthma.*
- *104 SSC "How does human health relate to climate & ecological breakdown?" by Dr Lisa Page includes discussion on the effect of climate change on health, including mental health. This allows students to discuss these effects with patients.*

Year 4:

- *Base week 1 "Dermatology History Taking and Terminology" has points on living abroad in hotter climates and outdoor working. Outdoor workers have more UV exposure. Living near the equator increases risk of skin cancer.*
- *Base week 2 "Sustainable Healthcare" includes a teaching example of how to consider the environmental history when treating a patient for breathlessness and also to minimise the environmental impact of treating patients.*

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)
Only **elective** coursework includes strategies for taking an environmental history. (1 point)
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)

Score Assigned:	2

Score explanation:
BSMS discusses the environmental history in the following lectures.
Year 1:

- *101 "Clinical Practice Workshop" Respiratory history teaching includes exposure history taking which includes asking about exposure to asbestos/MDF in the social history.*
- *110 Personal & Professional Development "Environment and Health" explores the importance of including the environment in the history and facilitates small group discussion on how to best achieve this.*

Year 3:

- *302 "The Case of The Bloody Cough" reinforces the importance of knowing a patient's environmental history, including environmental exposure, cold and homelessness for TB diagnosis.*
- *302 "The Case of The Unfair Diagnosis" includes environmental exposure as a risk factor for lung cancer.*

Year 4:

- *Base week 2 "Principles of Health Promotion and Disease Prevention" highlights features of an individual's history that affects their health, including access to clean water, food and air, and any environmental risks.*

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	2
Score explanation: *BSMS is continuing to explore ways to incorporate planetary health teaching into the curriculum - and specifically into clinical modules in years 3 and 4. The aim is to integrate content on the health impacts of climate change - specifically exposure to extreme heat - and also content on sustainable healthcare that is specific to individual clinical specialities.* *Anna Jones is a member of the core working group that is leading the development of the MSC-ESH alliance which is focussing on ways to achieve greater content of planetary health content across medical school curricula.*	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	4
Score explanation: *Planetary health is well discussed throughout years 1-4 of the BSMS Medicine degree.* *There is a large number of relevant research projects available to year 4 students and 2 SSCs, 1 for each of years 1 and 2, to allow students to explore an interest in sustainability relevant to their medical practice.* *Some topics are extremely well integrated into the curriculum throughout all years of the degree. For example the respiratory effect of pollution is a topic discussed in detail throughout all years, and is still frequently discussed in lectures not oriented in planetary health.* *Other topics rely on lectures based on sustainable healthcare to be mentioned throughout the degree. This includes the environmental impact of surgery and the health and environment co-benefits of non-pharmaceutical treatment. In year 5 there is very little teaching on planetary*	

health, and even though there is not a large amount of formal teaching in this year, it would be good to implement more sustainability throughout.

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	1
Score explanation: *Dr Anna Jones is the Project Lead for Sustainable Healthcare in Undergraduate Medical Education at BSMS, working towards the key learning outcomes:* 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*	

Section Total (66 out of 72)	**92%**

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Interdisciplinary Research

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	3

Score explanation:
BSMS Sustainable Healthcare Group consists of 6 core researchers with a focus on the environmental, social and financial components of sustainability in healthcare. The team includes:

- *Professor Mahmood Bhutta (DPhil FRCS)*
  - *Areas of research: Environmental sustainability in healthcare systems; labour rights in healthcare supply chains*
- *Dr Chantelle Rizan (BSc (Hons), MBBCh, MRes, MRCS (ENT), PhD)*
  - *Areas of research: Sustainable Surgery*
- *Dr Anna Jones (MBBS, DTM+H, MPH, FFPH, PGCert Med Ed, FHEA)*
  - *Clinical Teaching Fellow: Project Lead for Sustainable Healthcare in UG Med Ed*
  - *Areas of research: Medical education*
- *Dr Arianne Shahvisi (BA, MSc, MSt, PhD)*
  - *Research areas: Reproductive ethics; feminist bioethics; migration; gender; race*
- *Dr Lisa Page (BSc, MRCPsych, MSc, PhD, PGCert)*
  - *Areas of research: Environmental Epidemiology, Sustainability & Health, Public Health*
- *Dr Mei Trueba (BA, BSc, MA, MSc, PhD)*
  - *Areas of Research: Occupational Health and Safety (OHS); social policy; health policy; health risk perceptions and behaviours; health risk management; diseases of poverty and marginalisation*

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?	
There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)	
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 points)	
There is **no** dedicated department or institute. (0 points)	
Score Assigned:	3

Score explanation:
BSMS Sustainable Healthcare Group functions on the core values of:

- *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*

This group includes Professor Mahmood Bhutta, who directs a transdisciplinary hub to decarbonise commissioning and delivery of healthcare. This hub has been 1 out of 7 to receive a joint total of £42 million from the National Institute for Health and Care Research (NIHR) and UK Research and Innovation (UKRI) to provide high quality research with the aim to reduce health inequalities and ensure the UK's transition to net zero.

The University of Sussex conducts research under the theme of "Planetary health", studying the intersection of environmental health and human health, globally. This research strives to follow the United Nations Sustainability and Developmental Goals (SDGs). And primarily covers the goals: good health and wellbeing (SDG 3), clean water and sanitation (SDG 6), affordable and clean energy (SDG 7), climate action (SDG 13), life below water (SDG 14) and life on land (SDG 15).

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?
Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)
Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)

No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points)
There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:	2

Score explanation:
A partnership between the University of Sussex and BSMS using Sussex Sustainability Research Programme funding has previously worked in Papua New Guinea, establishing a clinic for medically neglected indigenous communities, expanding conservation areas to protect 150km^2 of biodiverse rainforest. Current projects aim to scale-up this approach in conservation areas across 5 provinces in Papua New Guinea. Current Sussex Sustainable Research Programme efforts are to support those affected most by climate change, including:

- *Territorial and Indigenous Rights*
- *Ecosystem protection*
- *Innovative sustainable education for young people*
- *Combining public health and biodiversity in Oceania*
- *Trade and deforestation regulations*

However the decision making process for which topics receive funding is unclear.

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?
There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)
There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)
The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)
There is **no** website. (0 points)

Score Assigned:	3

Score explanation:
BSMS Sustainable Healthcare Group's website outlines sustainable research done in the medical school. University of Sussex "Planetary Health" section under the Sussex Sustainability Research Programme website, localises research that links sustainability and health.

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

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

Score Assigned:	4

Score explanation:
BSMS and the University of Brighton co-hosted a conference titled SHARE (Sustainable Healthcare, Academic Research and Enterprise) on 25/06/2024 which covered the theme "Fast-tracking resilient and environmentally sustainable health systems" The University of Sussex hosted a symposium on 14/11/2024 which showcased research from the Sussex Sustainability Research Programme (SSRP) including two presentations regarding health:

- *Integrating action and policy on health, biodiversity and climate in Papua New Guinea, Bougainville and across Melanesia by Jo Middleton*
- *Co-creating adolescents' menstrual health research in Sussex, UK by Chi Eziefula*

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 points)
No, the institution is **not** a member of such an organisation. (0 points)

Score Assigned:	1

Score explanation:
BSMS is a member of the Planetary Health Alliance, a team of universities committed to understanding and addressing climate change and its impact on health.

Section Total (16 out of 17)	**94%**

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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.*

3.1. Does your institution partner with community organisations to promote planetary and health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3

Score explanation:
BSMS' outreach and widening participation programme BrightMed features a teaching session to year 12s detailing the carbon footprint of the NHS, what contributes to this carbon footprint and how to minimise this. The University of Brighton's Sustainability Team supported a number of community partnerships through the Community University Partnership Programme (CUPP) which ended in mid 2024. Projects from these partnerships include:

- *Microplastics and Chichester Harbour*
- *Community solutions to the Housing Crisis*
- *Improving Children and Young People's Mental Health*

The University of Brighton also runs free educational talks titled "Brains at the Bevy" hosted at a local community owned pub. Here university academics and local experts share a talk from their field, often about environmental health. These talks include:

- *Global warming threatens our frozen planet – why you should care about glaciers, ice sheets and permafrost. -Dr Lorna D Linch*
- *Blue Spaces – Water and Wellbeing for everyone -Dr Catherine Kelly and Sadie Rockcliffe*

3.2. Does your institution offer community-facing courses or events regarding planetary health?

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

Score Assigned:	3

Score explanation:
BSMS runs the widening participation programme BrightMed, which provides an insight into studying medicine for young people aged 13-18 living across Sussex. One of the sessions taught to year 12s outlines the environmental impact of healthcare, and how to reduce environmental impact without compromising on patient outcomes or experience. BSMS co-hosts the annual SHARE conference, open to the public live or by video recordings. In 2024 the theme was "Fast-tracking resilient and environmentally sustainable health systems" explored through a number of presentations from experts in the university, health professionals from local NHS trusts and internationally.

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:	2

Score explanation:
BSMS sends all students a monthly newsletter that includes a section on sustainability: how to reduce individual climate impact, sustainable developments on campus and student initiatives to benefit the environment.

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?
Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	2
Score explanation: *The SHARE conference 2024, co-hosted by BSMS, offered a number of talks detailing the implementation of environmentally sustainable healthcare systems. This was attended by health professionals in a range of disciplines, as well as academics, researchers and students.* *University Hospitals Sussex outlines their plan to develop a communications and engagement programme in their Green Plan. The aim of this is to engage all staff in sustainable healthcare, embed sustainable healthcare principles across the trust and to help achieve their net zero carbon footprint goal for 2040, while following patient first principles.* *BSMS offers the postgraduate module "Sustainable Healthcare Principles" for professionals wishing to further study the area.*	

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	0
Score explanation: *The UHSussex news page covers all recent developments in sustainability across the hospital trust.*	

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?	
Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: *BSMS Sustainable Healthcare Group has posted a series of lectures on youtube, covering a range of topics combining health and sustainability. For example "Health and Climate Change" explains*	

how climate change contributes to air pollution, increasing incidence of respiratory conditions, cardiovascular disease, dementia, breast cancer, type 2 diabetes and foetal cognitive deficits.

Section Total (11 out of 14)	**79%**

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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.*

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)	
No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2

Score explanation:
Sustainability QI projects are offered to BSMS students in year 4, under their independent research project. Here students choose a topic to undertake research on, some of the titles offered include

- *The 'gloves off' campaign: promoting environmentally friendly practice across Sexual Health and HIV departments*
- *Observational audit on single-use items in an intensive care unit – evaluating the carbon footprint associated with the disposal of plastic packaging in level 3 patients*
- *Improving sustainability in sexual health: a pilot project reintroducing reusable stainless steel vaginal specula at a sexual health clinic*
- *Helping the NHS reach Net Zero by improving asthma control and reducing short-acting beta-2 agonist overuse: a quality improvement project at a Brighton GP surgery*

BSMS is currently advertising their annual student Prize in Sustainable Healthcare in which students in year 3, 4 and 5 are invited to submit an abstract to form the focus area of a quality improvement project in sustainable healthcare. Up to 5 students will be invited to present to a panel, with one student being awarded £100.

The University of Sussex celebrates students who have shown outstanding climate leadership in their own communities, and are committed to student and community engagement in sustainability, by awarding "Climate Leader Scholarships" to upwards of 5 students annually.

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

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)	
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	2

Score explanation:
In year 4 of the BMBS Medicine degree at BSMS, students are required to undertake an Independent Research Project. This offered students 8 different research projects (2023/24) relating to planetary health, with the titles:

- *The 'gloves off' campaign: promoting environmentally friendly practice across Sexual Health and HIV departments*
- *Observational audit on single-use items in an intensive care unit – evaluating the carbon footprint associated with the disposal of plastic packaging in level 3 patients*
- *Improving sustainability in sexual health: a pilot project reintroducing reusable stainless steel vaginal specula at a sexual health clinic*
- *Helping the NHS reach Net Zero by improving asthma control and reducing short-acting beta-2 agonist overuse: a quality improvement project at a Brighton GP surgery*
- *Environmental waste and human health: Effect of microplastics on the immune system*
- *Should the UK ban bottled water? A systematic review of benefits and harms of bottled versus tap water to inform a public communications strategy*
- *Is there a moral obligation to protect the health of future generations as emphasised in the Lancet Rockefeller Commission on Planetary Health?*
- *Do the Objects of Nature Have Legal Rights? If so, what are they, and are they compatible with Planetary Health Medicine?*

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

BSMS sustainable Healthcare Group website features information on recent education, relevant research, and news as well as contact details for their core team.

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
Yes, there is a student organisation **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2
Score explanation: *BSMS Green Medicine society is a student organisation that works towards sustainability in healthcare. The group shares advice and education on sustainability in medical practice and wider student life via their Instagram. This group has been supported by staff through talks titled "The Zero Waste Movement", and "Introduction to Sustainability in Medicine" which featured 3 guest speakers Prof. Mahmood Bhutta, Dr Lisa Page and Dr Arianne Shahvisi.*	

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	1
Score explanation: *The University of Sussex's student union includes a "Student Sustainability Committee". This committee consists of elected students, who make decisions on sustainability related matters after open discussions with students. This committee works alongside Student Sustainability Reps, elected from each academic school (which includes BSMS) who provide feedback to staff on sustainability projects or education.*	

4.6. 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)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1

Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1

Score explanation:

1. ***Projects where students can gain experience in organic agriculture and sustainable food systems.***

The University of Sussex features the society "Sussex Roots" based around community gardening. The society is run by student volunteers and provides safe spaces and food for people and wildlife. The university has given this group an allotment on the campus to carry out their work.

2. ***Events related to planetary health with students as the intended audience.***

BSMS hosted the SHARE conference 2024, including a number of talks based around sustainable healthcare systems. Recordings are available here.

3. ***Events where students learn from members of a local environmental justice community and climate and environmental challenges they face and how health professionals may support them.***

BSMS' SHARE conference 2024 included a talk on the "Role of health professionals in supporting the shift towards a sustainable food system" by Dr Shireen Kassam, a member of the Plant-Based Health Professionals UK. This organisation advocates whole food plant-based nutrition and lifestyle medicine to prevent and treat chronic diseases.

4. ***Cultural arts events, installations or performances related to planetary health.***

There are no events of this description hosted by the institution.

5. ***Local volunteer events related to building community resilience to anthropogenic environmental impacts.***

The society "Sussex Roots" allows students to volunteer in a community garden twice a week, building an understanding in sustainable produce and community involvement.

6. ***Wilderness or outdoor programs.***

There are a number of active student organisations based around hiking at both of BSMS' parent organisations, including the UoS Walking and Hiking Society, and UoB Hiking and Tracking Society.

Section Total (14 out of 15)	**93%**

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Campus Sustainability

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

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
Score explanation: *Both of BSMS' parent organisations (University of Brighton and University of Sussex) both have a team of salaried staff dedicated to sustainability. These can be found here:* • *University of Brighton, Sustainability team* • *University of Sussex, Sustainability team*	

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

BSMS' parent organisation, the University of Sussex, has a sustainability plan (2021) to achieve a net zero carbon footprint by 2035. This is to be achieved by:

- *Investing in infrastructure that does not rely on fossil fuels.*
- *Increasing energy efficiency across campus.*
- *Being accountable for all carbon production. Including, financial investments, commuting, supply chains and waste.*

BSMS' other parent organisation, the University of Brighton, is currently aiming for net zero in 2050. By following the guidance:

- *Reducing energy demand*
- *Generating clean, affordable energy*
- *Responsible energy procurement*

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes institution buildings are **100%** powered by renewable energy. (3 points)	
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	1
Score explanation: *The University of Sussex Sustainability Annual Report 2023 states "In 2021/22, we, as a University, used 237,308 gigajoules of energy, 37.7% of this came from low carbon sources, i.e. solar, renewable electricity and combined heat and power. This was a 5% increase on the previous year (with 14.4% of energy used self-generated from renewable sources).". The University of Brighton has installed over 2500 solar panels across campuses.*	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?
Yes, sustainable building practices are utilised for new buildings on the intitution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

Sustainability is **not considered** in the construction of new buildings. (0 points)	
Score Assigned:	1

Score explanation:
The University of Sussex undertook an audit in 2021 to assess energy efficiency of all of its buildings, identifying cost-effective ways of reducing energy usage. With this information, the university is currently completing a more detailed audit of lighting and heating in the least energy efficient 20% of buildings. New or refurbished building developments on the University of Sussex campus must meet BREEAM 'Excellent' standard for sustainable construction. However the University has been criticised for the recent West Slope Development; destruction of the most biodiverse area on campus roots, destruction of 93 trees and destruction of the university's cheapest accommodation option, which was a functional halls of residence. Examples of sustainable initiative in new UoS buildings include: rain water harvesting on the Jubilee building and student centre, grey water recycling in East Slope halls of residence, reusing shower water for toilet flush systems. The University of Brighton is working to optimise current buildings energy efficiency using solar panels and energy-efficient LED lighting. Although there are many practices for sustainable initiatives in new buildings, the new 'West Slope Development' on the University of Sussex campus has been far from sustainable so sustainable building practices are clearly inadequate.

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

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)	
The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)	
The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)	
Score Assigned:	2

Score explanation:
BSMS pre-clinical teaching is held on both the University of Sussex campus and University of Brighton, Falmer campus. Both campuses have routine bus access from central Brighton, and are both a short walk from Falmer station, with regular trains to and from local towns and cities. BSMS student ID allows students free bus travel between the two campuses. Both the University of Sussex and the University of Brighton encourage students to cycle where possible, by:

- *Having Beryl bikes available on both universities' campuses, offering rental bikes between campus and the city.*
- *Free showers for cyclists at the University of Sussex*
- *Free bike parking, with plenty of bike racks on both campuses*

To attend placements outside of the Brighton and Hove area, BSMS' student travel policy encourages students to walk, cycle or use public transport. This offers a financial incentive to cycle

at 20p/mile and offers to fully reimburse public transport. This policy also recommends students share car rides where possible, with an increased milage rate of 5p/mile/passenger.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)	
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)	
There is **no** compost or recycling program at the medical school. (0 points)	
Score Assigned:	2
Score explanation: *The University of Sussex offers 'mixed recycling', 'food waste' and 'mixed glass' bins across campus for students and staff. The University of Brighton also has recycling bins around campuses, but no widespread compost recycling. The University of Sussex has introduced food waste recycling in the recently redeveloped "Eat Central" and in newer accommodation buildings, with the aim of offering this to all student residences in the future.*	

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	3
Score explanation: *The University of Sussex provides food and drink to "Doctor's Orders" a café based inside the BSMS building. The University of Sussex provides locally produced goods, including Blakes for meet, Real Patisserie for breads and Munneries for fruit and vegetables. The University of Sussex offers a Sussex Saver meal, a hot vegan meal for £2 that changes daily. This is an affordable and reliable way to get food on campus that is environmentally friendly. UoS has also partnered with Foodsteps to provide Carbon labelling of food bought from campus eateries, grading the carbon footprint on each item and highlighting with a traffic light system. The University of Brighton has a Sustainable Food Policy which outlines strategies to achieve environmental responsibility.*	

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	1
Score explanation: *The University of Sussex has a Sustainable Procurement Principles Framework, set out in 2021 with nine areas of sustainability that organisations that supply goods and services should be committed to. However these targets are neither quantifiable or mandatory for collaboration with the university, and the university was heavily criticised by students for its collaboration with building company Balfour Beatty for the new West Slope Developments. In the University of Brighton's Procurement Strategy, one of the seven procurement objectives (PO5) is "meets the University's sustainability objectives in all procurement activity including equalities and diversity and carbon reduction initiatives". These goals are quantifiable and state current and target values for each.*	

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?	
Every event hosted at the institution **must** abide by sustainability criteria. (2 points)	
The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)	
There are **no** sustainability guidelines for institution events. (0 points)	
Score Assigned:	1
Score explanation: *Neither of BSMS' parent institutions, the University of Brighton or University of Sussex have mandatory sustainability criteria but both encourage sustainable travel and have sustainable food guidelines to minimise carbon footprint*	

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

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
Score explanation: *BSMS laboratories have been awarded Bronze LEAF accreditation for 'Exemplary actions undertaken to improve the sustainability practices'.University of Sussex labs are adhering to the Laboratory Efficiency Assessment Framework (LEAF), with 5 labs across the campus achieving Bronze status. This shows commitment to research with sustainable methods, which include greater use of reusable products, developments in single-use materials and minimising use of fossil fuel-based products. University of Brighton labs are also working towards this accreditation. Clinical skills teaching at BSMS prioritises reusing equipment, minimising waste and energy use.*	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	4
Score explanation: *The University of Sussex has divested in fossil fuels since 2020, in lines with their Sustainable Investment Policy. Since then the university has joined almost 60 other institutions to sent an open letter to finance companies urging them to reduce their investment in fossil fuels. The majority of the universities' assets are now held in a "Sustainable Managed Investment Portfolio" The University of Brighton has been fossil free since 2021, as published in a press statement*	

Section Total (23 out of 32)	**72%**

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BSMS won a 'Gold Award' in the 'Green Impact Awards', run by the University of Sussex' National Union of Students. Departments at the university were graded on the implementation of new sustainable practices, and of the 645 actions submitted BSMS was responsible for 337, making them the highest scoring school, team or department at Sussex.

Section Overview

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

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

**Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-_4%) receives a "--". For example, a percentage score of 78% would be a B+.*

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	66/72 = 92%	A
Interdisciplinary Research (17.5%)	16/17 = 94%	A
Community Outreach and Advocacy (17.5%)	11/14 = 79%	B+
Support for Student-led Planetary Health Initiatives (17.5%)	14/15 = 93%	A
Campus Sustainability (17.5%)	23/32 = 72%	B
Institutional Grade	**(92x0.3 + 94x0.175 + 79x0.175 + 93x0.175 + 72x0.175) = = 86.6%**	**A**

Report Card Trends

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