



Planetary Health Report Card: *University of Aberdeen*



UNIVERSITY OF
ABERDEEN

CELEBRATING
525 YEARS
1495 – 2020

2021-2022 Contributing Team:

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Summary of Findings

Overall	C
Curriculum	C
<ul style="list-style-type: none"> Planetary Health topics are covered in the core curriculum at Aberdeen but they are a brief overview rather than in-depth analysis. A more in-depth analysis of topics is available through student chosen SSC projects. The curriculum is in the process of being enhanced with the themes of planetary health and sustainable medicine and work is being undertaken to improve teaching and learning on this topic. 	
Interdisciplinary Research	C-
<ul style="list-style-type: none"> Aberdeen lacks a specific institute for interdisciplinary PH research but has appointed an Interim Director for the Health, Nutrition & Wellbeing theme for interdisciplinary research. It is hoped this will enable further work in this theme. A group of interested clinicians with a primary research interest in planetary health are enhancing the teaching opportunities available to students interested in planetary health and sustainability medicine and facilitating projects and departmental education. The university itself does have a sustainability steering group- a relationship between this group and potential research opportunities could be expanded to include the medical school. 	
Community Outreach and Advocacy	C-
<ul style="list-style-type: none"> The medical school has a Students for Global Health society and MedAid society. We also have recently established a sustainable medicine society. Before the pandemic began the medical school contributed to both Café med and Café Sci events which were designed with a patient and community audience. Hopefully as lockdown restrictions continue to ease we can start these again. Occasionally communications from AUSA and school newsletters do detail sustainable healthcare topics. 	
Support for Student-Led Initiatives	C
<ul style="list-style-type: none"> Overall, the medical school is supportive of student-led PH initiatives, offering their time, funding, and enthusiasm for student work. The administration could further support student-led initiatives by facilitating connections between research mentors and students and creating grant opportunities for students to undertake PH work as summer placements or elective projects. 	
Sustainability	B
<ul style="list-style-type: none"> Aberdeen University has a committed steering group dedicated to campus sustainability and they are working towards 2040 net zero emissions. The medical school itself is powered by a low carbon network and supported by back up from the national grid. The medical school (Suttie Centre) was built to achieve BREEAM excellence and won an award in the bespoke category. 	

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the *Planetary Health Alliance* as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth”. For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (for example, undergraduate departments (USA), other related departments eg Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

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

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>The University of Aberdeen runs a sustainable medicine humanities module in which students can undertake a student-driven project in 3rd year. Students can also choose to cover areas of sustainable healthcare in their 5th-year elective projects.</i></p>	

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Effect of the environment and heat exposure was briefly covered in the infection course during 3rd year as part of the core curriculum at Aberdeen. Implementation of further coverage of racial disparities is being added to the dermatology core curriculum to discuss heat exposure.</i></p>	

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

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

Aberdeen covered extreme weather during the travel medicine lecture in the infections unit of the core curriculum- specifically effects of flooding, adverse weather (thunderstorms) and earthquakes. Natural disasters and their impact on healthcare were also briefly covered during a lecture on the Environmental Influences on Health.

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

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

This topic was briefly discussed during the infection unit and environmental influences on health lecture with regards to malaria: the expansion of mosquito zones and length of transmission season due to global weather changes.

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

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

At Aberdeen, this topic was briefly described in the cardiovascular block of teaching in the first-year curriculum. The discussion of nanoparticles and air pollution was also mentioned in the respiratory block in first year. The Foundations of Primary Care also briefly covers the relationship between extreme heat and cardiorespiratory disease during a lecture. At Aberdeen, we run a Sustainability

Session with Year 5 in PPB which is part of the core curriculum although it hasn't been delivered due to COVID but it will be rolled out next academic year.

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

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

During dermatology teaching, the effects of extreme temperature on the body, including cardiovascular health, were covered. The Foundations of Primary Care course also briefly covers the relationship between extreme heat and cardiorespiratory disease during a lecture.

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

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

This topic was not covered in the curriculum or elective opportunities.

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

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

At Aberdeen, there is an option to explore these topics through elective work with the sustainable medicine team and as a year 3 SSC. These projects are largely student selected but the above would be supported by supervisors in the sustainability team.

Additionally, there is a global health society that runs information evenings, guest lectures and film nights addressing all aspects of global health, Some of the evenings are environmentally based and aim to cover some of the above, along with local initiatives to improve our sustainability at medical school and at the hospital campuses. These could be used to springboard projects for summer projects or elective work.

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

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

This topic was not covered in the curriculum or elective opportunities.

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

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

Climate change and health inequalities were addressed in global health lectures during the 3rd year curriculum. This was also addressed in the global health lectures incorporated in the obstetrics and gynaecology teaching.

Global health teaching is now started in 1st year with an introductory talk by Dr Jolene Moore and it covers all aspects of global health but mentions physical and climate issues.

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

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

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

1	This topic was covered in elective coursework.
0	This topic was not covered.
<i>Obstetrics and gynaecology ran a series of global health lectures incorporated into the core curriculum in the 3rd year curriculum at Aberdeen.</i>	

12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<i>The option to undertake research in this area for SSC or elective would be possible with the support of the sustainable medicine team- one student undertook a project to understand the barriers to young families accessing the green space in Aviemore (a town near our Inverness campus) to determine if there were barriers which could be overcome to promote health and encourage green travel. The student-run Global Health society ran an evening lecture on the environmental policies at the university discussing subjects like recycling, active transport and what companies the university use as suppliers and their environmental policies.</i>	

13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
3	Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
0	This topic was not covered.
<i>This content was not covered in core curriculum or elective coursework.</i>	

14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women,

communities of colour, children, homeless populations, and older adults?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Toxins were addressed by the Foundations of Primary Care module at the University of Aberdeen but not with respect to those with low SES, women, communities of colour, children, homeless populations, and older adults.</i></p>	

Curriculum: Sustainability

15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>This topic was briefly covered in the nutrition lectures during the cardiovascular block but there are also opportunities to do student-run projects on nutrition and summer internships working with the school of nutrition. The medical school nutritank society also runs events with the lifestyle medicine society which address these topics. There is a MOOC available from the Rowett Institute on nutrition and wellbeing.</i></p>	

16. Does your medical school curriculum address the carbon footprint of healthcare systems?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Safe and correct waste disposal is covered in an online module which students are required to sit every year to pass into the next year. Student-run global health society ran an evening discussing the recycling opportunities of clinical waste. Students are able to undertake projects assessing and working with the environmental department at the university on waste management and attend meetings as part</i></p>	

of their sustainable medicine humanities module to understand the waste systems at the university and hospitals in which we work.

17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (1 point each)

1	Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions
1	The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfil this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK.
1	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
<p><i>Waste production, and the impact of inhalers, anaesthetic gases, pharmaceuticals and over-medicalisation are all covered during the Sustainable Medicine SSC. However, these are yet to be incorporated into the main curriculum.</i></p>	

Curriculum: Clinical Applications

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

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

This topic was not covered in the curriculum or elective opportunities

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

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

At the University of Aberdeen during our clinical skills training, we are trained to take a full social history which includes discussing occupational hazards, recent holidays for sun exposure and discussing the living conditions of patients to look at environmental exposure.

Curriculum: Administrative Support for Planetary Health

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

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|----------|--|
| 4 | Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education. |
| 2 | Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education. |
| 0 | No, there are no improvements to planetary health education in progress. |

In recent years there has been the inclusion of the sustainable medicine SSC for students to pick and there is a group of clinicians working to improve the sustainability teaching in the core curriculum. As students, we are well supported to take on projects which focus on environmental medicine and sustainable healthcare. The structures and teams are in place and every year the curriculum has new areas added.

21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?

- | | |
|----------|--|
| 6 | Planetary health/ESH topics are well integrated into the core medical school curriculum. |
| 4 | Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. |
| 2 | Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s). |

0	There is minimal/no education for sustainable healthcare.
<p><i>The University of Aberdeen covers the issues of planetary health concepts both in terms of our systems-based teaching- in relevant systems teaching, global health lectures, infection lectures and through our foundations of primary care module throughout first to third year. There are also ample student opportunities to carry out sustainable medicine projects with good support available.</i></p>	

<p>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?</p>	
1	Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.
<p><i>There is currently no one employed to oversee this aspect of the curriculum.</i></p>	

Section Total (32 out of 69)	32
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Interdisciplinary Research

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

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?

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

There are clinicians within the medical school who have a primary research focus on planetary health and healthcare sustainability. They support student projects and facilitate departmental understanding of the importance of sustainable healthcare and planetary health along with sitting on national committees. Dr Morven Wilson, Dr Kenneth Barker and Dr Dan Baraclough are 3 clinicians leading the sustainable medicine curriculum at the University of Aberdeen. There are clinicians working on the impact of telehealth within our healthcare region- PMID: 20511579.

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

3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
<p><i>There is a department at Aberdeen focused on the Environment and Biodiversity which has a Planetary Health focus as well as a broader focus on an interdisciplinary theme at Aberdeen. A new Interim Director for the Health, Nutrition & Wellbeing theme was appointed in Feb 2021.</i></p> <p><i>A department headed by Dr Jennie Macdiarmid a Professor of Sustainable Nutrition and Health exists. Her research is interdisciplinary and about the impact of dietary habits on climate change and land use, with implications for food and nutrition security. This includes understanding eating behaviours in particular how to move people to eating healthy and sustainable diets, especially in the UK. She led the Livewell project funded by the WWF, the first to model sustainable diets that were both nutritionally adequate and had lower impact on climate change. She leads a multi-disciplinary research team in Aberdeen and is the nutrition lead on several large interdisciplinary international research projects, including DEVIL (delivering food security on limited land) and AFRICAP (Agriculture and food-system resilience: increasing capacity and advising policy). The research is based in the UK and internationally. In 2015 Jennie won the Principal's Prize for Public Engagement with Research in Biomedical Sciences Awarded by the University of Aberdeen and Wellcome Trust.</i></p>	

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

1	No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.
0	There is no process, and no efforts to create such a process.
<p><i>Nothing has been established yet but highlighting this through this report will enable discussions on how this could be implemented. Already a good public engagement program is up and running within the medical school and university as a whole and therefore there are avenues to improve this.</i></p>	

4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?	
3	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.
2	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.
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.
<p><i>As part of the university of Aberdeen website there is a sustainability section which states the university sustainability goals, our commitment to sustainability at the university and highlights research being conducted. There is a specific section dedicated to the university focus to be net zero by 2040.</i></p>	

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.

2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
<i>Healthcare Improvement Scotland jointly hosted a symposium with our units : Health Services Research Unit and the Health Economics Research Unit at the University of Aberdeen in 2017.</i>	

6. Is your medical school a member of a national or international planetary health or ESH organisation?	
1	Yes, the medical school is a member of a national or international planetary health or ESH organisation
0	No, the medical school is not a member of such an organisation
<i>Aberdeen has signed up for the SDG Accord- which ensures that we report against each of the 17 Sustainable Development Goals (a framework which treats all 17 goals as an interlinked series of challenges that need to be tackled in concert, not independently).</i>	

Section Total (7 out of 17)	7
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Community Outreach and Advocacy

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

1. Does your medical school partner with community organisations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organisations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organisation to promote planetary and environmental health.
1	The institution partners with community organisations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
<p><i>The medical school has a Students for Global Health society https://www.facebook.com/sfgh.aberdeen and MedAid society https://www.facebook.com/MedaidAberdeen/. Also, the medical school links with wider university societies such as veg bag cooperative (delivering veg boxes to campus from local producers) and setting up swap shops within the medical school. These initiatives are all supported by AUSA environment and ethics committee. The University is a part of a number of sustainability networks- Environmental Association for Universities and Colleges, NorthEast Scotland Climate Change Partnership and Sustainable Scotland Network.</i></p>	

2. Does your medical school offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.

1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The medical school has not offered such community-facing courses or events.
<p><i>Before the pandemic began the medical school contributed to both Café med and Café Sci events which were designed with a patient and community audience. There had been previous events in this which had focused on planetary health. Café connect has provided podcasts on a range of topics during the pandemic. However, there have been none focusing on planetary health.</i></p>	

3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	Students do not regularly receive communications about planetary health or sustainable healthcare.
<p><i>Communications from AUSA and school newsletters do detail sustainable healthcare topics.</i></p>	

4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?	
2	Yes, the institution or main affiliated hospital trust offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
1	Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
0	There are no such accessible courses for post-graduate providers
<p><i>There are no courses with a focus on planetary health.</i></p>	

5. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about environmental health exposures?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centres have accessible educational materials for patients.
<p><i>The respiratory department have asbestos related literature and posters. Elsewhere in the hospital there are active travel posters, diet and exercise posters and posters demonstrating the effects of smoking. Lots of environmental health in corridors however, nothing related to climate change directly is advertised yet to patients.</i></p>	

6. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated hospitals have accessible educational materials for patients.
<p><i>No resources on climate change and some on environmental exposure.</i></p>	

Section Total (6 out of 14)	6
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Support for Student-Led Planetary Health Initiatives

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

young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

1. Does your institution offer support for medical students interested in enacting a sustainability initiative/QI project?	
2	Yes, the institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The medical school encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate.
0	No, the institution does not offer opportunities or support for sustainability initiatives or QI projects.
<p><i>Score explanation: Aberdeen University run both sustainability humanities modules and electives which are funded by the university to enable students to carry out projects on sustainable medicine.</i></p>	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
2	The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
1	There are research opportunities for students to perform research related to planetary health/sustainable healthcare but these require student initiative to seek these out and carry them out in their spare time.
0	There are no opportunities for students to engage in planetary health/sustainable healthcare research.
<p><i>Students that chose to undertake the Sustainable Medicine humanities SSC undertake projects in planetary health and sustainable healthcare. There are also opportunities for students to apply for grants for funding for summer projects, which cover costs of accommodation, expenses and research.</i></p>	

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

4. Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
2	Yes, there is a funded student organisation with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.
0	No, there is not a student organisation at my institution dedicated to planetary health or sustainability in healthcare.
<i>At Aberdeen, there is a student-run Global Health Society and Wilderness Society who run environmental events and information evenings can apply for funding from both the university and external sponsorship and are also funded by student subscriptions.</i>	

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?	
1	Yes, there is a student representative that serves on a medical school or institutional decision-making council.
0	No, there is no such student representative.
<i>There is no such student representative</i>	

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

Section Total (8 out of 15)	8
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Campus Sustainability

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

1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school.
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability.
1	There are no salaried sustainability staff, but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
<p><i>At Aberdeen there is a sustainability steering group who are responsible for the university's sustainability and social responsibility goals. They have been most helpful in carrying out this report and are invested in the outcome of the report and have said they would support student projects and interdisciplinary research for students hoping to pursue future projects.</i></p>	

2. How ambitious is your medical school/institution's plan to reduce its own carbon footprint?	
4	The institution has a stated goal of carbon neutrality by 2030 or earlier and the medical school / institution has a well-defined and adequate plan in place to achieve this goal.
3	Yes, there is a stated carbon neutrality goal by at least 2040 and the medical school/institution has a well-defined and adequate plan in place to achieve this goal.

2	Yes, there is a stated carbon neutrality goal by at least 2040, but the medical school/institution has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
0	There is no stated goal for reduction of CO2 emissions.
<p><i>Aberdeen 2040 strategy commits the University to achieving net-zero emissions before 2040. Colleagues from across the University are working to define the parameters of that commitment and how it will be pursued, with the initial findings of a working group to develop our net-zero thinking shared with the Sustainability Steering Group in September 2020.</i></p> <p><i>Our approach will encompass emissions from all sources (i.e. Scopes 1, 2 & 3) and all sites associated with the University.</i></p> <p><i>To reiterate this commitment we have also signed the Global Climate Letter and the One Planet Pledge.</i></p> <p><i>During academic year 2019/20 we moved to a Renewable Energy Guarantee of Origin (REGO) backed tariff with our framework grid electricity supplier. This means that we receive a zero carbon electricity supply from EDF for specific sites.</i></p>	

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilise renewable energy?	
3	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.
<p><i>The medical school building is fed from the jointly owned, with the NHS, private electrical wire and district heating network. This is a low carbon network which includes a gas fired CHP engine and biomass boiler. However the demand out strips the supply at peak times, so there is also back up grid electricity and gas fired boilers.</i></p>	

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

3 Yes, sustainable building practices are utilised for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.

2 Sustainable building practices are utilised for new buildings on the medical school campus, but most old buildings have not been retrofitted.

1 Sustainable building practices are inadequately or incompletely implemented for new buildings.

0 Sustainability is not considered in the construction of new buildings.

The medical school was designed and built to achieve BREEAM excellent and was recognized for an award in the bespoke category. Links [here](#) and [here](#).

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

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

1 The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.

0 The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

The medical school runs a free campus bus service to allow students to travel from the central campus and halls of residence to the medical school. There are cycle lanes to allow safe cycling on main arteries to the medical school. There are ample cycle storage and safe cycle storage on

the medical school campus. When travelling by car there is instruction from the Medical School to carpool where possible.

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

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

All medical school buildings have a bin system which allows for composting and recycling with adequate signage detailing what waste in what bin.

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?

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

Campus services has a carbon reducing policy and report successful changes such as changing to recyclable coffee cups, discount for bringing keep cups and have a sustainability criteria for procurement of food and beverages for the outlets on campus- [summary of carbon reducing policy](#).

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

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

Procurement at University of Aberdeen medical school adheres to a [procurement policy](#) which takes into account our sustainability goals as a university and medical school.

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

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

There are no sustainable guidelines for medical school events.

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

2 Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.

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

0 There are no efforts at the medical school to make lab spaces more sustainable.

At the medical school in Aberdeen the only lab spaces we use are the Anatomy Facility. In the lab spaces recycling bins are available for waste, lights are motion sensed and we are asked to buy lab coats rather than disposable aprons for our studies. Further work could be done to make workbooks virtual and focus more on online teaching away from paper based work.

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

4 The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.

3 No, the institution is entirely divested from fossil fuels.

2 The institution has partially divested from fossil-fuel companies.

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

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

The university does hold investments with fossil-fuel companies.

Section Total (21 out of 31)	21
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Grading

Section Overview

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

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

Planetary Health Grades for the University of Aberdeen School of Medicine

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

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	$(32 / 69) \times 100 = 46\%$	C
Interdisciplinary Research (17.5%)	$(7 / 17) \times 100 = 41\%$	C-
Community Outreach and Advocacy (17.5%)	$(6 / 14) \times 100 = 43\%$	C-
Support for Student-led Planetary Health Initiatives (17.5%)	$(8 / 15) \times 100 = 53\%$	C
Campus Sustainability (17.5%)	$(21 / 31) \times 100 = 68\%$	B
Institutional Grade	50%	C