

Planetary Health Report Card:

Royal College of Surgeons in Ireland University of Medicine & Health Sciences



2021-2022 Contributing Team:

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Summary of Findings

Overall	В
Curriculum	C

- At RCSI, Planetary health (PH) connections exist throughout the medical curriculum. The administration also made a concerted effort to increase the PH content as a result of the ongoing curriculum reform process which will see a new curriculum introduced in 2022
- **Recommendations:** Planetary health should be included as a comprehensive portion of a module (and labelled as such) as opposed to just one learning outcome under the umbrella of a Public Health / Epidemiology module.

Interdisciplinary Research

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- RCSI has now formally joined the Global Consortium on Climate and Health Education.
- **Recommendations:** The medical school should commit to recruitment of additional PH researchers, and endeavor to establish at least one collective research group which is dedicated exclusively to better understanding the intersection of PH and human health research.

Community Outreach and Advocacy

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- This is the area where RCSI performed the weakest. However, RCSI is actively working with other universities in Ireland to develop planetary health / sustainability curriculum content.
- **Recommendations:** Further community outreach and engagement of the surrounding community when making decisions about sustainability practices would significantly bolster the university's performance in this area.

Support for Student-Led Initiatives

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- Overall, RCSI performed very well in this area. The administration is supportive of student-led initiatives, including planetary health initiatives. The administration consistently offer their time, funding, and enthusiasm for student-led work.
- **Recommendations**: The administration could further support student-led initiatives by facilitating more planetary health-specific connections between research mentors and students, and by developing a student fellowship program designated for PH.

Campus Sustainability

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- RCSI has shown strong initiative in this area by developing a Sustainability Committee consisting of both student and staff members, as well as by developing the RCSI Green Campus Initiative which serves to champion and inform University policies with respect to Sustainability. The Beacon status was awarded to RCSI with the Centre for Sustainable Health care in 2022.
- **Recommendations**: The development of a formal Sustainability office with salaried staff who would assist in oversight of the implementation and progress of sustainability goals and practices would likely significantly strengthen the University's sustainability efforts.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the *Planetary Health Alliance* as "a solutions-oriented, transdisciplinary field and social movement focused on analyzing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." 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 mold 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.
 Pediatrics, 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).

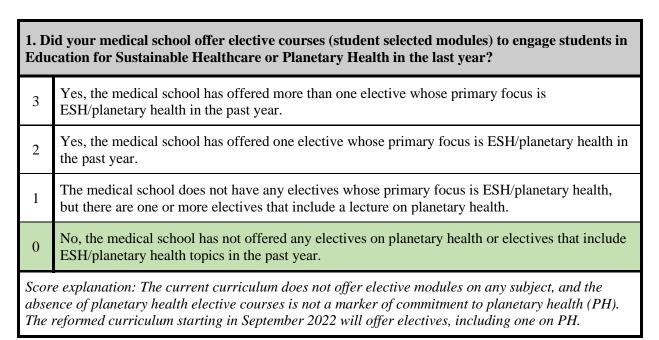
Literature Review of Metrics

Added to our resources this year, the Planetary Health Report Card <u>Literature Review by Metric</u> 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



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.	
Неа	Score explanation: As part of the Graduate Entry Medicine (GEM) 1 curriculum at RCSI, the Public Health and Epidemiology module includes a lecture on Environmental Health (PHE34) which addresses the associations between climate change and extreme temperature health risks. There is half	

of a lecture in the GEM and Direct Entry Medicine (DEM) programme that focuses on PH and examines sustainable healthcare.

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.

Score explanation: As part of the GEM1 and DEM curriculum at RCSI, the Public Health and Epidemiology module includes a lecture on Environmental Health (PHE34) which addresses the impacts of extreme weather events on individual health. This is also covered in half of the 'Global Health Challenges' lecture.

This topic was not covered.

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

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 explanation: As part of the GEM1 curriculum at RCSI, the Public Health and Epidemiology module covers the impact of climate change on changing patterns of infectious disease in the following lectures: "Environmental Health" (PHE34), "Epidemiology and Controlling Infectious Disease" (PHE36) and "Global Health Challenges".

5. Does your medical school 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 explanation: As part of the GEM1 curriculum at RCSI, the Public Health and Epidemiology module covers the impact of climate change on cardiorespiratory effects in the "Environmental Health" lecture (PHE34) and the "Mapping the NCD epidemic" (PHE31) lecture. This topic is also covered in the GEM2 curriculum in the Gastrointestinal medicine module clinical lectures "Global Environmental Health" (L16) and "Sanitation" (L17) as well as in the GEM2 Respiratory module pathology lecture "Pulmonary Fibrosis" (P03). This was also addressed in the "Global Health Challenges" lecture.

	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.	
Scor	Score explanation: This topic was briefly covered in the "Global Health Challenges" 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.	
Score explanation: This topic was briefly covered in the "Global Health Challenges" lecture.		

	8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
3	This topic was explored in depth by the core curriculum.	
2	This topic was briefly covered in the core curriculum.	
1	This topic was covered in elective coursework.	

0 This topic was not covered.

Score explanation: The Public Health and Epidemiology module in the GEM1 curriculum at RCSI addresses this topic briefly in the "Environmental Health" lecture (PHE34). The GEM2 curriculum covers water security in the Gastrointestinal module clinical lectures "Global Environmental Health" (L16) and "Sanitation" (L17). This topic was also covered in a "Global Health Challenges" lecture.

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

Score explanation: The RCSI GEM1 curriculum covered the impact of climate change on marginalized populations in the "Environmental Health" lecture in the Public Health & Epidemiology module. The topic was also covered in the GEM2 curriculum Gastrointestinal medicine module clinical lectures "Global Health Challenges"

- 10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?
 - This topic was explored in depth by the core curriculum.
 - 2 This topic was briefly covered in the core curriculum.
 - 1 This topic was covered in elective coursework.
 - 0 This topic was not covered.

Score explanation: The RCSI GEM1 curriculum covered the unequal health impacts of climate change in the "Environmental Health" lecture in the Public Health & Epidemiology module. The topic was also covered in the GEM2 curriculum Gastrointestinal medicine module clinical lectures "Global Environmental Health" (L16) and "Sanitation" (L17).

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.	
Scor	Score explanation: This topic is not covered in the curriculum at present.	

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.

O This topic was not covered.

Score explanation: Human-caused environmental threats were briefly covered in the GEM1 curriculum in the "Environmental Health lecture in the Public Health & Epidemiology module.

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

 Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education

 Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.

 Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.

 This topic was not covered.

 Score explanation: This topic is not covered in the curriculum at present.
- 14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?
 3 This topic was explored in depth by the core curriculum.
 2 This topic was briefly covered in the core curriculum.

- This topic was covered in elective coursework.
 This topic was not covered.
- Score explanation: The RCSI GEM1 curriculum covered the impact of anthropogenic environmental toxins on marginalized populations in the "Environmental Health" lecture in the Public Health & Epidemiology module. The topic was also covered in the GEM2 curriculum Gastrointestinal medicine module clinical lectures "Global Environmental Health" (L16) and "Sanitation" (L17). This topic was also covered in the "Global Health Challenges" lecture.

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.
Score explanation: This topic is not covered in the curriculum at present.	

16. I	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.	
Scor	Score explanation: This topic was also covered in the "Global Health Challenges" lecture.	

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

Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room

The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.

The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions

The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric.

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.

The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment

Score explanation:

Waste production within the healthcare system and strategies for reducing waste are covered in the GEM1 curriculum in 'Global Health Challenges'.

The merits of social prescribing are covered in the Epidemiology and Public Health module in GEM1 in addition to coverage in student group projects on social prescribing in GEM1.

Curriculum: Clinical Applications

18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	No, there are not strategies introduced for having conversations with patients about climate change
Score explanation: The curriculum does not currently include strategies on having conversations with patients about the health effects of climate change.	

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. Score explanation: the curriculum does not currently include strategies for taking an environmental history.

Curriculum: Administrative Support for Planetary Health

	20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.	
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.	
0	No, there are no improvements to planetary health education in progress.	
Score explanation: RCSI has undertaken a curriculum reform process which will see a revised medical		

Score explanation: RCSI has undertaken a curriculum reform process which will see a revised medical curriculum implemented, starting in the 2022 academic year. This has included efforts to improve education for planetary health education. The University has also formed a Sustainability committee consisting of both staff and student committee members. In conjunction with Irish Doctors for the Environment (IDE) RCSI has formed a network representing the 7 medical universities across the island of Ireland entitled "Climate Health in Medical Education" (CHIME) in an effort to develop planetary health curricula for medical students. More information here: https://www.rcsi.com/dublin/about/faculty-of-medicine-and-health-sciences/academic-departments/public-health-and-epidemiology

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.

Score explanation: RCSI has recently become a <u>Beacon Institution</u> for the Centre for Sustainable health care, and is training staff in SuS QI. Link here:. A population health framework has also been developed for the medical curriculum which is underpinned by health inequalities and sustainability practices – this forms part of the GEM programme assessment.

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

Score explanation: Dr. Debbi Stanistreet is the senior RCSI faculty member leading the efforts with respect to curricular integration of planetary health and sustainable healthcare

Section Total (37 out of 69)

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Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

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

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school? Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability. 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. There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school. No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation: Projects such as SURGE-Africa and partnerships with The College of Surgeons East Central and South Africa (COSECSA) are led by faculty members in the RCSI school of medicine. Link here: https://www.rcsi.com/surgery/global-surgery/our-work/surg-africa. Additional work includes Dr. Debbi Stanistreet's research on household air pollution, and involvement in the Enhancing Belmont Research Action (ENBEL) 2020 project linking climate change to public health outcomes (running until 2023). Prof Kevin McGuigan's work also focuses on Sanitation.

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

Score explanation: RCSI does not have a single department dedicated to Planetary Health, however, there are currently over 60 researchers working across the Dept of Public Health and Epidemiology and the Institute of Global Surgery collaborating to improve sustainable advancement of surgical and public health initiatives at community and regional level to make a lasting impact on global health.

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?

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

Score explanation: Substantial overseas work involves community-based participation, with communities inputting into decision making surrounding household air pollution and sanitation projects.

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

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

Score explanation: RCSI has a recently developed institutional website as part of the RCSI Green Campus Initiative, which lists the aims and ongoing efforts of the RCSI Sustainability Committee. Opportunities for students to contribute to sustainable development efforts can be found here: https://www.rcsi.com/society/un-sustainable-development-goals. Green campus website: https://www.rcsi.com/dublin/green-campus-initiative.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health? Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted a conference on topics related to planetary health in the past three years. The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.

Score explanation: RCSI was recently responsible for arranging a one-day virtual satellite conference called 'Connecting Health and Climate Change'. The conference attracts around 2000 public health professionals from across the EU to generate dialogue and practical outputs. More info here: https://ephconference.ew/pre-conference-337. RCSI also hosted the Times Higher Education University Impact Forum SDG 3 in July 2021. https://www.timeshighered-events.com/impact-health-forum-2021

No, the institution has not hosted a conference on topics related to planetary health in the past

0

three years.

6. Is your medical school a member of a national or international planetary health or ESH organization?		
1	Yes, the medical school is a member of a national or international planetary health or ESH organization	
0	No, the medical school is not a member of such an organization	
Score explanation: As of 2022, RCSI has formally joined the Global Consortium on Climate and Health Education at Columbia University.		

Section Total (16 out of 17)	16

Back to summary page <u>here</u> Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Community Outreach and Advocacy

<u>Section Overview:</u> This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most

affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of color. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

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

Score explanation: RCSI requires Foundation year projects for the DEM programme (not part of the GEM programme) that entail community partnership. RCSI is also an active member of the Irish Climate and Health Alliance: https://climateandhealthalliance.wordpress.com. The university contributed to the 'plant a native tree' project, and the Green light-up of the college building during COP26 in November 2021.

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. O The medical school has not offered such community-facing courses or events. Score explanation: RCSI does not offer community-facing courses or events of this nature.

3. Does your medical school 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.

 Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.

 Students do not regularly receive communications about planetary health or sustainable
- Score explanation: Weekly emails from the RCSI Students Union often contain material pertaining to sustainable healthcare topics as advertised by student environmental societies or the RCSI Green Campus initiative.
- 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.
- Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- There are no such accessible courses for post-graduate providers

healthcare.

Score explanation: While no Continuing Medical Education (CME) courses are currently offered at RCSI, staff have been sent to attend Centre for Sustainable healthcare courses.

- 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 centers have accessible educational materials for patients.

Score explanation: No affiliated medical centers have these materials available for patients.

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

1	Some affiliated hospitals have accessible educational materials for patients.	
0	No affiliated hospitals have accessible educational materials for patients.	
Score explanation: No affiliated medical centers have these materials available for patients.		

Section Total (4 out of 14)	4
Section Total (4 out of 14)	4

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Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Support for Student-Led Planetary Health Initiatives

<u>Section Overview:</u> 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? Yes, the institution *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. The medical school encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate.

No, the institution does not offer opportunities or support for sustainability initiatives or QI

Score explanation: RCSI offers Student Engagement and Partnership (StEP) grants to students for project proposals that are designed to improve the curriculum or the University as a whole in any specific area, including sustainability. This past year, one student project was designed to increase

0

projects.

recycling / sustainability in RCSI laboratories.

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

- The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
- 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.
- There are no opportunities for students to engage in planetary health/sustainable healthcare research.

Score explanation: RCSI offers funded summer research projects to medical students which cover a variety of field-specific areas including those related to sustainable healthcare and planetary health.

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. 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. 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. There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: Opportunities for RCSI students to contribute to sustainable development efforts can be found here: https://www.rcsi.com/society/un-sustainable-development-goals. Green campus website: https://www.rcsi.com/dublin/green-campus-initiative

4. Does your medical school 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 organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
- Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support.
- No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: RCSI has both an Environmental Society, a White Coats for Planetary Justice society and a RCSI Green Campus initiative / Sustainability Committee consisting of both student and staff members.

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

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

Score explanation: RCSI has recently developed a Sustainability Committee which includes student representatives.

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) Projects where students are able to gain experience in organic agriculture and sustainable food 1 systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects. Panels, speaker series, or similar events related to planetary health that have students as an intended audience. 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. Cultural arts events, installations or performances related to planetary health that have students as 1 an intended audience. Local volunteer opportunities related to building community resilience to anthropogenic 1 environmental impacts. Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)

Score explanation: Ms. Amina J. Mohammad, Deputy Secretary General of the UN recently gave the Millin lecture at RCSI (Feb 2022), discussing the interface of education and SDG, and discussing local environmental challenges with RCSI senior faculty member Dr. Debbi Stanistreet. The RCSI Wildnerness society regularly organises hiking trips and outdoor outings for students on a weekly basis.

Section Total (12 out of 15)	12
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Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Campus Sustainability

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

1. Does your medical school and/or institution have an Office of Sustainability? 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. 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. There are no salaried sustainability staff, but there is a sustainability task force or committee There are no staff members or task force responsible for overseeing campus sustainability Score explanation: RCSI developed a Sustainability Committee consisting of both students and staff. In

2022, one designated staff member was formally appointed Sustainability Officer, a role used to be

covered by one of the college's project managers since 2010.

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.

O There is no stated goal for reduction of CO2 emissions.

Score explanation: The college completed an Energy Performance Contract (EPC) and has currently reduced energy usage and carbon footprint by 28%. The target is to be carbon neutral by 2030.

The redevelopment of Block A of the Ardilaun Centre into a new campus is said to help significantly reduce carbon emissions through energy efficient buildings.

RCSI is also engaged in a comprehensive review by the UK Climate and Health Alliance of Net Carbon Zero in health care. RCSI was recently awarded Beacon Status in recognition of it's commitment to sustainable development. More information here: https://www.rcsi.com/dublin/news-and-events/news-news-article/2022/02/rcsi-is-first-institution-in-ireland-to-be-awarded-beacon-status

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

Score explanation: RCSI uses 100% green electricity with all power produced by windfarms.

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

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

Score explanation: The recent 26 York St project achieved Leadership in Energy and Environmental Design (LEED) Gold accreditation and future projects will all be aspiring to the highest accreditations for environmentally responsible building practices.

https://www.igbc.ie/certification/leed/

The RCSI Green Campus Initiative states that the University is "committed to the procurement of green energy for all future tenders to new and existing sites". Source: https://www.rcsi.com/dublin/green-campus-initiative. The redevelopment of Block A of the Ardilaun Centre into a new campus is said to help significantly reduce carbon emissions through energy efficient buildings.

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

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

Score explanation: RCSI has considerable campus biking infrastructure, including bike racks and bike storage facilities directly on campus. Increased accessibility to or promotion of subsidized public transport options to peripheral clinical placement locations across the country could be improved.

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

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

Score explanation: RCSI has recycling programs accessible to students and staff (in cafeteria and cafes), campus bins collect organic waste for composting.

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

Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.

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.

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.

There are no sustainability guidelines for food and beverages.

Score explanation: All restaurant cutlery at RCSI is compostable, which is part of an ongoing effort to remove all single-use plastics in 2022/23. Whenever possible, restaurant products are locally sourced e.g., Cloud Picker Coffee, a local artisan brand.

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

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

Score explanation: Example includes the use of cleaning products that are green and free from environmentally-impacting chemicals. As per the RCSI Green Campus Initiative, the university is committed to "giving full consideration to the sustainable use of resources in all management decisions". Source: https://www.rcsi.com/dublin/green-campus-initiative

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.
- The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
- 0 There are no sustainability guidelines for medical school events.

Score explanation: As per the RCSI Green Campus initiative, the university recommends sustainability measures but they are not incentivized or required.

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

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

Score explanation: There are Green Labs objectives in development, with a pilot project in the St. Stephen's Green campus, that if successful will be rolled out across all College Labs. An RCSI Student Engagement and Partnership project has developed an initiative to assist with making lab spaces at the University more environmentally sustainable with respect to recycling and minimizing the use of disposable laboratory equipment. The RCSI Green Campus Initiative is also dedicated to making lab spaces more environmentally sustainable.

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 or has made a commitment to fully divest, but currently still has fossil fuel investments. 1 The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment. O Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

Score explanation: RCSI has been using 100% green electricity, with all powers produced by wind farms, for several years. As per the RCSI Green Campus Initiative, RCSI is a signatory of the Principles of Responsible Investment (PRI) and applies ethical considerations when making investments, including not investing in fossil fuels. In 2017, Ireland voted to become the first country to fully divest public money from fossil fuels. In the area of ethical investment, RCSI is committed to responsible investment principles suited to a Healthcare Education, not-for- profit institution. RCSI aligns to principles of ESG – Economic, Social and Governance – by applying ethical considerations when making investments, including not investing in fossil fuels, tobacco or armaments. This ethical statement is now reflected on the RCSI website: https://www.rcsi.com/dublin/green-campus-initiative

Section Total (25 out of 31)	25

Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Grading

Section Overview

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

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

Planetary Health Grades for the Royal College of Surgeons in Ireland School of Medicine The following table presents the individual section grades and overall institutional grade for the RCSI School of Medicine on this medical-school-specific Planetary Health Report Card.

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	(37 / 69) x 100 = 54%	С
Interdisciplinary Research (17.5%)	(16/ 17) x 100 = 94%	A
Community Outreach and Advocacy (17.5%)	(4 / 14) x 100 = 29%	D
Support for Student-led Planetary Health Initiatives (17.5%)	(12 / 15) x 100= 80%	A-
Campus Sustainability (17.5%)	(25 / 31) x 100 = 81%	A-
Institutional Grade	66 %	В

Report Card Trends

Section Overview

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

