



Planetary Health Report Card (Medicine) 2026:

Leiden, Netherlands medical university centre



Leids Universitair
Medisch Centrum

2025-2026 Contributing Team:

- Students: *Pip Oostwoud, Jelle van der Marck*
- Faculty Mentors: *Laura Warmerdam*

*Primary Contact: Pip Oostwoud, pip.oostwoud@gmail.com

Summary of Findings

| | |
|--|-----------|
| Overall Grade | C+ |
| Curriculum | B+ |
| <ul style="list-style-type: none"> In 2026, LUMC demonstrates strengthened and more systematic integration of planetary health within the core medical curriculum. Climate change, environmental determinants of health, sustainable healthcare systems and health equity are more incorporated across multiple stages of the medical education and supported by clearer learning objectives compared to last year. Environmental change and patient care, prevention and health system responsibilities are linked and discussed in various courses. Compared to 2025, content is less fragmented and more longitudinally structured, with improved alignment between courses. Sustainable healthcare principles are more consistently embedded with mandatory components on top of the elective initiatives. The newly incorporated Themeweek ‘Planetary Health and Sustainability’ covers a broad spectrum of important planetary health principles. Improvement in the medical curriculum could be made by focussing on ensuring consistent integration of the applied clinical component of Planetary Health in each rotation during the master of Medicine that LUMC offers. Also, community based learning opportunities as well as developing interprofessional education on sustainable healthcare delivery could be worked on for next coming years. | |
| Interdisciplinary Research | C+ |
| <ul style="list-style-type: none"> Similar to last year, the university remains an active member of the Planetary Health Alliance, and several LUMC faculty members continue to conduct research on planetary health and sustainable healthcare. LUMC also hosted another conference on sustainable healthcare this year. While no major progress has been made on the recommendations from the previous year, there are promising opportunities to build on the current foundation. Establishing a dedicated department or research cluster focused on planetary health, and engaging community organizations in shaping the research agenda, would strengthen LUMC’s role in this field. It is recommended that LUMC take proactive steps toward these developments in the coming year. | |
| Community Outreach and Advocacy | C- |
| <ul style="list-style-type: none"> LUMC and Leiden University (LUGO) play an increasingly structured role in professional dialogue on climate change and health. Through student lectures and professional education the institution contributes to regional awareness and capacity building. Advocacy efforts in terms of patient information are more aligned with research strengths and sustainability priorities. The structurally embedded collaboration with public communities and advocacy objectives could be focused on to ensure systematic implementation and evaluate impact and visibility of climate health initiatives. | |
| Support for Student-Led Initiatives | C |
| <ul style="list-style-type: none"> Student-led planetary health initiatives at LUMC and Leiden University receive institutional recognition and sometimes advisory participation. Students can be engaged in curriculum feedback, research activities, advocacy efforts and operational sustainability discussions. Compared to 2025, support structures are better visible and embedded within institutional frameworks, with expanded opportunities for meaningful participation. Online visibility and outreach of student initiatives could however still be improved. To ensure continuity and long-term impact, LUMC could establish stable funding streams for student initiatives and strengthen structured student body influence by integrating a long-term student planetary health advocacy council within the institutional board. | |

| Campus Sustainability | C- |
|---|-----------|
| <ul style="list-style-type: none">• Compared to last year, all sub-metrics of Campus Sustainability have remained unchanged. However, this does not imply that LUMC made no progress. The LUMC sustainability core team has grown rapidly, laboratory spaces have become increasingly sustainable, resulting in more LEAF certifications, and progress has been made toward improving the sustainability of the hospital's food and beverage.• The metrics remained the same mainly because LUMC focused on strengthening existing strong areas rather than addressing weaker aspects. It is recommended that LUMC take proactive steps to tighten climate targets, increase the use of renewable energy, establish sustainability guidelines for events, and enhance transparency regarding investments in fossil fuel companies. | |

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many health professional 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 health professional training. It is imperative that we hold our institutions accountable for educating health professional students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

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

Definitions & Other Considerations

Definitions:

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

specifically targeted for medical students, can meet this metric.

- **Environmental history (Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to the taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

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

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

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

Other considerations:

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

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered d

isciplines. A link to the 2025 literature review by metric is available [here](#).

Planetary Health Curriculum

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

Curriculum: General

| | |
|--|---|
| 1.1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year? | |
| Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points) | |
| Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. (2 points) | |
| The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. (1 point) | |
| No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points) | |
| Score Assigned: | 1 |
| <p><i>Score explanation:</i></p> <p>The half Minor 'Lifestyle Medicine and Primary Care' at the LUMC, NL, contains one lecture dedicated to Planetary Health and primary care. The half Minor* 'Clinical Immunology' at the LUMC, NL, includes a lecture about Planetary Health in relation to infectious diseases.</p> <p>The half Minor 'Global Health' provides students with a perspective on planetary health in the lecture Impact of climate / environmental change on health systems worldwide.</p> <p>*Half minor = 2,5 month of an elective course</p> | |

Curriculum: Health Effects of Climate Change

| | |
|---|--|
| 1.2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 points) | |

| | |
|---|---|
| Score Assigned: | 3 |
| <p><i>Score explanation:</i></p> <p>The Theme-week 'Planetary Health and Sustainability' in year 2 and 3 of the bachelors of Medicine at the LUMC, NL features lectures that mention the health risks due to extreme heat and climate change. Topics such as health risk due to heat waves and floods are mentioned in the introductory lectures. The health risks due to climate change and extreme weather events are recurring topics of interest during the lectures, coursework and panel discussions during this theme week that is specifically organised to pay attention to planetary health. In the courses 'Early lifephase' and 'Late lifephase' during year 2 of the Bachelor Medicine these topics are covered also.</p> <p>Also, the elective honours course 'Beyond the Boundaries of Healthcare' contains one lecture session on planetary health. In this lecture, a notion on the relationship between extreme heat, health risks, and climate change is made.</p> | |

| | |
|---|---|
| 1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i></p> <p>The Theme-week Planetary Health and Sustainability in year 2 and 3 of the bachelors of Medicine at the LUMC, NL mentions briefly some health risks due to extreme weather and climate change, covering both the individual health as the impact on health systems.</p> <p>The half Minor Lifestyle Medicine and Primary Care (year 3) at the LUMC, NL, contains one lecture dedicated to Planetary Health and first line care. The half Minor Clinical Immunology at the LUMC, NL, includes a lecture about Planetary Health in relation to infectious diseases.</p> <p>The half Minor Global Health (year 3) provides students with a perspective on planetary health in the lecture Impact of climate / environmental change on health systems worldwide. These lectures included focus on the impacts of extreme weather events on individual health and/or on healthcare systems.</p> | |

| | |
|--|--|
| 1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |

| | |
|---|---|
| This topic was not covered. (0 points) | |
| Score Assigned: | 3 |
| <p><i>Score explanation:</i> The course 'Mechanisms of Disease 1' in year 2 at the LUMC focuses on Infectious diseases and includes education on planetary health and vector borne diseases in context of climate change. There are also electives such as the half Minor Clinical Immunology and the half Minor Global Health that address the impact of climate change on the changing patterns of infectious diseases. The theme-week Planetary Health and Sustainability in year 2 and 3 of the bachelors of Medicine at the LUMC, NL also cover this topic.</p> | |

| | |
|--|---|
| 1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> At the master of medical school at LUMC an e-learning on planetary health for the course 'health and prevention' mentions the respiratory health effects of climate change and air pollution. This course is dedicated to health management and prevention of disease. In the upcoming year, the Bachelor Course 'Thorax and Kidney' will address this also.</p> | |

| | |
|--|---|
| 1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> At LUMC the master of medicine includes an elaborate e-learning on planetary health for the placement health and prevention. In this e-learning the cardiovascular health effects of climate change are discussed. During the half Minor Global Health and the Honours course 'Beyond the boundaries of healthcare' this topic is briefly mentioned.</p> | |

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

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

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

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

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

Score Assigned:

2

Score explanation:

During the Themeweek 'Planetary Health and Sustainability' the effects of climate change on students' mental health is being discussed. The neuropsychological effects of air pollution are also briefly mentioned.

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

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

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

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

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

Score Assigned:

3

Score explanation:

The individual relationship between diet and environmental impact is covered in the lecture on healthy diet and gut health in the second year of Medicine at the LUMC. Planetary health, health and the ecosystem are emphasised and a connection with extractivism or planetary boundaries is made during the Themeweek Planetary Health and Sustainability.

1.9. 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?

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

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

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

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

Score Assigned:

2

Score explanation:

During the Masters the course 'Health and Prevention' dives deeper into the social health determinants. Social (in)equity and its relation with environment and sustainability in the Netherlands is being discussed as part of that. It highlights specific examples of environmental factors disproportionately impacting lower SES communities such as mould in buildings. In addition, The half Minor Primary Care at the LUMC, NL, contains one lecture dedicated to Planetary Health and first line care. The half Minor Global Health provides students with a perspective on planetary health in the lecture Impact of climate / environmental change on health systems worldwide. Both these electives addressed the outsized impact of climate change on marginalised populations.

1.10. 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. (3 points)

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

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

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

Score Assigned:

2

Score explanation:

The half Minor Global Health provides students with a perspective on planetary health in the lecture Impact of climate / environmental change on health systems worldwide. It thus addresses the unequal regional health impacts of climate change globally. During the Themeweek 'Planetary Health and 'Sustainability' this topic is also briefly covered.

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

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

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

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

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

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

Score Assigned:

3

Score explanation:

At LUMC, during the course 'Early life phase' there is a lecture and mandatory preparatory e-learning dedicated to addressing the reproductive health effects of industry-related environmental toxins, such as air pollution, microplastics and pesticide exposure.

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

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

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

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

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

Score Assigned:

2

Score explanation:

During the Masters the course 'Health and Prevention' some human-caused environmental threats such as air pollution effects are briefly discussed. However, hazards like flood risks and heat waves—which are significant concerns for our surrounding community—are not covered in regular coursework. The effects of light pollution are also not covered extensively in the curriculum yet. During the Themeweek 'Planetary Health and Sustainability' a podcast and project to walk around the hospital area briefly touches on these topics.

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

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

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

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

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

Score Assigned:

0

Score explanation:

This topic is not covered yet in the curriculum. It is, however, important to note that no or few (prominent) indigenous populations in the Netherlands are known of. In regard to global health education or education that is held partly abroad, lectures on this are highly recommended to add fundamental acknowledgement of a lifestyle in balance with our environment as well as fostering decolonising perspectives.

1.14. 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, Indigenous populations, and older adults?

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

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

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

| | |
|---|---|
| This topic was not covered. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> The half Minor Primary Care at the LUMC, NL, contains one lecture dedicated to Planetary Health and first line care. In this lecture, some time is allocated to address the outsized impact of climate change and toxins on certain populations. During the course ‘Early Lifephase’ the outsized impact on children, pregnant women and the effect of SES is explored in a e-learning.</p> | |

Curriculum: Sustainability

| | |
|--|---|
| 1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 point) | |
| Score Assigned: | 3 |
| <p><i>Score explanation:</i> During the first year course ‘Control and Metabolism’, a symposium in context of nutrition covers this topic. The Course ‘Abdomen’ in the third year also puts emphasis on this topic. Both go in depth around health risks and benefits of a variety of diets. Environmental and health benefits plant-based diet or Mediterranean diet is thoroughly covered in these lectures. The Themeweek ‘Planetary Health and Sustainability’ also addresses the benefits of a plant-based diet.</p> | |

| | |
|---|---|
| 1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems? | |
| This topic was explored in depth by the core curriculum. (3 points) | |
| This topic was briefly covered in the core curriculum. (2 points) | |
| This topic was covered in elective coursework. (1 point) | |
| This topic was not covered. (0 points) | |
| Score Assigned: | 3 |
| <p><i>Score explanation:</i> In a variety of courses the carbon footprint of healthcare systems is discussed. For example in the Themeweek ‘Planetary Health and Sustainability’ or the Course ‘Thorax and Kidney’ in a lecture on pharmacology and in The Course ‘Mechanisms of Disease 1’ in the lecture ‘Introduction to planetary Health’. In the master preparatory course as well as other placements focus is put on sustainable diagnostics.</p> | |

| 1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each) | Score |
|--|-------|
| The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment (2 points) | 2 |
| The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfil this metric. (2 points) . | 2 |
| The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point) | 1 |
| Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point) | 1 |
| The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point) | 1 |
| The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point) | 1 |
| Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point) | 1 |
| <p><i>Score explanation:</i></p> <ul style="list-style-type: none"> • The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment is covered throughout the curriculum, e.g. in the placement 'Health and Prevention' focusing on sustainable choices for therapy. • 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 are discussed in the course 'Pharmacology' in year 2. • The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits is covered in the courses focusing on health promotion throughout all six years. • Environmental impact of surgical healthcare on planetary health and the climate crisis, and how it can be mitigated is discussed in the course 'Abdomen' as well as the symposia days of the Surgery placements. • The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions is covered in the course 'Abdomen' as well as the half minor 'Sense and Non-sense in Anesthesiology'. • The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers is discussed in the courses "Thorax and Kidney' and Pharmacology classes. | |

- Waste production within healthcare clinics and strategies for reducing waste in clinical activities is covered in various preparatory courses for clinical placements in the master phase.
- All of the above mentioned components are also being discussed during the Themeweek 'Planetary Health and Sustainability'.

Curriculum: Clinical Applications

1.18. 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?

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

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

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

Score Assigned:

0

Score explanation:

The LUMC does not offer any strategies on having conversations with patients about climate change. This would well be fit into both the bachelor and master education on professional skills.

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

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

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

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

Score Assigned:

0

Score explanation:

Leids Universitair Medisch Centrum (NL) does not yet offer any strategies for taking an environmental history or exposure history. This would well be fit into both the bachelor and master education on professional skills.

Curriculum: Administrative Support for Planetary Health

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

Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)

| | |
|--|---|
| Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education. (2 points) | |
| No, there are no improvements to planetary health education in progress. (0 points) | |
| Score Assigned: | 4 |
| <p><i>Score explanation:</i> Leids Universitair Medisch Centrum (NL) has established a faculty-wide Impulse team dedicated to coordinating the implementation of planetary health education across all curricula. Workshops have been conducted to enhance the professional development of lecturers and teachers, and these sessions—as well as additional information on planetary health education—are publicly available. Moreover, staff members are encouraged to integrate this education into all of their courses, with the team continuously providing updates, assistance, and support.</p> | |

| | |
|---|---|
| 1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum? | |
| Planetary health/ESH topics are well integrated into the core medical school curriculum. (6 points) | |
| Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points) | |
| Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s) . (2 points) | |
| There is minimal/no education for sustainable healthcare. (0 points) | |
| Score Assigned: | 6 |
| <p><i>Score explanation:</i> At the University of Leiden Medical Centre (Netherlands), the core curriculum now includes enhanced education on planetary health across all courses, in addition to the existing electives that will continue to be offered. The theoretical courses, which span the three-year bachelor’s program, cover topics such as pharmaceutical effects, the impact of pollution on cardiovascular and lung health, and the environmental co-benefits of certain lifestyle habits. This content is integrated throughout the academic years—with a dedicated special week supplementing the regular lectures on these topics. In the master’s phase of medicine, the focus shifts to practical learning; however, raising awareness of planetary health effects prior to placements and incorporating a “Mastermind Challenge” on environmental topics should help keep students engaged with these issues.</p> | |

| | |
|--|--|
| 1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course? | |
| Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point) | |
| No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points) | |

| | |
|---|---|
| Score Assigned: | 1 |
| <p><i>Score explanation:</i> The Impulse team, consisting of medical students as well as employees to include planetary health in the core curriculum, is led by staff members Laura Warmerdam (l.a.warmerdam1@lumc.nl) together with Nienke Boogaard (j.a.boogaard@lumc.nl).</p> | |

| | |
|---|---|
| <p>1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?</p> | |
| <p>This topic was explored in depth by the core curriculum. (3 points)</p> | |
| <p>This topic was briefly covered in the core curriculum. (2 points)</p> | |
| <p>This topic was covered in elective coursework. (1 point)</p> | |
| <p>This topic was not covered. (0 points)</p> | |
| Score Assigned: | 3 |
| <p><i>New metric for 2025/26 PHRC. This metric highlights the role of healthcare professionals as advocates for their patients beyond just clinical care. As trusted voices, health professionals have significant influence on policy and public perceptions of the environmental and social determinants of health. Public policy profoundly impacts our health across areas of housing, food, access to healthcare and indirectly through climate and environmental policies. In many healthcare systems internationally advocacy by healthcare professionals is increasingly viewed as an ethical imperative and professional duty.</i></p> <p><i>To learn more about this topic and the importance for healthcare professionals please review the following resources:</i></p> <ul style="list-style-type: none"> - Why and How Civic Health Should Be Incorporated Into Medical Education. Barrere-Cain et al., 2022. <i>Academic Medicine</i>. - Civic Engagement: A Vital Sign of Health and Democracy. Philip M. Alerbti. AAMC. <p><i>For practical guidance on incorporating this into your health professional curriculum:</i></p> <ul style="list-style-type: none"> - CRHE Module: Interaction between health care systems, government policy, and environmental advocacy. - Medical Schools Council (UK), Education for Sustainable Healthcare, A curriculum for the UK. Page 21. <i>Professionalism, leadership and achieving structural change</i>. | |
| <p><i>Score explanation:</i> During the Themeweek ‘Planetary Health and Sustainability’ students are being supported in exploring their role as a doctor in civilisation and outside of the clinical span of medical work.</p> | |

| | |
|-------------------------------------|--------------|
| Section Total (58 out of 75) | 77,3% |
|-------------------------------------|--------------|

Back to Summary Page [here](#)

Interdisciplinary Research

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

| | |
|--|---|
| 2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>? | |
| Yes, there are faculty members at the institution who have a primary research focus in planetary health or sustainable healthcare/vetcare. (3 points) | |
| Yes, there are individual faculty members at the institution who are conducting research related to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points) | |
| There are sustainability researchers at the institution , but not specifically associated with healthcare/vetcare. (1 point) | |
| No, there are no planetary health and/or sustainability researchers at the institution at this time. (0 points) | |
| Score Assigned: | 3 |
| <p><i>Score explanation:</i></p> <p>There are multiple researchers and PhD candidates at LUMC whose primary research focus is planetary health or sustainable healthcare. Currently, research is being conducted on planetary health education (https://bjgpopen.org/content/9/4/BJGPO.2025.0041.abstract), ecosyndemics (https://www.mdpi.com/1660-4601/22/10/1474), carbon footprints (https://academic.oup.com/ehjdh/article/6/3/496/8043202?login=true), sustainable anesthesia, and more.</p> | |

| | |
|---|--|
| 2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>? | |
| There is at least one dedicated department or institute for interdisciplinary planetary health research. (3 points) | |
| There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years. (2 points) | |
| There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. (1 point) | |

| | |
|--|---|
| There is no dedicated department or institute. (0 points) | |
| Score Assigned: | 1 |
| <i>Score explanation:</i> The LUMC has a Public Health Department which includes the research programme Population health, aiming to improve health, functioning and quality of life across the lifespan and striving for health equity and sustainability in the organization of healthcare. There is no specific focus on Planetary Health. | |

| | |
|---|---|
| 2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution? | |
| Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda. (3 points) | |
| Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. (2 points) | |
| No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. (1 point) | |
| There is no process, and no efforts to create such a process. (0 points) | |
| Score Assigned: | 0 |
| <i>Score explanation:</i> At this moment there are no processes available for communities to give input or make decisions about the research agenda in LUMC. Also there is no (known) effort to create this process. | |

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

Score explanation:

Leiden University has a website

(<https://www.universiteitleiden.nl/dossiers/de-duurzame-universiteit>) that brings together various resources related to health and sustainability across its campuses. However, information specific to the medical faculty is currently missing, and no agenda of upcoming events is provided.

Relevant opportunities for sustainability-related theses are difficult to find through this website. Instead, these can be found via the Centre for Sustainability's Sustainable Thesis Labs (<https://www.centre-for-sustainability.nl/home>). These labs enable master's students to work on real-world sustainability challenges in collaboration with multiple institutions, including the university hospital.

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

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

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

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

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

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

Score Assigned:

3

Score explanation:

Last July (2025), LUMC organised a conference for medical specialists to learn from the sustainability strategy and best practices of our university hospital. Also in July, an evening event was organized for students and others with Reduce from the R-ladder as central theme.

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?

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

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

Score Assigned:

0

Score explanation:

Leiden University is a member of the Planetary Health Alliance
(<https://www.planetaryhealthalliance.org/pha-members>).

Section Total (10 out of 17)

58,8%

Back to Summary Page [here](#)

Community Outreach and Advocacy

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

| | |
|--|---|
| 3.1. Does your <u>institution</u> partner with community organisations to promote planetary and health? | |
| Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health. (3 points) | |
| Yes, the institution meaningfully partners with one community organisation to promote planetary and environmental health. (2 points) | |
| The institution does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point) | |
| No, there is no such meaningful community partnership. (0 points) | |
| Score Assigned: | 1 |
| <i>Score explanation:</i> Students of Middle School are invited to come to LUMC for science orientation to learn about planetary health. There is however, no official collaboration yet. | |

| | |
|---|---|
| 3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health? | |
| The institution offers community-facing courses or events at least once every year. (3 points) | |
| The institution offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points) | |
| The institution has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point) | |
| The institution has not offered such community-facing courses or events. (0 points) | |
| Score Assigned: | 0 |
| <i>Score explanation:</i> | |

No such initiatives exist at the institution for planetary health specifically. No points were assigned.

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

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)

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

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

Score Assigned:

1

Score explanation:

Planetary health and sustainable health care are occasionally mentioned in the institution updates. There is an internal webpage for master students and health care professionals on which updates and articles on various topics are published. These updates include interviews with individuals promoting planetary health and sustainable health care, or innovations made by green teams within the institution.

The Leiden University Green Office also has a podcast on planetary boundaries, they include information on planetary health.

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

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

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

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

Score Assigned:

2

Score explanation:

There are courses available online with a lecture series and links to informative websites on planetary health. There are also courses by the post-grad education centre 'Boerhaave' in First Line Innovation in which sustainability is part of the lectures:

<https://www.boerhaavenascholing.nl/medische-nascholing/2026/>

<https://www.boerhaavenascholing.nl/medische-nascholing/2026/jouw-rol-in-planetaire-gezondheid/>

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

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

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

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

Score Assigned:

2

Score explanation:

Patient education about environmental health exposures in the Netherlands is regulated by different institutions such as the RIVM. All hospitals do hold close relationships however with the GGD and the RIVM. Patients do have the information available to be well informed. Hospitals do help in research on environmental health exposure and risk. There is for example a webpage on trees and the pollen they release ([Bomenkompas | LUMC](#)) and the Lung Diseases department of the LUMC has a patient folder on work related health care problems ([Beroepsgerelateerde longziekten | LUMC](#)).

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

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

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

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

Score Assigned:

0

Score explanation:

Hospitals currently do not provide information on this topic; therefore, much-needed initiatives would be welcomed. Patient education about environmental health impacts in the Netherlands is regulated mostly by different institutions such as the RIVM.

Section Total (6 out of 14)

42,9%

Back to Summary Page [here](#).

Support for Student-Led Planetary Health Initiatives

Section Overview: This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

| 4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project? | |
|---|---|
| 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. (2 points) | |
| The institution encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate. (1 point) | |
| No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i></p> <p>The Leiden University Green Office offers the opportunity to get involved in sustainability initiatives throughout the university like improving biodiversity on campus. https://www.universiteitleiden.nl/en/green-office/initiatives . These initiatives, however, are not integrated in the LUMC. At the LUMC there is a separate Student-led Green team launched that will busy themselves with sustainability initiatives/ QI's based in the faculty. These projects have not yet started.</p> <p>Throughout the curriculum in the Themeweek Planetary Health and Sustainability in the bachelors as well as during the Mastermind challenge in the Masters, planetary health problems are to be solved and sustainability initiatives to be created during the process.</p> | |

| 4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare? | |
|--|---|
| The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points) | |
| There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek them out and carry them out in their spare time. (1 point) | |
| There are no opportunities for students to engage in planetary health/sustainable healthcare research. (0 points) | |
| Score Assigned: | 1 |

Score explanation:

Leiden University, and by proxy the LUMC, has some opportunities for (medical) students to perform research related to planetary health topics through thesis labs at the Centre for Sustainability. This is a joint venture between three universities, Leiden University, Technical University Delft and Erasmus University (LDE-universities):

<https://www.leiden-delft-erasmus.nl/nl/groene-zorg>

There is also room for students to seek contact with a researcher for planetary related topics for the internship part of the MSc Medicine. Though there are definitely opportunities, research related to planetary health topics still mostly requires student initiative to get going.

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

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

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

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

Score Assigned:

1

Score explanation:

The LUMC and Leiden University have several websites on which information on sustainability and planetary health projects can be found. They are, however, a bit inaccessible and difficult to find, and the websites don't relate well to each other, making it seem like a collection of individual websites, rather than a network. The Leiden University websites, mostly offer broad information about sustainability in general. The planetary health information is to be found on the internal website of the hospital or different other websites. There is room for improvement and a joined website in order to find initiatives, education, patient information or research opportunities.

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)

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

| | |
|---|---|
| No, there is not a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> University Leiden, and by proxy the LUMC, has the Leiden University Green Office (LUGO), which has a team of students and some university employees that are dedicated to improving the sustainability of the university. Furthermore, many of the students' associations in Leiden have their own sustainability groups within their association, which the university does not explicitly acknowledge, though they aren't opposed to it either. They also cooperate at times. For example, the Student Medical Board holds meetings with the LUMC Impuls Green Team every 6 weeks. Though the LUGO does not solely concern itself with healthcare related sustainability topics, the co-existence of the Student Green Team at the LUMC earns the institute two points.</p> | |

| | |
|--|---|
| 4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices? | |
| Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point) | |
| No, there is no such student representative. (0 points) | |
| Score Assigned: | 0 |
| <p><i>Score explanation:</i> Student council and other student representation do not have a dedicated member for sustainability or planetary health, but individual student representatives could choose to prioritise this topic in their term. Thus, there is still room for improvement.</p> | |

| 4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each) | Score |
|---|--------------|
| Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects. | 0 |
| 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. | 0 |
| Cultural arts events, installations or performances related to planetary health that have students as an intended audience. | 0 |

| | |
|--|--------------|
| Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts. | 1 |
| Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students) | 0 |
| <p><i>Score explanation:</i></p> <p>There are no agri-cultural projects or outdoor events that students can join. Neither are there events where students meet and learn from community climate justice advocates. There are however multiple events organised by LUGO such as talks about climate change and the psychological aspects or an initiative for a clothing swap or to make sustainable soup. Thus building community resilience. They also made a podcast which covers the threat of climate change on health(care). The medical Delta Café hosted a symposium about Green Healthcare and waste reduction. Here students could attend a variety of talks around planetary health.</p> | |
| Section Total (8 out of 15) | 53,3% |

Back to Summary Page [here](#)

Campus Sustainability

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

| 5.1. Does your <u>institution</u> have an Office of Sustainability? | |
|---|---|
| Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points) | |
| There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of hospital sustainability. (2 points) | |
| There are no salaried sustainability staff , but there is a sustainability task force or committee. (1 point) | |
| There are no staff members or task force responsible for overseeing campus sustainability. (0 points) | |
| Score Assigned: | 3 |
| <p><i>Score explanation:</i> Leiden University has an active Green Office (https://www.universiteitleiden.nl/en/green-office), consisting of paid students and university employees. The Green Office has two main objectives. (1) Structurally integrate sustainability in Leiden University's education, research, and facilities and (2) Foster a culture of sustainability in the community of staff and students at Leiden University.</p> <p>LUMC has a fast growing sustainability core team, consisting of a sustainability coordinator, multiple staff members and student-assistents. All working together with the green teams to make the hospital more sustainable.</p> | |

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

| | |
|---|---|
| Score Assigned: | 0 |
| <p><i>Score explanation:</i> The LUMC has a written plan to achieve carbon neutrality by 2050, so it doesn't meet any of the metrics listed above. The LUMC did sign the Green Deal 3.0, aiming for about a 55% reduction in CO2 emissions by 2030, amongst other things.</p> | |

| | |
|--|---|
| <p>5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?</p> | |
| <p>Yes, institution buildings are 100% powered by renewable energy. (3 points)</p> | |
| <p>Institution buildings source >80% of energy needs from off-site and/or on-site renewable energy. (2 points)</p> | |
| <p>Institution buildings source >20% of energy needs from off-site and/or on-site renewable energy. (1 point)</p> | |
| <p>Institution buildings source <20% of energy needs from off-site and/or on-site renewable energy. (0 points)</p> | |
| Score Assigned: | 0 |
| <p><i>Score explanation:</i> LUMC has plans to procure 80 percent of the energy needed from sustainable and renewable sources. Use of certificates to compensate emissions is stopped. So efforts for renewable energy usage are being made but not yet implemented. Thus, currently, no points can be attributed.</p> | |

| | |
|--|---|
| <p>5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</u> campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?</p> | |
| <p>Yes, sustainable building practices are utilised for new buildings on the institution's campus and the majority of old buildings have been retrofitted to be more sustainable. (3 points)</p> | |
| <p>Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have not been retrofitted. (2 points)</p> | |
| <p>Sustainable building practices are inadequately or incompletely implemented for new buildings. (1 point)</p> | |
| <p>Sustainability is not considered in the construction of new buildings. (0 points)</p> | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> LUMC is ISO 50001 certified and has made several efforts to make their energy usage more</p> | |

sustainability through limiting energy usage through energy saving measures and by generating renewable energy through solar panels, heat pumps and making use of the cold outside to cool the building when needed.

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

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

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

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

Score Assigned:

2

Score explanation:

LUMC is positioned right next to the Leiden Centraal train station and the Leiden Centraal bus station, making it easily accessible with public transport, something most students make use of. For the students that live close to the faculty plenty of safe places to store their bikes have been provided. The faculty can be accessed by car, though the students will have to pay a hefty amount for the parking costs. Additionally, LUGO (Leiden University Green Office) has provided a Sustainable Travel Guide, which has extended from local to international travelling.

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

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

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

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

Score Assigned:

1

Score explanation:

LUMC has a large recycling program with 32 different waste streams, including compost and recycling. However, the bins accessible to students only provide recycling.

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

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

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

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

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

Score Assigned:

2

Score explanation:

LUMC is actively engaged in efforts to increase the sustainability of its food and beverages. Although the hospital is making progress, there is still work to be done. Food is not always sourced locally, and there are no initiatives for meat-free days. However, one of the main providers is PUUR, which emphasizes locally produced, plant-based foods.

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?

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

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

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

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

Score Assigned:

2

Score explanation:

By signing the Green Deal 3.0, LUMC has committed to prioritizing sustainability and circularity in its procurement processes. For European tenders, these criteria are mandatory requirements. At the hospital level, individual departments are responsible for implementing these principles and are encouraged (not yet obligated) to do so. All academic hospitals in the Netherlands are working together to develop more guidelines on sustainability requirements for supply procurement.

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

| | |
|--|---|
| Every event hosted at the institution must abide by sustainability criteria. (2 points) | |
| The institution strongly recommends or incentivizes sustainability measures, but they are not required . (1 point) | |
| There are no sustainability guidelines for institution events. (0 points) | |
| Score Assigned: | 0 |
| <p><i>Score explanation:</i> Within LUMC there are no sustainability requirements specific for events. However, both institutions value sustainability and incentivizes green teams to organize events in a more sustainable way.</p> | |

| | |
|---|---|
| 5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable? | |
| Yes, the institution has programs and initiatives to assist with making lab spaces more environmentally sustainable. (2 points) | |
| There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point) | |
| There are no efforts at the institution to make lab spaces more sustainable. (0 points) | |
| Score Assigned: | 2 |
| <p><i>Score explanation:</i> Within the labs, multiple green teams are working to make lab spaces more sustainable. After a successful pilot, the first LEAF certificates were awarded in 2025, with more lab spaces expected to follow in 2026.</p> | |

| | |
|---|--|
| 5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies? | |
| The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives. (4 points) | |
| The institution is entirely divested from fossil fuels. (3 points) | |
| The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. (2 points) | |
| The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. (1 point) | |
| Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. (0 points) | |

| | |
|-----------------|---|
| Score Assigned: | 0 |
|-----------------|---|

Score explanation:

The LUMC is not transparent about this matter, so a 0 has been given as we don't have any proof they are divesting.

| | |
|-------------------------------------|--------------|
| Section Total (14 out of 32) | 43,8% |
|-------------------------------------|--------------|

Back to Summary Page [here](#)

Grading

Section Overview

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

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

**Within each grade bracket, a score in the top 5% (_5 to _9%), receives a “+”, and a score in the bottom 5% (_0- _4%) receives a “--”. For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the _____ School of Medicine.

The following table presents the individual section grades and overall institutional grade for the _____ School of Medicine on this Planetary Health Report Card.

| Section | Raw Score % | Letter Grade |
|---|---|--------------|
| Planetary Health Curriculum (30%) | $(58/75) \times 100 = 77,3\%$ | B+ |
| Interdisciplinary Research (17.5%) | $(10/17) \times 100 = 58,8\%$ | C+ |
| Community Outreach and Advocacy (17.5%) | $(6/14) \times 100 = 42,9\%$ | C- |
| Support for Student-led Planetary Health Initiatives (17.5%) | $(8/15) \times 100 = 53,3\%$ | C |
| Campus Sustainability (17.5%) | $(14/32) \times 100 = 43.8\%$ | C- |
| Institutional Grade | $(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 57.98\%$ | C+ |

Report Card Trends

Section Overview

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

Planetary Health Report Card Trends for Leids Universitair Medisch Centrum

