

Education for Sustainable Healthcare

Embedding the new curriculum into medical education

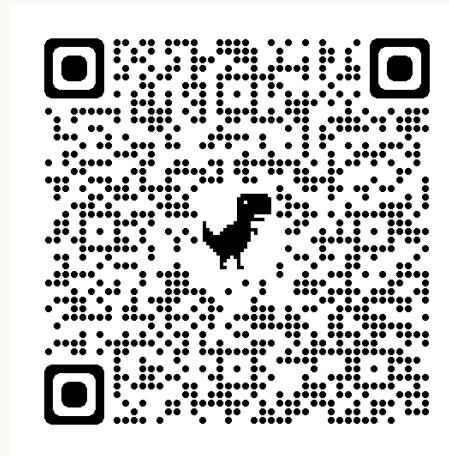
Dr SanYuMay Tun

In Conversation Lunchtime Sessions
UK Health Alliance on Climate Change

15 February 2023

EDUCATION FOR SUSTAINABLE HEALTHCARE

A curriculum for the UK

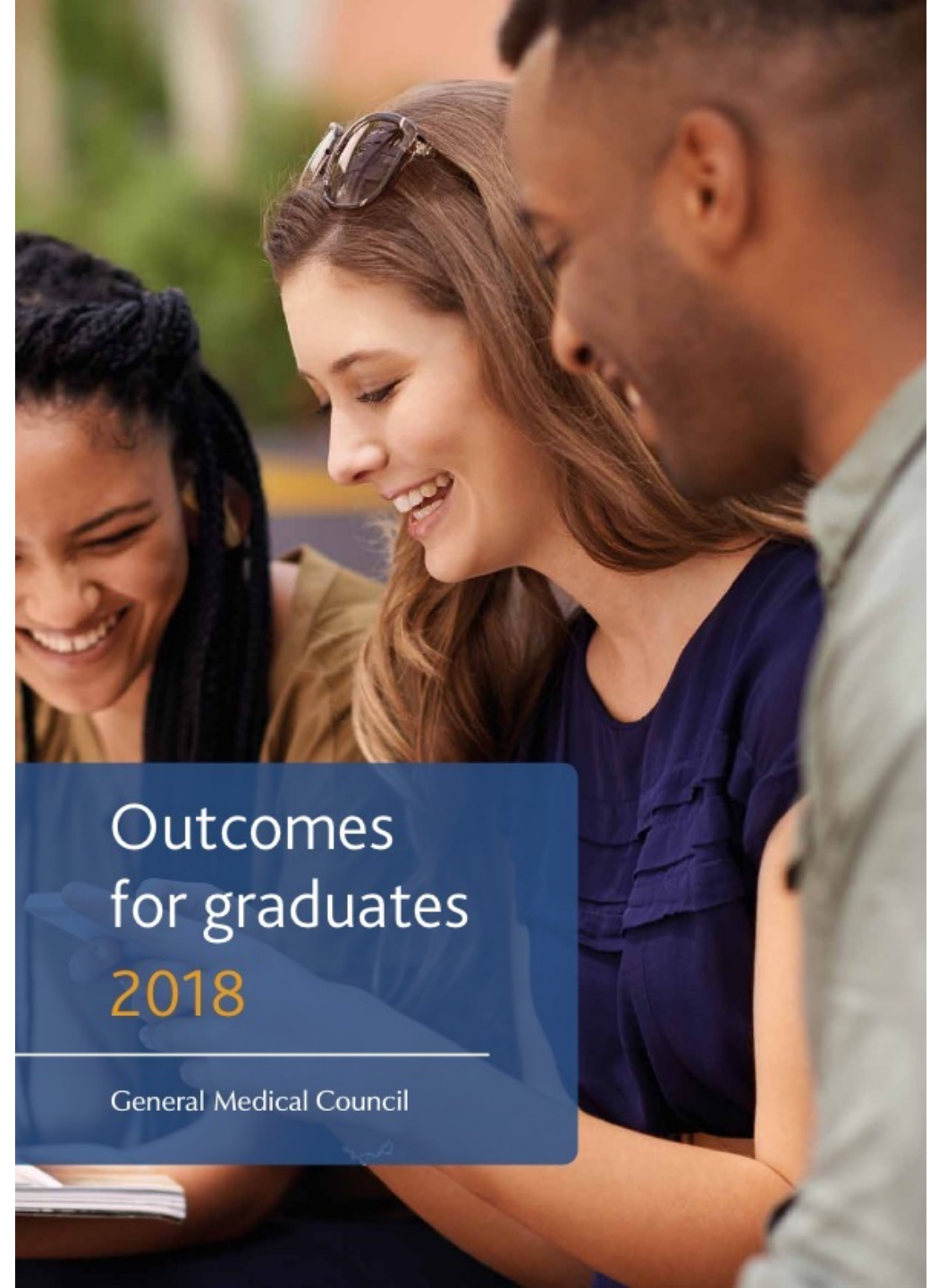


Endorsed by the Medical Schools Council



Newly qualified doctors **must** be able to
apply the principles, methods and knowledge
of population health and
the improvement of health and
sustainable healthcare
to **medical practice**

**From 2020, medical schools must show
how they are implementing this teaching**

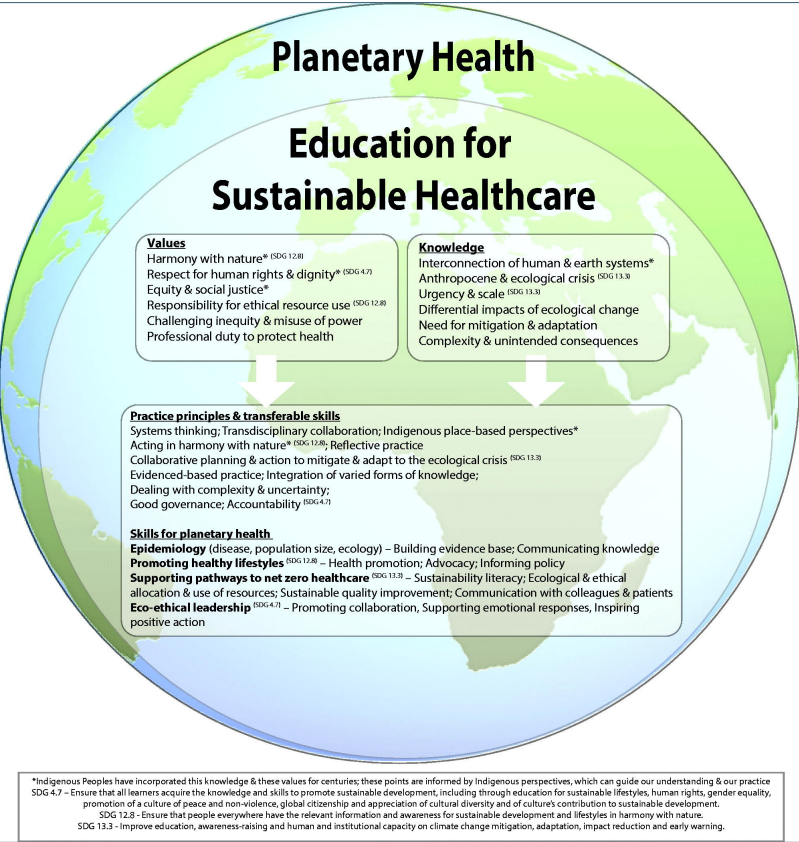


Outcomes
for graduates
2018

General Medical Council

Sustainable healthcare

focuses on the **improvement of health** and **better delivery of healthcare** rather than late intervention in disease, with resulting **benefits** to **patients** and to the **ecosystems** on which human health depends, thus serving to provide **high-quality healthcare** now without compromising the ability to meet the health needs of the future



education for sustainable healthcare

Practical recommendations for implementing and evaluating education for sustainable



Research Article

AMEE Consensus Statement: Planetary health and education for sustainable healthcare

Emily Shaw, Sarah Walpole , Michelle McLean , Carmen Alvarez-Nieto , Stefi Barna, Kate Bazin, Georgia Behrens, Hannah Chase, Brett Duane, Omnia El Omrani , Marie Elf , Carlos A. Faerron Guzmán, Enrique Falceto de Barros, Trevor J. Gibbs, Jonny Groome, Finola Hackett, Jeni Harden, Eleanor J. Hothersall, Maca Hourihane, Norma May Huss , Moses Ikiugu , Easter Joury , Kathleen Leedham-Green, Kristin MacKenzie-Shalders , Diana Lynne Madden , Judy McKimm , Patricia Nayna Schwerdtle, Sarah Peters, Nicole Redvers , Perry Sheffield , Judith Singleton, SanYuMay Tun & Robert Woollard ... show less

Published online: 19 Feb 2021

Download citation



Full Article

Figures & data

References

Supplemental

Citations

Metrics

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Abstract

The purpose of this Consensus Statement is to provide a global, collaborative, representative and inclusive vision for educating an interprofessional healthcare workforce that can deliver sustainable healthcare and promote planetary health. It is intended to inform national and global accreditation standards, planning and action at the institutional level as well as highlight the role of individuals in transforming health professions education. Many countries have agreed to ‘rapid, far-reaching and unprecedented changes’ to reduce greenhouse gas emissions by 45% within 10 years and achieve carbon neutrality by 2050, including in healthcare. Currently, however, health professions graduates are not prepared for their roles in achieving these changes. Thus, to reduce emissions and meet the 2030 *Sustainable Development Goals* (SDGs), health professions education must equip undergraduates, and those already qualified, with the knowledge, skills, values, competence and confidence they need to sustainably promote the health, human rights and well-being of current and future generations, while protecting the health of the planet.

Further reading

Recommended articles

Cited by

Faculty development and partnership with students to integrate sustainable healthcare into health professions education >

SanYuMay Tun (May Sanyu Tun) et al.
Medical Teacher

Published online: 7 Aug 2020

Rethinking health professions' education leadership: Developing 'eco-ethical' leaders for a more sustainable world and future >

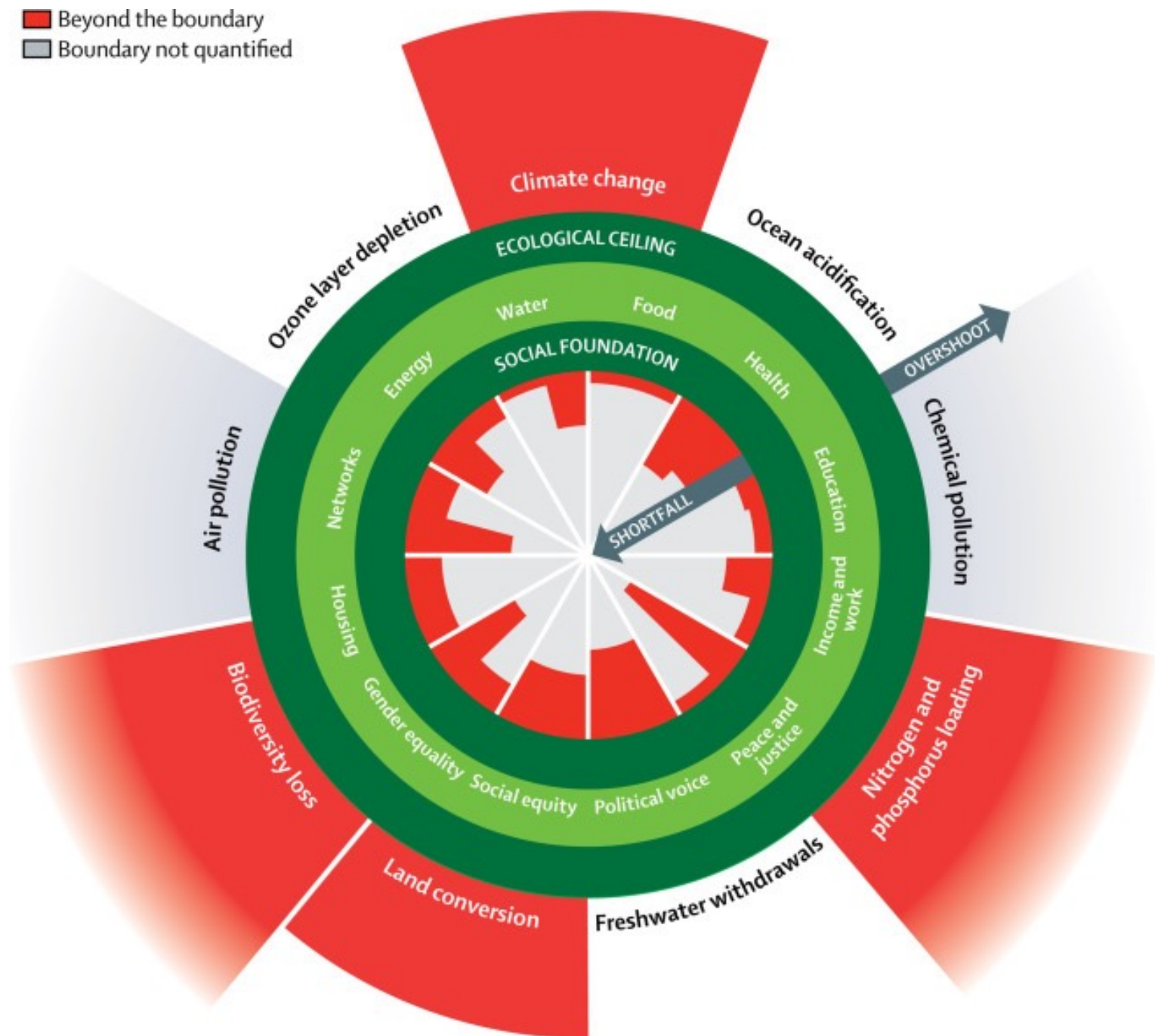
Planetary Health

Planetary health is 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**

<https://www.planetaryhealthalliance.org/planetary-health>

Raworth's doughnut social and ecological model

Thrive not grow



A multi-factor modeling study has linked biodiversity loss with human health impacts:

- Agricultural yields are suffering. 3-5% of fruit, vegetable, and nut **production is being lost** due to inadequate pollination.
- Humans are suffering. Scientists have conservatively estimated that an extra 427,000 **deaths each year** from noncommunicable diseases are attributable to the present-day dietary impacts of insufficient pollination.
- In lower-income countries, 10-30% of **agricultural income** is being lost from depressed yields caused by inadequate pollination.

Pollinator Deficits, Food Consumption, and Consequences for Human Health: A Modeling Study

<https://doi.org/10.1289/EHP10947>

THE LANCET

October, 2022

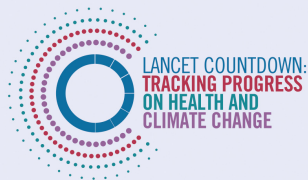
www.thelancet.com

The 2022 report of the *Lancet* Countdown on health and climate change



Saif Pongthaisang/Getty Images

"Countries and companies continue to make choices that threaten the health and survival of people in every part of the world...At this critical juncture, an immediate, health-centred response can still secure a future in which world populations can not only survive, but thrive."



A Review by *The Lancet*

Health at the mercy of fossil fuels

New findings presented in the seventh annual global report of the Lancet Countdown on health and climate change reveal that governments and companies continue to follow strategies that **increasingly threaten the health and survival** of all people alive today, and of future generations.

Reliance on oil and gas is worsening climate impacts and compounding food, energy and cost of living crises. As countries devise ways to recover from the coexisting crises, the evidence is unequivocal.

At this critical juncture, **an immediate, health-centred response can still secure a future** in which world populations can not only survive, but thrive.

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)01540-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01540-9/fulltext)

<https://www.theguardian.com/environment/2022/oct/25/global-health-fossil-fuels-climate-oil-gas-food-energy-cost-of-living>

EDUCATION FOR SUSTAINABLE HEALTHCARE

A curriculum for the UK

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Aims of the **ESH** curriculum

- Self-explanatory as far as possible
- User-friendly across various curricular structures
- Concise
- Hyperlinks to high quality sources of information



THE PLANETARY HEALTH REPORT CARD INITIATIVE

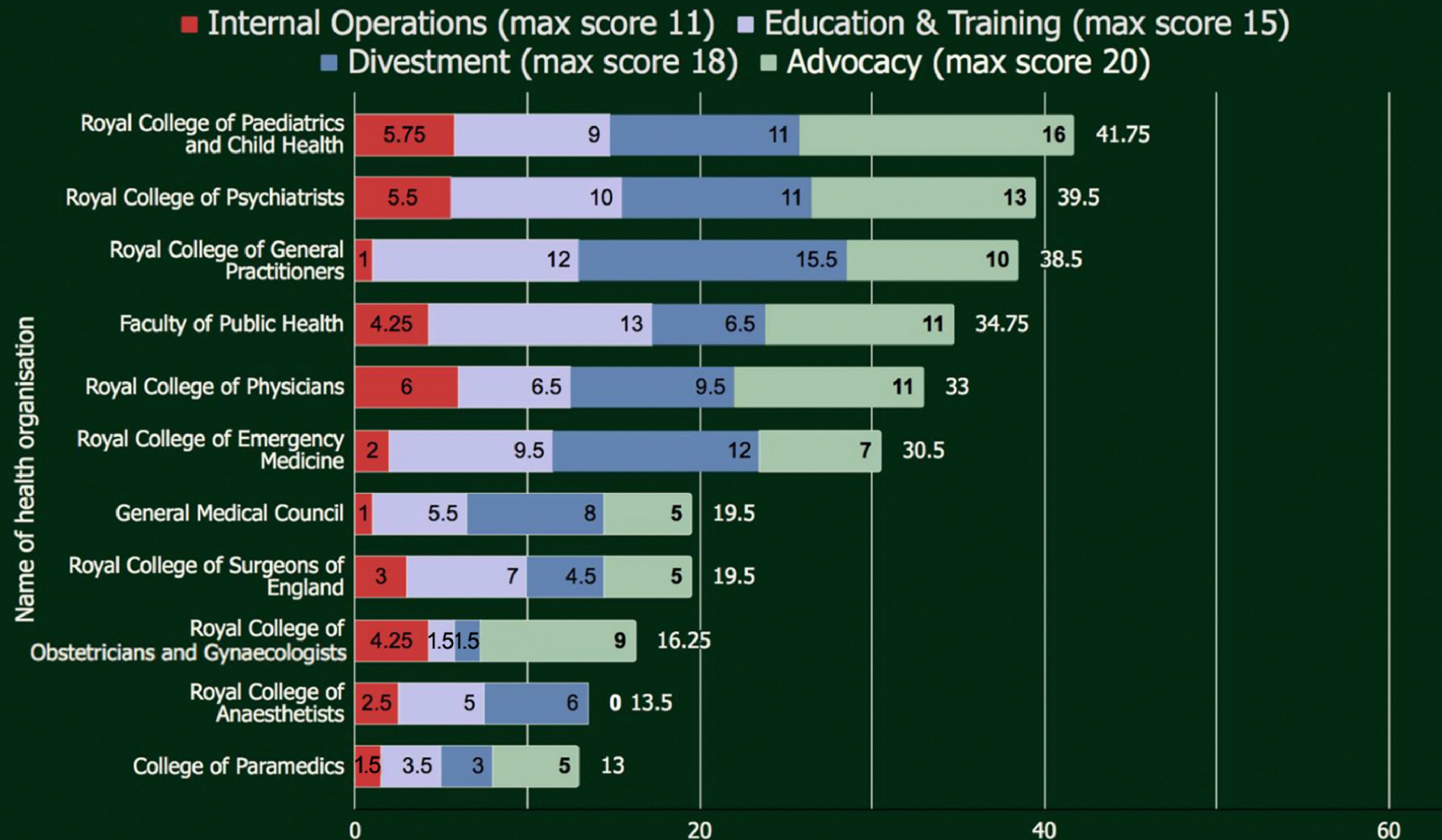
An international health student community inspiring institutional change.

Check out the 2022 Planetary Health Report Card.

[DOWNLOAD](#)



CLIMATE CHANGE & HEALTH SURVEY SCORES



Key aspects of Education for Sustainable Healthcare/Planetary Health

- Sustainable healthcare is good medicine
- Win-win for patient, planet and practitioner
- Core teaching of fundamentals at key stages/ years of the course
- In every subject/specialty, connect with ESH principles
- Embed in assessment

Medical Licensing Assessment - three themes

- a. Readiness for safe practice
- b. **Managing uncertainty:** the ability to cope with uncertainty over diagnosis, prognosis, response to therapeutic interventions; medical science; and when to call for help
- c. **Delivering person-centred care:** listening and hearing patients' values; taking account of comorbidities and frailty and social context; working effectively within a multi-professional and multi-disciplinary team and across multiple care settings; and demonstrating shared decision-making that takes account of patients' expectations and wishes

Promoting person-centred, sustainable healthcare

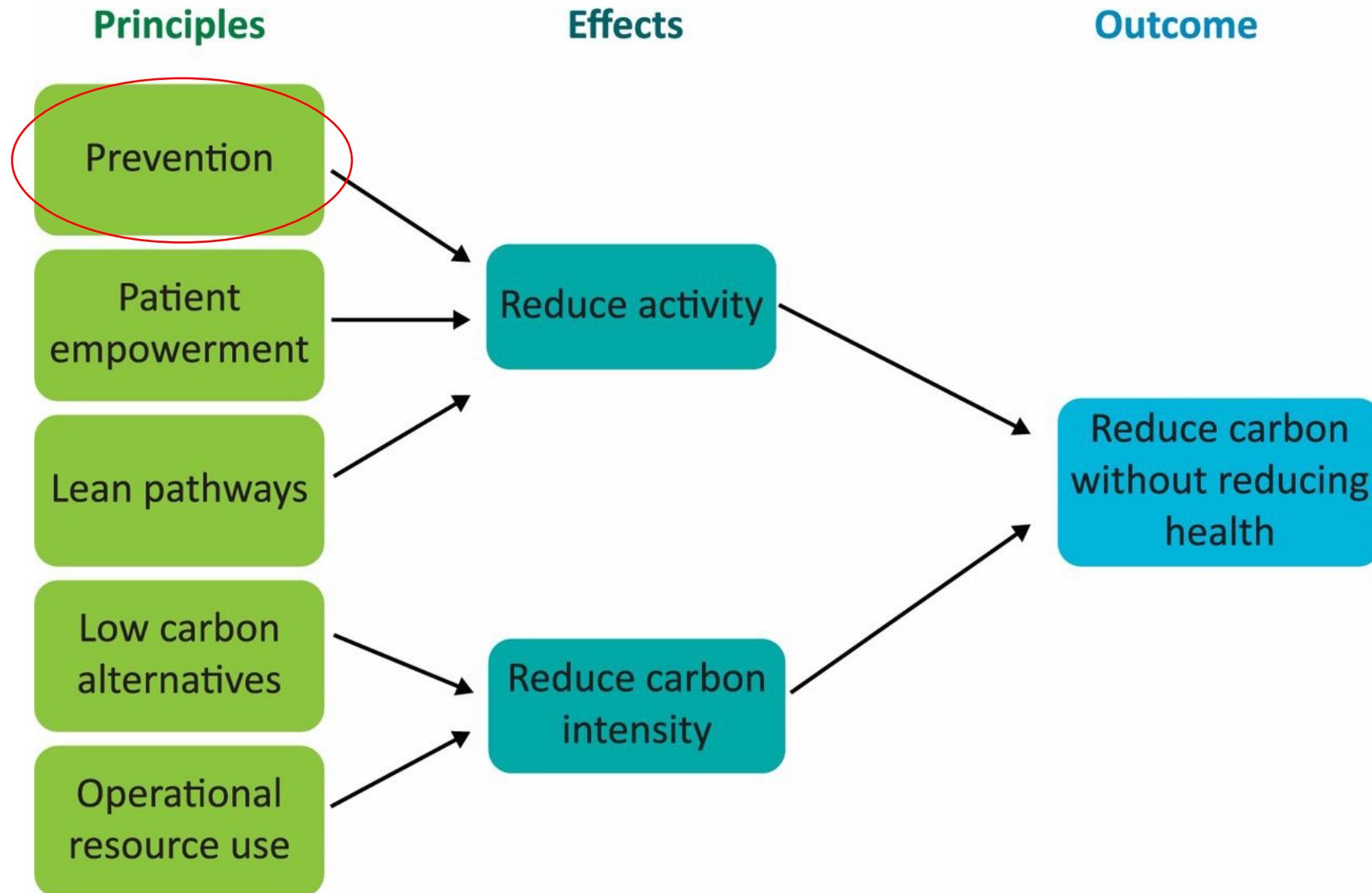
- Realistic Medicine in Scotland
- Prudent Healthcare in Wales
- Rethinking Medicine
- **Choosing Wisely** is the international equivalent
- Minimally Disruptive Medicine, Deprescribing, medstopper

Patients' questions in shared decision making

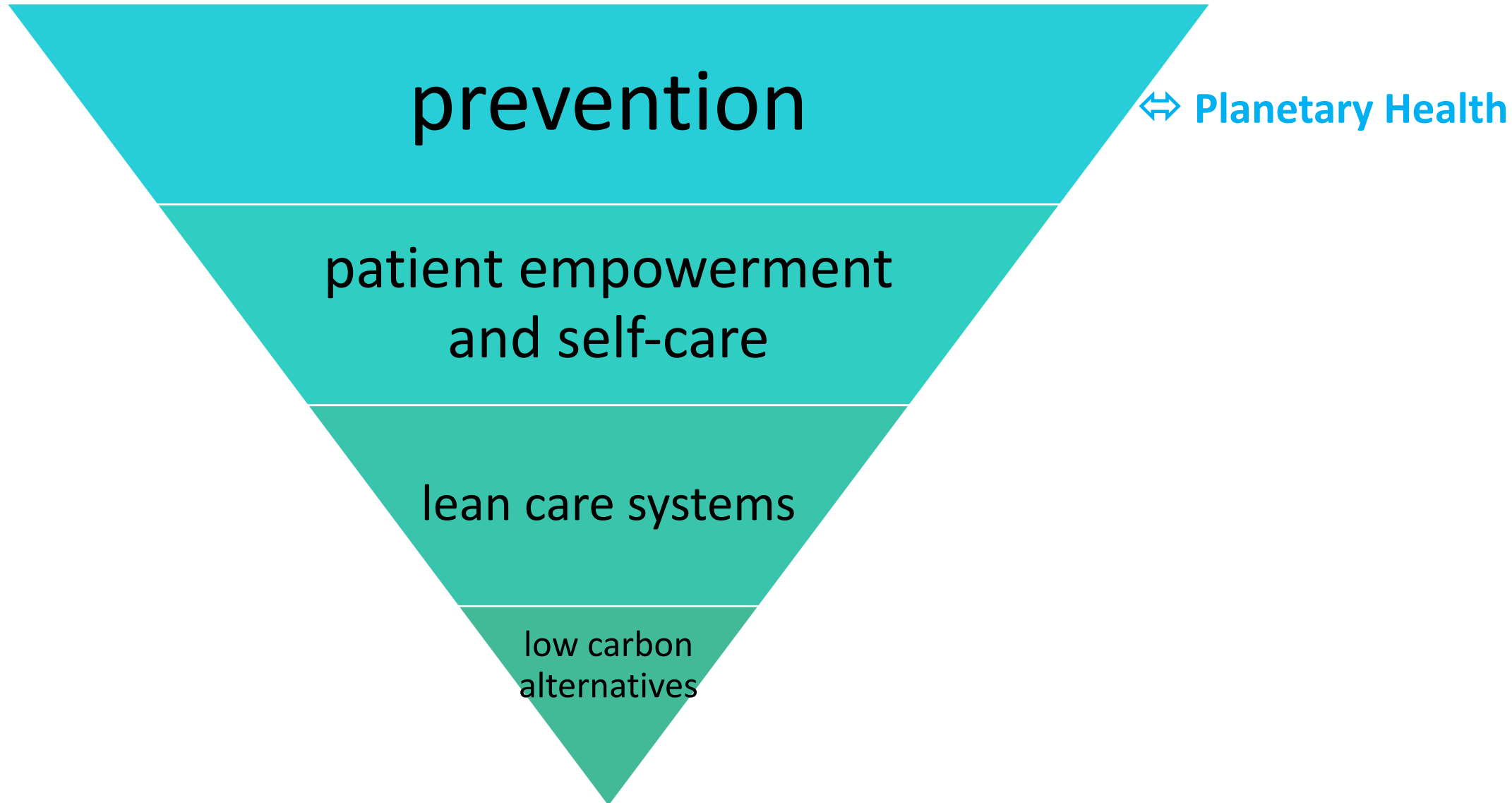
(Choosing Wisely/Practising Realistic Medicine/RCPSG)

1. Is this test, treatment or procedure really needed?
2. What are the potential benefits and risks?
3. What are the possible side effects?
4. Are there simpler, safer or alternative treatment options?
5. What would happen if I did nothing?

Principles of sustainable clinical practice



Principles of sustainable clinical practice



‘The three numbers you need to know about healthcare: the 60-30-10 challenge’

Braithwaite et al. 2020 <https://link.springer.com/content/pdf/10.1186/s12916-020-01563-4.pdf>

- 60% of care is in-line with guidelines as shown by large empirical studies of multiple conditions in adults and children in the USA, England, and Australia [2–6]
(does not mean the care is effective)
- 30% of care is waste, duplication, or of low value, according to Berwick and the Organisation for Economic Co-operation and Development (OECD) [7–10]
- At least 10% of patients globally suffer iatrogenic harm or adverse events [11-15]

Net zero healthcare: a call for clinician action

<https://www.bmj.com/content/374/bmj.n1323>

Key recommendations:

- Clinicians must work to reduce the incidence and severity of disease to decrease the amount and intensity of care required
- Use of resources must be optimised by ensuring appropriate care and avoiding unnecessary investigations and treatments
- Coordination of care between different providers should be promoted to avoid duplication of services and reduce travel emissions and unnecessary building use
- Health professionals should encourage change through individual practice, influencing healthcare organisations, and contributing to standards and policy

Take home points

- Planetary Health ↔ Sustainable Healthcare
- Adapt resources of ESH curriculum to context
- Embed in Assessment

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