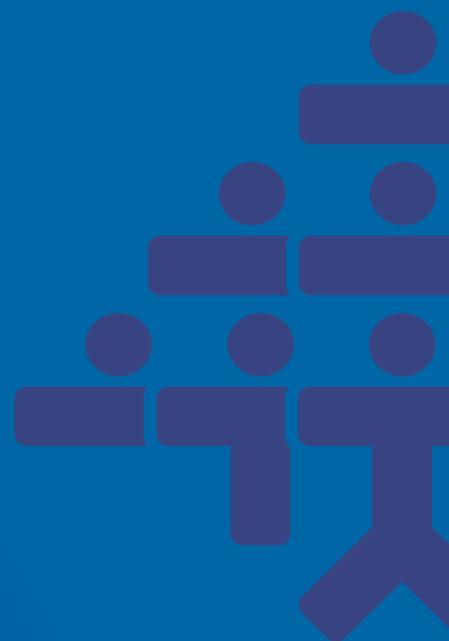

ICGP Response to the
Preparedness for Climate Change
in the Health Sector Public Consultation





ICGP Response to Preparedness for Climate Change in the Health Sector

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Introduction

In composing this response, the ICGP also consulted with a number of GPs for their views on this topic including GP Trainers, CME Tutors, GP Trainees, and newly establishing GPs (NEGS).

We are grateful for their input.

DoH is welcoming views on 3 questions in relation to Preparedness for Climate Change in the health sector.

- 1) Do the six climate scenarios identified represent the highest priority concerns and risks for the health sector? (UV radiation, Air pollution, Heat, Cold, Wind, Precipitation).
Yes / No, and if No why?
- 2) Are there climate change-related risks or vulnerabilities that do not feature and should be included, and why?
- 3) Do you have additional suggestions for concrete and cost-effective adaptation actions for the health sector?

The responses to the third question have been subdivided into four subsections below for clarification purposes.

Question 1: Do the six climate scenarios identified represent the highest priority concerns and risks for the health sector? (UV radiation, air pollution, heat, cold, wind, precipitation)

Answer: Yes

In terms of projecting scenarios of climate change prediction these are the issues that would be likely to cause problems to infrastructure, economy and personal health in the future.

The six priority areas listed are important but the greatest concern has to be the combined influence on society of climate change, because the indirect effects of these issues are more likely to impact our health systems and communities first. For example:

Effect on Economic Migration and Geopolitics

The number of climate refugees from regions with greater exposure to climate extremes will increase exponentially, presenting future resource and political pressures in Ireland.

Flood Water

Precipitation issues have a wide potential impact on health. Some studies estimate the number of floods could increase 60 fold by 2100, which could be a proxy for Irish vulnerability (Robert McSweeney, "The Impacts of Climate Change at 1.5C, 2C and Beyond," Carbon Brief, October 4, 2018).

Water Quality

All of Ireland's healthcare facilities are heavily reliant on reliable water supplies. In recent years we have seen not only severe shortages of water for healthcare facilities internationally but also recurrent contamination of water sources. This needs to be addressed for the Irish context.

Action for preparedness is required – knowledge of climate change is not sufficient. Actions are required for preparedness, prevention and mitigation, as knowledge of the priority areas is not sufficient for improving the situation. The consideration of these potential eventualities is similar to preparing for a pandemic, a major influenza outbreak or even a possible terrorist attack. It is easy to presume we have no choice but to face an oncoming onslaught of extreme weather or invest our energy in prevention and mitigation while we still can.

General practice in particular with its long-term trusting relationships within its communities and with an average GP-patient encounter of 100,000 people per day has phenomenal scope to stimulate behaviour change.

Question 2: Are there climate change-related risks or vulnerabilities that do not feature and should be included, and why?

Water

Water pollution and water quality is a crucial biological factor in climate change that impacts on health. Water shortages and contamination from overflow effluent pose realistic threats to the population. Water is also contaminated from hormones and medication residues which could have potential deleterious effects on health.

Antibiotics

An ever growing issue is that of antimicrobial resistance which is on course to alter the way healthcare is delivered irrevocably. Antimicrobial resistance is increasing internationally. A number of Irish agencies have been liaising with international bodies tracking the proliferation of global resistance patterns globally, yet there is a concurrent paucity of new antimicrobials being brought to market.

Nutritious food production is impacted by Ground Pollution and Water Pollution

As the overall trend of global temperatures continues to rise, there is emerging evidence of a “great nutrient collapse”, a paradox whereby elevated carbon dioxide concentrations lead to greater crop yields that are proportionally deficient in nutrients. This may exacerbate the chronic disease tsunami that is already consuming our fragile healthcare system. Water pollution and climate change effects on fish stocks will impact on those who depend most on fish for nutrition.

Impact of Biodiversity on Human Health

One difficulty with climate change is the complexity of interactions within nature. Species extinction and especially the threat to our pollinators could have untold consequences which we struggle to comprehend without an understanding of the relationships between complex systems. Alongside the biological crisis we have now become acutely aware of the exponential loss in environmental biodiversity. The 2019 IPBES global report on this issue made headlines for its findings of rapid species extinction yet there remains a host of unknowns about the effect on human health and human health systems should this continue at its current trajectory. (Ref The Extinction Rebellion movement)

Miscellaneous

- National distribution of food and clothing and other consumables
- Cleaner transport for patients and healthcare supplies
- Clean energy development for healthcare
- Cleaner packaging for healthcare
- Reliable communications systems

Question 3: Do you have additional suggestions for concrete and cost-effective adaptation actions for the health sector?

As with many public health interventions, we ought to focus on concurrent sustainable small changes across as many settings as possible, to reach as many individuals as possible rather than isolated efforts in one service localised to one region, or one sub-group of the population.

Health care staff, managers and leaders have a moral responsibility to reduce unnecessary waste.

- Unnecessary mileage through sharing / pooling cars
- Unnecessary for meeting attendees to be physically present in one physical room. Video conferencing allows meetings to be conducted in the same effective way with additional efficiencies (less travel carbon footprint, less time away from work tasks spent on travel, minimising risks to staff) and should be encouraged - particularly when a simple cultural precedent exists for attendees to be physically present is the only barrier to videoconferencing or audio calls.
- Many software programmes are free e.g. Skype and there are concrete examples of this working for international meetings in the health sector.
- The carbon footprint of paper in the health sector should be reduced. For example referral letters, hospital discharge letters, paper prescriptions, medical reports and test results need to move away from paper to electronic format.
- Recyclable packaging, Rechargeable batteries / electrical equipment in place of battery operated equipment,
- Need to work with bioengineers and materials engineers to find alternative packaging to plastic used for biological sample containers, cervical speculums, and single use metal surgical instruments
- Need to move from health care facilities reliance on oil heating to sustainable heating sources.
- Need to raise awareness of heating wastage, for example radiators in children's' hospitals at high level while windows are opened to reduce overheating and improve ventilation.

Question 3(a): Additional suggestions for concrete and cost-effective adaptation actions in terms of general practice: e.g. clinical care, practice management and administration?

“As family doctors we are in a unique position to promote knowledge about Planetary Health and behaviour changes, which can improve both individual health and Planetary Health - the so called co-benefits, such as active transportation, low emission sources of energy and a more vegetable based diet in our patient communities.” Quotation from [Wonca Statement on Planetary Health 2018](#) (Endorsed by Wonca Executive October 2016)*.

Always Refer to the Growing Scientific and Medical Evidence Base

The health sector must be led by the international scientific consensus on what actions must be taken to address the climate crisis within the sector, in order to prevent or to mitigate the impact of climate change on the sector and on the population using health facilities and health services electively or urgently.

The recent 2018 WONCA declaration has called on family doctors across the world to act and lead on planetary health. This has been seconded by the Lancet which has called for all healthcare professionals to lead on this issue.

*Wonca is the World Organisation of National Colleges and Academic societies of Family Medicine / General Practice, colloquially known as global family doctor movement.

The reason why healthcare professionals have been singled out is that through our knowledge of disease and our relationships with patients we have the potential to be great effectors of change of not just our patients but also the planet. General practice in particular, with its long-term “cradle to grave” trusting relationships within its communities and with average daily patient encounter of 100,000 people in Ireland has phenomenal possibility to stimulate behaviour change.

Lifestyle Medicine and Management of Non-Communicable Disease

Non-communicable disease, or chronic disease includes cardiovascular diseases like coronary artery disease, raised cholesterol levels and hypertension, obesity and all of the diseases it is associated with such as arthritis and cancer, chronic obstructive airways disease and smoking related diseases. Lifestyle and prevention in general should play a more prominent role in Irish healthcare and this should be a collaborative effort. We have already seen good examples such as Healthy Ireland teaming with [Parkrun](#) and how popular media shows such as Operation Transformation have had knock on positive side effects in many small and large communities throughout Ireland. ICGP are actively engaging with HSE Healthy Ireland to promote parkrun.

The health promoting practice model (Watson, Quality in Primary Care, 2008) is very relevant in 2019 and could be extended to harness practices as community drivers of climate action. Practices, as small businesses could adopt and visibly demonstrate to the public their environmentally safer processes.

The UN, WHO, WONCA World and Lancet reports are unambiguous in their statements on the advantages of plant-based diets, with less animal protein products or no animal products and minimal processed foods, are optimal for human and planetary health. Yet our hospitals and healthcare facilities do not routinely offer plant-based diets as advised by international bodies as the healthiest and most sustainable. Whilst there are any number of efforts that could be made to mitigate the climate crisis, two of the low hanging fruits for healthcare are active transport (walking, running and cycling) and plant based diets. These two activities are termed “triple wins” i.e. firstly there are less carbon emissions, secondly they are cheaper on the pocket and thirdly they confer improved and better health. We must be mindful not to become distracted by other initiatives that may be well meaning but less impactful.

The health sector needs to keep up to date with the evidence that these diets can prevent and potentially reverse a number of the major chronic diseases that consume the limited resources within our healthcare system.

Practice Premises

In practical terms there are activities which can lead individual practices to not only reduce their carbon footprint, but also to become community leaders, influencers and advocates for sustainability in their community and regionally. In terms of GP practice facilities, in an attempt to avoid reinventing the wheel, the HSE facilities directorate could function as an advisory role to GPs to improve the carbon footprint of their practices, in terms of sustainable heating systems, insulation, and maximum use of natural daylight, reusable water systems for sanitation and on water use generally. One example is the Green Toolkit <http://www.ukhealthalliance.org/toolkit-green-impact-for-health/> which was designed by GPs for GPs to help GP practices improve their sustainability and environmental impact. It can help reduce waste, reduce Practice running costs and address the risks of climate change.

Clinical Care

At a clinical care level, lifestyle and particularly diet must be brought into the conversation during clinical consultations, with a supportive framework of referral pathways for those that require direction or resources. The key and potentially transformative element of changing the healthcare paradigm in this regard would be for professionals to move to a space whereby they are working within solutions as opposed to problems i.e., moving from a disease care model to a health care model.

Disaster Management and Preparedness

Disaster management with centralised information and direct communication to keep GPs on the front- line up to date with severe weather changes and their consequences. This is also relevant for management of pandemics in the community. WHO pandemic preparedness should be used as a template to assist the various sectors within the health service <https://www.who.int/influenza/preparedness/pandemic/en/>

Biodegradables and Recyclables

There needs to be a move to use of recyclables and biodegradables in practices.

The carbon footprint of everything we do needs to be measured so that we can ascertain where we can best focus energy and time to reduce it where that is practical, while being mindful of international infection control standards.

There are many examples of use of disposable, single-use only items, rigid plastic urine containers, dressing packs with metal instruments which when used once are disposed of.

Bioengineering expertise and researchers are needed to develop solutions in balance with universal infection control experts. This could be something that Ireland could lead on internationally.

Efficient Use of Healthcare Resources

Addressing “Too Much Medicine” climate change and control is affected by overuse of resources. All doctors, including family doctors and GPs should avoid over-prescribing (products and amounts).

[Dublin Unused Medicines Project](#) (DUMP) programme in 2009, experienced black sacks full of unused unopened medications from prescriptions hoarded in people’s homes could be reassessed for efficiency, and assessed for root causes of pharmaceutical waste in order to prevent the problem.

GPs, like all doctors, should avoid over-referral, inappropriate use of blood tests during diagnostic processes and clinical reviews. Example: If a statin (a cholesterol lowering drug) is indicated, there is a limited benefit to the patient to recheck the blood levels again, yet many people on these drugs have annual lipid blood tests yet no alteration in medication – this is an example of a blood test being performed yet there will likely be no alteration in management once the initial level is known.

Some doctors do annual bloods on a prophylactic basis or check many blood tests when all that is required is a test for renal function or thyroid function.

Example: Vitamin D blood tests have a range of normal levels that have not yet been agreed upon internationally, yet they are requested and tested. There are medical colleges who have called for the suspension of Vit D blood tests. In fact they state that we don’t clearly know the significance of the impact of deficiency or excess, or indeed if supplementation is effective.

Miscellaneous issues:

- Stop use of single-use cups/ plastics in the practice staff room/ waiting areas
- Use of recycling bins and compost bins in the practice to ensure incoming packaging etc. are properly disposed of
- Using rechargeable batteries for devices, and
- Use health mail for transfer of patient records.

Question 3(b): Additional suggestions for concrete and cost-effective adaptation actions in terms of GP /trainee education, CME, CPD, skills and training?

“It is imperative that Planetary Health be included in the core curriculum of medical schools, family medicine residencies and further professional development.

We must strive to integrate sustainability into our individual clinician behaviour, clinical practice, and into clinical and educational meetings.” - WONCA World 2018

The Irish College of General practitioners (ICGP) is the professional body for education of GPs and Trainees. GPs spend a great part of their working lives imparting practical day-to-day information and signposting people to further resources that can help people improve their health and many of these also help the environment. GPs often underestimate the power of their instruction and advice to produce change, so all GPs ought to be aware of the incremental effectiveness of the general practice encounter with patients over many years in promoting public awareness and adoption of planetary preserving options and choices.

The ICGP introduced its GP members to the topic of Planetary Health at its National Annual Conference in May 2019, incorporating this topic in the educational programme of the conference.

Within the ICGP membership there is increasing demand through the ICGP faculties for medical education about planetary health/ environmental health which may be delivered locally at CME meetings, regionally, nationally at ICGP conferences, through digital education streams like webinars, and to undergraduates and postgraduates in other medical colleges and education meetings of allied health professionals.

The GP Continuing Medical Education (CME) programme is delivered locally to the country's GPs, and is an established system which may be utilised to educate GPs on planetary health and optimal lifestyles along with the evidence for instigating behaviour changes. Behaviour change skills and techniques such as motivational interviewing and cognitive behaviour therapy should be taught, practiced and formally assessed.

Evidence based medicine must be at the core of awareness training for GPs on practical aspects of health sector activities in the mode of “This is what you can do to make a difference...”. It is crucial for ICGP to keep abreast of the exponential evidence for teaching and promoting GPs to engage in behaviour change techniques to encourage evidence based lifestyle changes which are better for personal health and for the environment.

There is also scope for lifestyle based interventions such as plant based diets and active transport at a curriculum level in GP training when the curriculum is next reviewed. Identify environmental factors that impact on health - biological, chemical, physical and immunological.

GPs need information on patterns of non-communicable disease and preventable health problems at primary prevention (at source), secondary prevention (early identification and

treatment) and tertiary prevention (addressing the consequences of established disease) levels.

Cross Sector Benefits

With international reports concerning the climate crisis informing medical educators, there is also scope for medical education to achieve consensus within healthcare, and for this to help inform government departments.

Sample syllabus from the [planetary health alliance](#). Delivered from New York University, Global Institute of Public Health

Non-Communicable Disease Epidemiology and Control

The New York University course focuses on the considerable and increasing burden of disease due to chronic diseases, mental health, substance use (alcohol, tobacco, other drugs), risk factors (obesity, lack of physical activity), and injuries within the developing world, and explores the role of the environment in relation to these challenges.

This course will focus on the considerable and increasing burden of disease due to chronic diseases, mental health, substance use (alcohol, tobacco, other drugs), risk factors (obesity, lack of physical activity), and injuries within the developing world. It will present methods for measuring the burden of non-communicable disease, review approaches to program and service development to modify risk factors, present lessons learned from successful developing country programs, and discuss implications for health services development and international development policies. Non-communicable diseases are the leading causes of mortality in the world, accounting for 60% of deaths. Despite the enormous global impact, governments, non-governmental organizations, and other key stakeholders have not developed sufficient programs for the prevention, surveillance, and treatment of these diseases.

Figure 1: Screenshot from PHA curriculum

Topics include:

- Epidemiology and scientific basis of NCD prevention and co.
- Global challenges in cancer prevention
- Infectious agents and chronic disease
- Tobacco, alcohol and health
- Environmental air pollution and chronic disease
- Chemicals in water and chronic disease
- Nutrition, obesity and chronic disease
- Genetics and the global burden of NCDs
- Global challenges in primary care for NCDs
- Microbiome and NCDs
- Environment and childhood chronic disease

Question 3(c): Additional suggestions for concrete and cost-effective adaptation actions in terms of the interfaces between general practice and other services: e.g. primary care services, hospitals, other services?

Services and Supports to promote positive behaviour changes. Behaviour change skills and techniques such as motivational interviewing can be utilised effectively as GPs have a daily, mass interface with the public.

However, with ten minute appointments running throughout the week in practices and out of hours care, it is not feasible to implement anything other than the briefest of interventions. HSE initiatives such as [Making Every Contact Count](#) (MECC) and the HSE [National Framework for Self-Management Support](#) and [Living Well with a Chronic Condition](#) have enormous potential to promote the uptake of HSE services such as nutritionists and dedicated health promotion staff who are trained in patient self-management support.

These services should be directly available to patients in each CHO area on referral from their GP.

GPs collectively have some “muscle” in messaging and enforcing best practice regarding waste, stock redundancy, use of paper and packaging.

In terms of disaster management with extreme weather events enhanced emergency department service planning (e.g. increased staffing and premises for EDs to cope with increased attendance) with possible increased diagnostics access for GPs should be envisaged.

Minimise Use of Hospital Services and Hospital Resources

Specific cross sector approaches are needed within the health sector to minimise over-diagnosis, over-referral, over-investigation, over-testing, over-intervention, over-prescribing and over-imaging.

The European initiative “Health Care without Harm” has already begun to lead on some of these initiatives and we should be informed by them, and other such agencies that are focused on this issue, going forward.

Balancing defensive medicine approach with a new approach to communicating clinical uncertainty to patients and their families should be a national imperative.

Minimize paper use between services by using electronic data transfer.

Question 3(c): Additional suggestions for concrete and cost-effective adaptation actions in terms of your views on the remainder of the health sector (outside general practice and its clinical interfaces)

Different models of healthcare delivery may be more conducive to medical over-investigation and medical over-intervention and may need specific approaches; in particular financial models that promote fee per item of activity, that is the more procedures are performed the greater the income.

Suppliers to hospital and health sector generally should be encouraged to supply items in biodegradable packing, minimize single-use plastics in hospitals.

- Input to health sector from climate economists as important as well as health economists
- There is a cost to harms from interventions: screening, surgical procedures, angiography, over-prescribing, etc.
- We should not do 'nice' tests and interventions because 'we can' but only if justifiably clinically indicated in the management decision for the patient.
- GP don't need information surplus to clinical management requirements – colour photographs of the duodenal ulcer on paper to the practice are not necessary for medical management. However GPs could be helped by being enabled to send colour photographs electronically of skin lesions and rashes to our dermatology colleagues!

Credibility of the Evidence Base

An often underplayed issue facing Health care is the crisis in the credibility of the evidence base. Leaders of the Evidence Based Movement in Oxford (e.g., Goldacre, Hennigan, McCartney), alongside other international commentators such as Vinay Prasad, have been calling for a complete overhaul of the current system and retrograde transparency for existing evidence. At present there is a worrying lack of knowledge of which treatments and interventions that we use help or harm and by how much. This causes huge quantities of waste, both fiscal and material, whilst drawing significant resources away from those that need it most. This could be a role for HSE Library to coordinate this information for all including GPs.

Dissemination of information and actions from collaborative Quality Improvement Initiatives and Patient Safety campaigns are crucial in order to move medical care into the 21st Century, such as:

- [Choosing Wisely](#)
- [Preventing Overdiagnosis](#)

Examples include:

- Screening
- Cardiac stenting
- Aspirin
- Statins

Implementing Lifestyle Medicine

All healthcare departments should have universal policies in line with planetary health to instil a culture of sustainability and health optimization e.g. recycling, reusing, less food waste, active transport and plant-based food options.

Incentivising staff also would help with this culture change within the HSE e.g. through possible provision of pedometers/fitness wearables, healthy snacks e.g. fruit and nuts, public transport discounts etc.

Question 4: Additional or miscellaneous points you would like to raise?

Most of our healthcare spending is on chronic disease.

The prevalence of chronic disease is increasing. We have accrued significant evidence from multiple sources in terms of the prevention, treatment and reversal of chronic disease with lifestyle change. An altered emphasis, with funding to incentivize GPs, to encourage patients to optimize their lifestyle would have a significant effect in decreasing the spiralling healthcare costs, improving the health of our population while simultaneously enhancing planetary health.

“...we invite all family doctors to collaborate in the development of innovative strategies, practical examples, scientific evidence for effective action, inclusive educational resources and to advocate about Planetary Health.” - Wonca 2018.

Resources

[WONCA Statement on Planetary Health and Sustainable Development Goals](#)

The WONCA Working Party on the Environment has developed the WONCA Statement on Planetary Health and Sustainable Development Goals which was endorsed by the WONCA Executive in April 2017.

[Clinicians for Planetary Health](#) - Planetary Health Alliance and associated links

The Planetary Health Alliance is a consortium of universities, NGOs, government entities, and other partners committed to advancing planetary health. With its office at Harvard University, Boston, MA 02115 pha@harvard.edu

Mission is to support the rapid growth of a robust, interdisciplinary field of planetary health, the PHA is focused on:

- 1) **Building** a global planetary health community that crosses sectors, disciplines, generations, and geographies;
- 2) **Facilitating** the training of the next generation of planetary health scholars through the development of mentorship opportunities and foundational open-access educational resources from primary to university levels; and
- 3) **Mainstreaming** planetary health science through broad public outreach and direct engagement with policy makers.

[Sam Myers](#) - PHA Director

Sam Myers works at the intersection of human health and global environmental change. He received his BA from Harvard College, his MD from Yale Medical School, performed his residency in internal medicine at the University of California, San Francisco and received his MPH from the Harvard School of Public Health. He is a Principle Research Scientist, Planetary Health at the Harvard T.H. Chan School of Public Health and Director of the Planetary Health Alliance. He is an Instructor of Medicine at Harvard Medical School and is Board Certified in Internal Medicine. PHA Fellows programme.

[The Rockefeller Foundation Planetary Health \(RFPH\) Fellows Program](#)

With support from The Rockefeller Foundation, the Planetary Health Alliance (PHA) at Harvard University has created The Rockefeller Foundation Planetary Health (RFPH) Fellows program to enable recent doctorate recipients to tackle complex questions at the intersection of global environmental change and human health.

Members of PHA include The [Irish Doctors for Environment \(IDE\)](#), the Royal College of General Practitioners (RCGP) UK, American Society for Lifestyle Medicine, Canadian Association of Physicians for the Environment, plus the [American Public Health Association \(APHA\)](#) The [WFPHA](#)'s mission is to promote and protect global public health. It does this throughout the world by supporting the establishment and organizational development of public health associations and societies of public health

The [Consortium of Universities for Global Health \(CUGH\)](#) is a rapidly growing Washington, DC based organization of over 175 academic institutions and other organizations from around the world engaged in addressing global health challenges.

The [Canadian Medical Association](#) is the representative organization for the physicians of Canada.

[Doctors for the Environment Australia \(DEA\)](#) is the only organization of medical professionals in Australia solely focused on promoting good health through care of the environment. We are GPs, surgeons, physicians, anesthetists, psychiatrists, pediatricians, public health specialists, academics, medical students and researchers.

The Centre for Sustainable Healthcare (CSH) works with key partners to engage healthcare professionals, patients and the wider community in understanding the connections between health and environment, and to reduce healthcare's resource footprint. The Centre for Sustainable Healthcare (CSH) works with key partners to engage healthcare professionals, patients and the wider community in understanding the connections between health and environment, and to reduce healthcare's resource footprint. Our range of programmes seeks to inspire healthcare professionals to develop sustainable models of care. We provide tools and resources to empower and enable individuals and groups to make their own changes and we work with them to transform practice.

World Organization of Family Doctors (WONCA) Working Party on the Environment: Our vision is healthy people, healthy communities and healthy ecosystems on a healthy planet.

Further Information

- Robert McSweeney, "The Impacts of Climate Change at 1.5C, 2C and Beyond," Carbon Brief, October 4, 2018
- [Climate change and Human Health](#) - What can GPs do?
- [Addressing the health effects of climate change](#) – Family Physicians are key
- [Wonca Global Family Doctor Working Group on the Environment](#)
- [Wonca World Declaration calling for family doctors of the world to act on planetary health](#)
- [Clinicians for Planetary health](#)
- [Overdiagnosis, Overintervention and actions to be taken](#)
- [Overmedicalisation and Quaternary Prevention](#)
- [Justification and Appropriateness of radiological diagnostics](#)
- [Going for gold: the health promoting general practice](#). Michael Watson. Quality in Primary Care 2008.
- [Healthy Ireland teaming with Parkrun](#)
- [Green Toolkit](#)
- [WHO pandemic preparedness](#)
- [Dublin Unused Medicines Project \(DUMP\) programme 2009](#)

- [The Anthropocene, the pathophysiological relationship between our plate, our patient and our planet: ICGP AGM 2019](#)
- [Making Every Contact Count \(MECC\)](#)
- [HSE National Framework for Self-Management Support](#)
- [Living Well with a Chronic Condition](#)
- [Choosing Wisely](#)
- [Preventing Overdiagnosis](#)
- [Healthcare without Harm](#)

