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# PLANETARY HEALTH COLLABORATIVE FOR NURSES AND MIDWIVES 2024 NEWSLETTER



The ultimate test of a moral society is the kind of world  
that it leaves to its children.

~ Dietrich Bonhoeffer



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# Introduction

The Planetary Health Collaborative for Nurses and Midwives was established in 2023. It is premised on the understanding that the health of humanity depends on the health of our planet. We believe that together, we can create a healthier and more equitable future for current and future generations and that, as guardians of health, it is our duty to help lead the way in this crucial fight.

As nurses and midwives, we are uniquely positioned to drive change. Our holistic approach to health along with our understanding of how climate change disproportionately affects those who are most vulnerable, allows us to identify creative solutions and advocate for policies that address climate justice issues.

With more than 30 million nurses and midwives worldwide, we have the collective power to make a difference. We cannot wait. Our shared commitment to climate justice and the health of our planet is more than a moral imperative—it is essential to ensuring the well-being of generations to come.

The Planetary Health Collaborative has grown from six members in April 2023, to more than 50 members from 20 institutions across Australia and beyond. This growth is evidence of nurses' and midwives' recognition of the imperative to address climate change, biodiversity loss and pollution as critical health priorities.

2024 began with the Collaborative's first face-to-face team building and strategy workshop. A key outcome from this day was the development of our Mission, Vision and Values statement. The workshop also provided an opportunity to deepen our shared commitment, foster stronger connections across our network, and set actionable goals for advancing planetary health in nursing and midwifery.



# Introduction

This year, with the growth of the Collaborative, it became apparent that we needed a less organic and more coordinated governance structure and approach. Consequently, the Planetary Health Leadership Group was formed along with four strategic pillars designed to drive focused action.

The strategic pillars represent four distinct yet interrelated focus areas—Research, Education, Advocacy, and Practice (REAP). Together, these pillars strengthen our strategic intent and help to coordinate the Collaborative’s efforts to advance planetary health, both nationally and globally. The pillars bring coherence to our strategic direction, enabling us to track progress and measure impact, while providing a shared language for collaboration with partners across academia, industry, healthcare, and policy sectors.

The strategic pillar leads are:

- Research - Tracy Levett-Jones and Tracey Tulleners
- Education – Tracey Moroney and Lorraine Fields
- Advocacy – Aletha Ward and Mark Holmes
- Practice – Christine Catling, Suzanne Sheppard-Law and Wayne Varndell.

In this newsletter I, and the members of Planetary Health Collaborative, are proud to share our 2024 achievements. Our work demonstrates how a shared sense of purpose, commitment and collective action can help to create a world where health and environmental justice go hand in hand.

Tracy Levett-Jones

Distinguished Professor, University of Technology Sydney

Lead, Planetary Health Collaborative for Nurses & Midwives

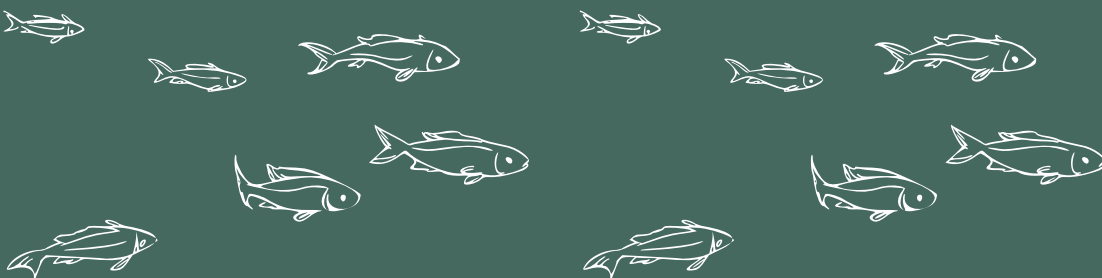
# HIGHLIGHTS: STRATEGIC PILLAR 1. RESEARCH

*As the global health landscape rapidly shifts in response to climate change, environmental degradation, and social inequalities, the role of healthcare professionals—particularly nurses and midwives—becomes ever more crucial. The Research Strategic Pillar seeks to explore the ways in which environmental factors such as air quality, water access, and climate-related disasters directly impact maternal and child health, chronic diseases, mental health, and the broader healthcare system. By fostering collaboration and interdisciplinary knowledge, this pillar aims to generate evidence that informs practice, policy, and education, ensuring nurses and midwives can not only mitigate the health effects of environmental changes but also advocate for sustainable health practices within their workplaces and communities.*

## Research Achievements

Since the Collaborative was established in 2023, we have been committed to creating a strong evidence base for our work by undertaking a number of research projects, including both clinical projects (see [Practice section](#)) and educational studies (see [Education section](#)).

In 2024, Collaborative members completed a number of funded and unfunded research [projects](#) and published the results as journal [articles and reports](#). Examples of some of our ongoing projects include a bibliometric analysis of climate change in nursing education, a critical analysis of contemporary reporting of climate change and health in popular media, and an exploration of healthcare professionals' planetary empathy levels.



# HIGHLIGHTS: STRATEGIC PILLAR 1. RESEARCH CONT.

## Spotlight on a new field of study – Planetary Empathy

*We need acts of restoration, not only for polluted waters and degraded lands, but also for our relationship to the world ~ Robin Wall Kimmerer*

Planetary Health emphasises the inseparability of human health with the health of the natural environment. Despite this, human induced destruction of nature and natural systems has persisted, threatening the stability of the planet's ecosystems and the health of all life on earth. An in-depth understanding of the concept of planetary empathy offers new opportunities and insights for understanding how healthcare professionals live in relationship with the natural world.

Tracy Levett-Jones, Katie Tunks Leach, Odette Best, Heidi Honneger Rogers, Catelyn Richards, and Aletha Ward have been exploring the concept of planetary empathy, and its role in shaping our sensibilities for health, healthcare, and the roles and responsibilities of healthcare professionals. We began with an editorial titled: '[Dear Earth](#) – Cultivating Planetary Empathy for the health of all' and recently had a concept analysis paper accepted by Nursing Outlook. We are currently conducting a study to explore healthcare professionals' levels of planetary empathy and to examine the psychometric proprieties of the Planetary Empathy Scale.



# HIGHLIGHTS: STRATEGIC PILLAR 1. RESEARCH CONT.

## Journal Special Editions

Members of the Collaborative have been guest editors for four special editions of journals focusing on planetary health; they include:

- Midwifery & Birth – ‘Planetary Health and The Role of Midwives’. Guest Editors Christine Catling and Maeve O’Connell.
- Teaching & Learning in Nursing – ‘Transformative Education for Nurses in the Anthropocene’. Guest Editors: Aletha Ward and Tracy Levett-Jones.
- Nurse Education Today – ‘Planetary health in nursing and midwifery education: pedagogy for hopeful futures’. Guest Editors: Deb Massey, Richard Kyle, Catelyn Richards and Anna Foster.
- Journal of Advanced Nursing – ‘Nursing for a Healthy Planet and People: Addressing Climate Change Impacts on Health and Mitigating Healthcare's Carbon Footprint’. Zerina Lokmic-Tomkins, Elizabeth Schenk, Calvin Morley and Jay Lee.





## Publications & Dissemination

As well as publishing more than 40 research [articles and reports](#), we have focused on highlighting the significance of planetary health for nurses and midwives by contributing to scholarly dialogue and debate through discussion papers and editorials. Dissemination strategies also include conference presentations as well as our [website](#), [blogs](#) and [social media](#), each of which have generated significant interest.

Members of the Collaborative recently presented on planetary health and related topics at the 9th International Nurse Education Conference in Singapore; these presentations included:

- *Nurses promoting a healthy planet through the 'Planetary Health Education' Framework.* Oral presentation by Janet Roden and Teresa Lewis.
- *Achieving consensus on the essential knowledge and skills needed by nursing students to promote planetary health and sustainable healthcare: a Delphi study.* Oral presentation by Tracy Levett-Jones (presenter), Christine Catling, Jacqui Pich, Jane Maguire, Erica McIntyre, Tracey Moroney, Lorraine, Anna Foster, Nicci Whiteing and Zerina Lokmic-Tomkins.
- *Use and effectiveness of current educational approaches for teaching planetary health, sustainability and climate change in undergraduate health programs.* Poster presentation by Anna Foster, Deb Massy, Nicci Whiteing and Tracy Levett-Jones.



## HIGHLIGHTS: STRATEGIC PILLAR 1. RESEARCH CONT.

- *'Healthy planet, healthy people'*: The development and evaluation of an educational board game. Poster presentation by Tracy Levett-Jones, Tracey Moroney, James Bonnamy, Elaine Correia Moll, Jack Cornish, Anna Foster, Sam Lapkin, Jacqui Pich, Catelyn Richards, Tracey Tulleners, Naomi Tutticci, Melissa Young.
- *Because that's what I was taught! Is there evidence for wearing gloves when preparing or administering intravenous antimicrobials?* Rapid 5 presentation by Natasya Raja Azlan (presenter), Debbie Massey, Lesley Andrew, Mandy Towell-Barnard, Seng Giap Marcus Ang, Carol Crevacore, Martina Costello, Aaron Alejandro, Weiting Liu, Naila Zaman, Peta-Anne Zimmerman. RECEIVED HIGHLY COMMENDED NOMINATION (see further information about this study below).





# HIGHLIGHTS: STRATEGIC PILLAR 1. RESEARCH CONT.

## Spotlight on evidence-based practice: “Because that’s what I was taught”.

The practice of wearing non-sterile gloves during the preparation and administration of intravenous (IV) antibiotics has become increasingly common in healthcare settings. Yet, is this practice truly evidence-based or environmentally sustainable? Recent research highlights a concerning lack of evidence to support the routine use of non-sterile gloves in these procedures and underscores the critical role of nurses in promoting both patient safety and planetary health. Nurses often wear non-sterile gloves intending to prevent infections, but studies indicate that this practice may inadvertently replace proper hand hygiene, potentially increasing infection risks. Beyond patient safety, the financial and environmental costs of glove use are significant. The manufacturing and disposal of single-use gloves generate plastic waste and emissions, contributing to environmental degradation. As frontline healthcare providers, nurses have a unique responsibility to balance patient care with environmental stewardship, making sustainable choices that align with planetary health principles. A scoping review has been conducted to examine the evidence on non-sterile glove use during IV antibiotic preparation. Surprisingly, after reviewing 11 articles, researchers found no direct evidence supporting the efficacy of this practice. In an innovative approach, the researchers traced indirect references within these studies, further confirming that no foundational evidence backs glove use in this context.

These findings reveal an urgent need for rigorous research to clarify when non-sterile gloves are genuinely beneficial, aiming to inform nursing education and clinical guidelines. In the absence of clear evidence, nursing practices like routine glove use could be re-evaluated to prioritise both patient safety and environmental sustainability. By advocating for evidence-based practices that consider planetary health, nurses can lead healthcare toward a more sustainable future, ensuring that every action—from hand hygiene to glove use—contributes positively to both patient outcomes and the health of our planet.



# Spotlight on Higher Degree Research candidates and graduates

As a Collaborative, our mission is to foster a culture of research collaboration and mentorship that supports and empowers early career academics and Higher Degree Research candidates. Without a doubt, their curiosity, 'out of the box' thinking, innovative approaches, and drive to make an impact, are a constant source of inspiration. Below we feature two of our outstanding PhD students/graduates:

## Catelyn Richards

Catelyn is currently completing a PhD exploring how the Australian health system can incorporate planetary health principles through policy, nursing practice, and leadership to foster health outcomes for both people and the planet. Through a varied explanatory sequential mixed methods approach, Catelyn will be exploring the overarching question: How can the Australian health system incorporate planetary health principles through policy, nursing practice, and leadership to foster health outcomes for both people and the planet?

Through her PhD, Catelyn aims to review and synthesise the key strategic decisions outlined in State and Territory Net Zero policies, and critically analyse the extent to which these policies incorporate planetary health principles. She will then evaluate the extent to which State and Territory policies influence health organisations' practices in embedding planetary health principles. Once she has a clear understanding of these two factors, Catelyn will explore the current behavioural intentions of nurses in relation to planetary health. Using data from the previous phases of this research, Catelyn will then conceptualise and identify opportunities and strategies to embed planetary health in the Australian health system. Find out more about Catelyn's research by [clicking on the attached image.](#)



# Spotlight on Higher Degree Research candidates and graduates

## Lorraine Fields

Lorraine Fields graduated with a PhD in October, 2024 Her thesis was titled: The Impact of Education on the Sustainable Development Goals through Critical Pedagogy on Nursing Graduates. Her study explored how educating nursing students on the United Nations Sustainable Development Goals (SDGs) can empower nurses to address pressing health and environmental issues. While Lorraine's research found that SDG education raises awareness, it also highlighted barriers—such as limited resources and entrenched workplace hierarchies—that challenge nurses' ability to advocate for sustainability and environmental health in clinical practice. Lorraine emphasises that the nursing profession must unite in purpose and work collaboratively to overcome these constraints, positioning nurses to play a transformative role in advancing both health equity and planetary health. By focusing on key SDGs—particularly SDG3 (Good Health & Well-Being), SDG4 (Quality Education), SDG5 (Gender Equality), SDG8 (Decent Work), SDG12 (Responsible Consumption & Production), and SDG13 (Climate Action)—nurses can make targeted, meaningful contributions to a sustainable and healthier future. Lorraine's research underscored the importance of a cohesive commitment across healthcare to help achieve these vital goals for people and the planet.



Since completion of her PhD, Lorraine has received two prestigious teaching awards at the University of Wollongong: The Faculty of Science, Medicine and Health Academic Award for Outstanding Contribution to Teaching and Learning (OCTAL) Award and the Overall Vice-Chancellor's Award for Outstanding Contribution to Teaching and Learning (OCTAL). Recognised for her leadership, innovation, and dedication, Lorraine's achievements include embedding sustainability into nursing curriculum, advancing scholarship on the SDGs, and implementing sustainability-focused innovations acknowledged by the accrediting body ANMAC.





## HIGHLIGHTS: STRATEGIC PILLAR 2. EDUCATION

*The Education Strategic Pillar focuses on embedding planetary health principles into nursing and midwifery education, equipping students with the knowledge, skills and critical thinking needed to address complex environmental and health challenges. This pillar aims to transform educational practices by fostering sustainability-minded curricula, promoting interdisciplinary learning, and preparing future healthcare professionals to advocate for and lead change in planetary health.*

The Collaborative has had a very productive year, integrating planetary health into nursing education in creative and impactful ways. Through games, simulations, and innovative resources, we are actively bridging the gap between health education and environmental sustainability, preparing future nurses to tackle pressing global challenges.

### **Planetary Health Delphi Study**

One of our standout achievements is the completion of the [Planetary Health Delphi Study](#). This project reached a consensus on the essential knowledge and skills nursing students need to promote planetary health and sustainable healthcare. The study outcomes offer a clear, evidence-based framework that can guide curriculum development and support the integration of planetary health principles into nursing education worldwide. Building on the Delphi study, Christine Catling led a nominal group technique study to validate the knowledge and skills in climate change and planetary health statements to ascertain their appropriateness for midwifery course curricula.

## Educational Studies Cont.

### The 'Healthy Planet, Healthy People' Educational Board Game

Studies suggests that well-designed educational board games can promote higher level thinking and learner engagement. The 'Healthy People, Healthy Planet' educational [board game](#) was designed by members of the [Planetary Health Collaborative](#) in partnership with Focus Games. The game was informed by the results of a [Delphi study](#) that sought consensus on the knowledge and skills that graduates require to steward healthcare towards a more sustainable future and it is based on the premise that there is 'no health without planetary health'.

The game takes a hopeful and solutions-focused approach that empowers players to generate new ideas for how they can individually and collectively create a healthier, more equitable world for current and future generations. It is available in Australian, international, hard copy and digital formats.

Two hundred and eighty-four (284) nursing students enrolled at five universities across Australia participated in the evaluation study, with 184 completing both the pre-and post-surveys. The preliminary results of the evaluation indicate that the 'Healthy People, Healthy Planet' game had a statistically significant impact on students' knowledge and attitudes and that they were highly satisfied with the instructional design elements of the game.



### Responding to Extreme Weather Events: An Innovative Tabletop Simulation Activity

The increasing impacts of extreme weather events due to climate change present significant challenges to the healthcare system globally. Nurses, the largest workforce within the healthcare sector, are often at the forefront of disaster responses; however, they often lack the skills and knowledge needed to respond appropriately to extreme weather events. We designed and implemented an 'Extreme weather events tabletop simulation' to help address this issue and enhance workforce readiness.

Tabletop simulations as the name implies, are played out around a table, with students working in small groups responding to written or verbal prompts related to the unfolding scenario. The atmosphere is purposefully informal, non-competitive, collegial and exploratory. The 'Extreme weather events tabletop simulation' was designed to ensure that future nurses are better prepared to respond to the complex challenges posed by climate-induced disasters. The simulation scenarios were informed by interviews with nurses and midwives who had first-hand experiences in responding to extreme weather events (see [Climate-driven extreme weather events: Australian nurses' and midwives' experiences](#)).

This allowed us to integrate real-world challenges into the simulation, ensuring it reflected the unpredictability and intensity of such events.

Informal feedback from students included comments such as:

- It got us thinking about potential scenarios in the future where thinking outside the box will be required.
- It made me realise how emergency response management is a team effort.
- It enhanced my understanding of extreme weather events and how critical communication is.



# HIGHLIGHTS: STRATEGIC PILLAR 2. EDUCATION CONT.



## Intersecting Agendas: Nursing & Midwifery Education & Planetary Health

James Bonnamy, Naomi Tutticci and Tracy Levett-Jones presented a workshop at the Council of Deans of Nursing & Midwifery Symposium in Darwin in July. The workshop presented key findings from four nested educational studies that each addressed a contemporary imperative related to planetary health education.

- **Study 1** – Benchmarking the integration of climate health in nursing curricula in Australia and New Zealand.
- **Study 2** – Investigating nursing students' attitudes towards and awareness of climate change and sustainability issues and their inclusion in nurse education.
- **Study 3** – Exploring Australian and New Zealand nursing and midwifery educator's planetary health knowledge, perspectives, confidence and teaching practices.
- **Study 4** – Achieving consensus on the knowledge and skills that undergraduate nursing students require to steward healthcare towards a more sustainable future.

The key findings from these studies are summarised in an [infographic](#).

The main component of the workshop was a 'hackathon', an approach that allows participants to come together for an intense problem-solving session. In this session, participants focused on ways to strengthen planetary health education in nursing and midwifery curricula in order to better prepare graduates for the realities of practice.



# HIGHLIGHTS: STRATEGIC PILLAR 2. EDUCATION CONT.

## Promoting Sustainability in Nursing & Midwifery Clinical Laboratories: Strategies for Resource Reduction, Reuse, & Recycling

University based clinical laboratories or simulation units replicate authentic healthcare environments, and are designed to enhance students' and preparation for practice. However, similar to healthcare settings, clinical laboratories produce vast quantities of waste. This concern led to the writing of a journal [paper](#) that provides a series of exemplars that illustrate sustainability initiatives being used in four university-based clinical skills laboratories. These initiatives each demonstrate a commitment to the United Nation's [Sustainable Development Goals](#) and illustrate the principles of 'reduce, reuse, recycle'. Importantly, these exemplars provide a way to role model the principles of sustainable practice to students.

## Chapters in Nursing Textbooks

Tracy Levett-Jones is the editor of the 4th edition of 'Clinical reasoning: Learning to think like a nurse' and one of the editors of 5th edition of Kozier and Erb's Fundamentals of Nursing. In both of these texts, planetary health is being included a core construct. Lorraine Fields and Tracey Moroney have authored/edited a new chapter for Potter and Perry's Fundamentals of Nursing textbook, drawing on insights from the [Collaborative's Delphi study](#) to shape the content. These efforts ensure that planetary health is deeply integrated into nursing education, preparing students to address the health impacts of environmental change.





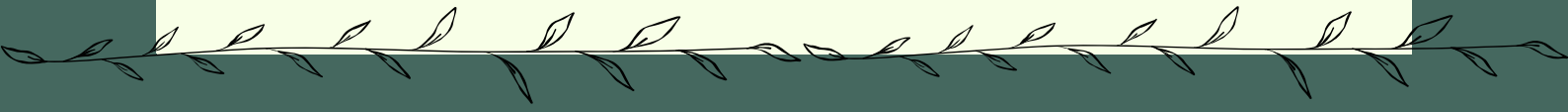
## HIGHLIGHTS: STRATEGIC PILLAR 3. POLICY AND ADVOCACY



*The Policy and Advocacy Strategic Pillar seeks to empower nursing and midwifery professionals to lead and advocate for policies that advance climate adaptation, resilience, and social justice. We aim to influence policy across global, federal, state, and local levels to ensure healthcare systems address environmental sustainability, health equity, and the urgent need to promote intergenerational justice in the face of climate change impacts.*

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The Policy and Advocacy efforts of the Planetary Health for Nursing and Midwifery Collaborative reflect the urgent need for nurses and midwives to be at the forefront of climate action and healthcare reform. Through influential Senate hearings, strategic partnerships with leading healthcare organisations, and the development of key position statements, the Collaborative advocated for systemic changes that integrate planetary health into policy and practice. Additionally, members of the Collaborative have contributed to critical public discussions, such as the Queensland election's climate debate, highlighting the hidden costs of climate inaction on healthcare, food security, and economic stability. The Collaborative's leadership in both public and academic forums, including various key speaking events, further amplifies our call for sustainable healthcare practices and equity-driven climate policies. Together, these efforts embody the Collaborative's commitment to empowering healthcare professionals to lead in addressing the intersecting challenges of climate change, health, and social justice.



## Collaborative Declaration and Press Release

In October 2024, coinciding with Global Climate Change Week, the Collaborative released the declaration: [Nurses and Midwives for Planetary Health: A Call to Action](#). This declaration, accompanied by a press release, urges immediate policy shifts to integrate health in all climate policies and highlights the disproportionate impact of the climate crisis on vulnerable populations. The press release reiterates that "the health of humanity depends on the health of our planet" and calls for collective advocacy efforts to push for systemic changes that safeguard both planetary and human health.

## Senate Hearing on the Duty of Care and Intergenerational Climate Equity Bill

In February 2024, members of the Planetary Health for Nursing and Midwifery Collaborative were key expert witnesses in a public Senate hearing on the Duty of Care and Intergenerational Climate Equity bill 2023, in Canberra. Dr. Aletha Ward, representing the Australian Primary Health Nurses Association (APNA), and Mr Mark Holmes, representing Climate Action Nurses (CAN), gave testimony on the critical intersections between climatechange and health. Their contributions underscored the urgency of embedding a 'Duty of Care' for future generations within climate policy, stressing that healthcare professionals must be at the forefront of advocating for climate action to mitigate long-term health impacts.






## Planetary Health Position Statements

Members of the Collaborative have actively worked with the [Council of Deans of Nursing and Midwifery](#) (CDNM), Australian College of Nursing (ACN), and Australian College of Perioperative Nurses (ACORN) to co-author and/or inform position statements on planetary health. These statements call for the integration of sustainability principles into nursing practice and healthcare governance. They advocate for nursing leadership in climate mitigation and adaptation strategies across clinical practice and healthcare settings. The Collaborative continues to work closely with these organisations to ensure that planetary health remains a priority in nursing leadership and education.

### ACN White Paper 2024

The Australian College of Nursing (ACN) recently updated and released its white paper titled "[The Nursing Response to the Climate Emergency](#)" in October 2024. The white paper, led by Collaborative members Dr Aletha Ward and Mr Mark Holmes, offers an updated framework for nursing leadership in emissions reduction, disaster preparedness, and the broader integration of climate health into healthcare systems. This landmark document emphasises the role of nurses in driving sustainability, advancing education on climate impacts, and preparing the healthcare system for future climate emergencies.





# Media Engagement

In October 2024, key members of the Collaborative, including Dr. Aletha Ward, Mark Holmes, and Distinguished Professor Tracy Levett-Jones, co-authored an impactful piece in Croakey Health Media titled [Published "The Hidden Costs of Climate Inaction for Queensland Voters."](#) ahead of the Queensland state election, the article highlights the often-overlooked consequences of climate inaction, outlining the risks to food security, healthcare infrastructure, economic stability, and employment that stem from fossil fuel dependency. It underscores that a vote for climate inaction is a vote for a more unstable, unhealthy, and inequitable future, particularly in Australia's most disaster-prone state, calling for urgent political commitments to transition to renewable energy. This advocacy aligns with the Collaborative's broader mission to embed planetary health in healthcare discussions, underscoring the vital role of nurses and midwives in public education and policy influence.

In an invited editorial, Dr. Ward wrote further on the critical juncture Queensland faces as fossil fuel dependency threatens public health, economic stability, and food security. She highlighted that those most affected by climate inaction, particularly rural and coastal communities, bear the harshest burdens while industries profiting from fossil fuels retain undue political influence. Moving towards renewable energy, Dr. Ward noted, would strengthen economic resilience, improve health outcomes, and offer climate security for all Queenslanders. [Federal election 2025 – Croakey Health Media](#)

In June 2024, a number of Collaborative members, including Distinguished Professor Tracy Levett-Jones and Dr Aletha Ward, signed an open letter in The Australian. The letter was signed by 400+ health professionals concerned about the hazardous health impacts of coal, oil, and gas.

# Media Engagement Cont.

Aligned with COP29, Dr Aletha Ward spoke on Southern Cross Australia radio about the urgent need for climate-resilient healthcare systems, stressing that failing to meet net-zero emissions targets will severely impact healthcare accessibility, cost, and quality. She outlined how climate-driven challenges, from heatwaves and bushfires to extreme weather events, place unsustainable pressures on healthcare facilities and frontline workers, often under-resourced to manage such crises. Without decisive action, communities could face frequent disruptions, reduced access to essential services, and increased health inequities, as Dr Ward highlighted that net zero is not only an environmental target but a public health imperative to ensure stable and equitable healthcare for all Australians.

In a recent Croakey article, Aletha Ward, Tracy Levett-Jones, and Mark Holmes urge decisive action at COP29 to prevent the healthcare system's collapse due to climate breakdown. They invited readers to envision a future where healthcare services, empowered by climate justice and sustainable policies, can withstand climate extremes, advocating for political accountability and transformative change to secure health for all by 2050. Read this article here: [Our healthcare system is at a climate crossroads. What will it look like in 2050? – Croakey Health Media](#)



## Presentations and Advocacy at Universities and Council of Deans Nursing and Midwifery

Members of the Collaborative have delivered numerous presentations at universities and to the Council of Deans Nursing and Midwifery advocating for the integration of Planetary Health in nursing and midwifery curricula. These presentations have highlighted the need for innovative educational strategies and leadership roles for nurses and midwives in addressing climate change through education and research.



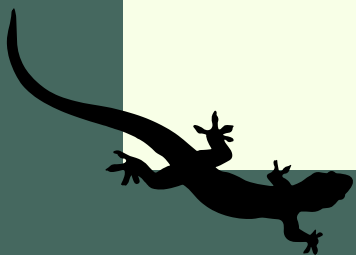
## HIGHLIGHTS: STRATEGIC PILLAR 4. PRACTICE

*Healthcare systems contribute significantly to climate change with greenhouse gas emissions from healthcare increasing by 36% since 2016. This is driving healthcare away from its guiding principle of doing no harm and making achievement of net zero targets increasingly challenging. Nurses and midwives can make a powerful contribution to building climate resilient healthcare systems, mitigating climate change, and supporting people and communities to adapt to its impacts. The Practice Strategic Pillar is committed to enhancing the capacity of nurses and midwives to respond to the challenges of climate change through engagement in clinical research, leadership and practice initiatives.*

### **PROFILING THE WORK OF NURSES AND MIDWIVES**

While some nurses and midwives are pioneering local changes and implementing planetary health innovations well ahead of the curb, only a select few are sharing their trailblazing work. This lack of visible role models is problematic, especially for future nurses and midwives, as ‘you cannot be what you cannot see’.

The reports below showcase nurses and midwives who are leading successful initiatives designed to have a positive impact on healthcare sustainability, climate change and planetary health. We interviewed nurses and midwives from across Australia who are working in clinical, organisational and educational roles. The inspirational models of innovation they describe will help healthcare and educational organisations to re-imagine the role of nurses and midwives in championing healthcare sustainability and adaptation initiatives.



# HIGHLIGHTS: STRATEGIC PILLAR 4. PRACTICE

## **Celebrating Australian nurses who are championing planetary health and sustainable practice: A compilation of case studies**

This [report](#) provides a snapshot of the experiences and perspectives of a group of Australian nurses who are engaged in and highly committed to planetary health and sustainable healthcare. Accomplishing extraordinary things can be challenging, but the nurses showcased in this report illustrate that determination along with creative strategies, can help to address the climate crisis. These types of case studies demonstrate that appointment of more nurses with climate and sustainability expertise at all levels of healthcare, including those in clinical, educational, research, leadership and strategy roles, will accelerate the implementation of responsive strategies that target waste management, emissions reduction and climate resilience across healthcare organisations.



## HIGHLIGHTS: STRATEGIC PILLAR 4. PRACTICE

### **Climate-Driven Extreme Weather Events: Australian Nurses' and Midwives' Experiences**

This report presents a series of case studies developed with nurses and midwives who have led or been actively involved in responding to a range of extreme weather events. The report illustrates the critical and multifaceted roles that nurses and midwives play in responding to climate-driven weather events. The case studies demonstrate nurses' and midwives' extraordinary leadership, resilience, and adaptability in the face of unprecedented challenges. Their efforts not only provided immediate relief and safe care during crises, but also contributed to long-term community resilience and preparedness.

Climate-Driven  
Extreme Weather Events:  
**Australian Nurses' and  
Midwives' Experiences**





# CLINICAL RESEARCH PROJECTS

Members of the Planetary Health Collaborative are leading a number of clinical research projects that highlight the crucial role that nurses and midwives play in addressing climate change and promoting sustainable practices within healthcare. Selected examples include:

## **Assessing the impact of bushfire-related air pollution on emergency department presentations and patient outcomes'**

**Investigators:** *Dr Shirley Qui, Professor Margaret Fry and Associate Professor Eamon Merrick*

This project seeks to investigate the potential increase in emergency department (ED) presentations on days with elevated atmospheric particulate matter (PM2.5) due to bushfire smoke. This retrospective population-based cohort study will analyse over 800,000 ED presentations within the Northern Sydney Local Health District, utilising de-identified electronic medical records in conjunction with public air quality data. The findings aim to inform targeted strategies for optimising ED operations and enhancing patient outcomes during predictable air quality events linked to bushfires, ultimately improving resource allocation and operational efficiency.



# CLINICAL RESEARCH PROJECTS



## **Measuring the impact of extreme climate-related temperatures on the utilisation of the emergency department and the impact on people living with a chronic condition: A mixed methods study.**

**Investigators:** Associate Professor Suzanne Sheppard-Law, Dr Wayne Varndell, Elaine Correia Moll and Jack Cornish

This project, funded by South Eastern Sydney Local Health District (SESLHD) Research Collaborative, will include a mixed method study and the results will be used as pilot data to secure future funds and expand the study nationally. The study will be conducted over two sequential studies. The first phase will involve a retrospective medical record review of SESLHD Emergency Department (ED) presentation data and correlate this with climate-related extreme heat (>30 Celsius) and cold (<10 Celsius) temperature events for New South Wales. The primary outcome for phase one will investigate the correlation between climate-related extreme weather (as defined by meteorology heat and cold data) and SESLHD ED presentations in 2022 and 2024. The secondary outcome will i) identify which population groups are statistically more likely to deteriorate and present to ED. Finally, phase one data will be used to create predictive models of ED presentation rates during a climate-related extreme weather event. Phase 2 will use qualitative in-depth interviews to determine the holistic (physical, social and psychological) care needs of consumers most at risk of deteriorating health due to climate-related extreme-weather events, their knowledge and adaptive behaviours to self-manage symptoms of deterioration.

# CLINICAL RESEARCH PROJECTS CONT.

## Clinical care processes that mitigate environmental damage

**Investigators:** *Associate Professor Erica McIntyre, Dr Rupert Legg, Professor Jason Prior, Distinguished Professor Tracy Levett-Jones, Dr Sam Vigours, Associate Professor Edgar Lui*

This project, funded by an INSIGHT Research Engagement Grant, includes a scoping review that will examine the effectiveness of interventions in clinical care practices in relation to how they reduce environmental damage. It will also highlight the strategies and activities being implemented within clinical settings to reduce environmental damage. The results of the review will be used to design workshops with clinical partners to help support net zero programs.

## Strengthening translation of ‘place-based design for health’ guidelines for NSW health precincts into practice: A co-designed framework for evaluating the impact of ‘place quality’ in precincts on health outcomes and community, patient, and workforce experience.

**Investigators:** *Jason Prior, Edgar Lui, Erica McIntyre, Deb Debono, Tracy Levett Jones et al.*

This project is being funded by a SPHERE Big Ideas Health Service Research Grant Scheme, and aims to develop and implement standardised indicators that assess place quality, health and wellbeing across diverse communities. These indicators, covering areas such as connectivity, resilience, and social equity, will evaluate health precinct impacts and ensures a systematic approach to sustainable prevention systems for diverse communities.

For further information about the Collaborative’s clinical research and practice initiatives, please review examples of our [publications](#).

