

BUILDING A HEALTHIER FUTURE

Scientific strategy 2025-2030



Foreword



Dear Colleagues and Supporters,

In an era marked by unprecedented global health challenges, the need for reliable, high-quality health evidence has never been more critical. From the rise of infectious diseases such as polio and malaria due to war and poverty to the profound health impacts of climate change, our world faces a myriad of crises that demand informed, evidence-based responses. Yet, despite significant advancements in health research, a gap remains in making trusted

health evidence accessible and useable for those on the frontlines — especially in low- and middle-income countries with limited resources.

Global health inequalities continue to mean that millions suffer and die from preventable health risks daily. Without dependable evidence, healthcare professionals, patients, and policy makers struggle to make informed decisions that could alleviate these hardships and save lives. At Cochrane, we understand this urgency and the indispensable role of robust evidence in bridging health disparities across the globe.

Our scientific strategy for 2025-2030 is a bold response to this challenge. By streamlining our processes and focusing on the most pressing global health issues, we aim to bridge the current evidence gap. Our priorities reflect today's realities, centring on maternal, newborn, and child health; multiple chronic conditions; infectious diseases and pandemics; and the health effects of climate change. These focus areas are not only a response to the current health landscape but also a proactive approach to shaping a future where health decisions are consistently informed by the best possible evidence.

Cochrane has dedicated over three decades to improving global health and life expectancy through trusted evidence. We have systematically reviewed and analysed health research, using innovative statistical methods to ensure findings that are both robust and reliable.

We are keen to continue collaborating closely with our global Cochrane community, and to attract funders and partners to join us on this vital mission. Together, we can harness the power of evidence to overcome today's most urgent health challenges and build a healthier, more equitable world for all.

Warm regards,

Karla Soares-Weiser Cochrane's Editor in Chief

Strategic purpose

We will improve people's health worldwide by producing trusted evidence for those who need it most.

Introduction

Over the three decades of its existence, the Cochrane Collaboration has played a pivotal role in improving health and life expectancy worldwide. We have produced trusted evidence to guide the decisions of healthcare professionals and patients across the world, influencing health policy and helping to enhance clinical practice. We are experts at systematically reviewing health research – pooling data from multiple studies to help decision makers draw conclusions about what works and what doesn't. Our research is underpinned by innovative statistical methods, developed with international experts and refined over decades. Our work has informed medical advances that touch every stage of human life – from use of magnesium sulphate in pregnancy to reduce the risk of cerebral palsy in babies, to exercise programmes that prevent falls among older people.

Yet despite these advances in treatment, public health and healthcare delivery, substantial global challenges remain. Infectious diseases such as malaria and tuberculosis (TB) still claim millions of lives worldwide, far too many women continue to die in childbirth, and population ageing, as well as risk factors associated with the social and commercial determinants of health are driving a growing wave of chronic disease. Health and social well-being both suffered during the COVID-19 pandemic, and we have begun to witness the devastating effects of climate change on human health. Progress towards the United Nations (UN) Sustainable Development Goals (SDGs)¹, set out to tackle global disparities in economic development and health, has been inconsistent. Huge variations in life expectancy persist across different parts of the world – with people in the world's healthiest nations enjoying up to 30 more years of life on average than those of the least healthy nations².

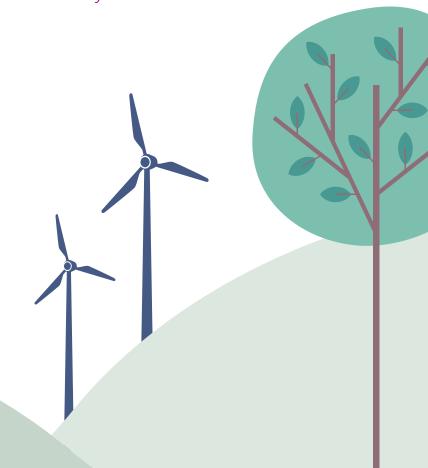
¹ United Nations Department of Economic and Social Affairs, Sustainable Development; The 17 Goals. Available at https://sdgs.un.org/goals (accessed 6 June 2024)

² The Global Health Observatory, World Health Organization. Available at https://www.who.int/data/gho (Accessed 6 June, 2024)

It is against this backdrop that Cochrane has worked with its collaborators and partners to develop its scientific strategy for the next five years. Cochrane has always been a truly international organisation, championing innovative approaches by bringing together diverse perspectives from our worldwide network of researchers, healthcare professionals, patients and policy makers. We are proud of our track record of maintaining the highest possible scientific and ethical standards, which is why our evidence is trusted all over the world. We're now looking to become truly global in our outlook and ambitions too – improving people's health worldwide by producing trusted evidence for those who need it most.

Our scientific strategy will confront the most pressing global health challenges by addressing complex research questions and providing rigorous independent assessments to guide decision making. It will capitalise on Cochrane's strengths, by drawing on our international network of collaborators and partners and our proud history of developing innovative methods. But we want to do better – working more effectively with researchers and patients in low- and middle-income countries, and focusing our efforts on the areas of health most relevant to them. We aim to produce evidence that can increase healthy life expectancy and enhance quality of life worldwide, and help close the health equity gap.

The scientific strategy is central to the delivery of the first goal of Cochrane's organisational strategy, to produce timely, relevant evidence for and with those who need it most. Elements of the scientific strategy also support the other goals of Cochrane's organisational strategy; to save and improve lives, collaborate globally and locally, and secure our long-term sustainability.



Our research priorities

Cochrane's scientific strategy aims to make the maximum possible impact with our limited resources. We believe we can best achieve this by focusing our efforts on critical health challenges, where there is a real opportunity for Cochrane to make a difference, rather than trying to address every global health issue.

We have worked with our global community of researchers, healthcare professionals, patients and organisational partners to identify the areas of health where we can make the greatest impact. We began by mapping the world's health challenges, starting with the UN SDGs, then adding in data on the global burden of disease and the social factors that influence it. We consulted with various expert groups of renowned international researchers, and with our network of patients and carers. We also met with external partners and potential funders, as we know that collaboration will be essential if we are to make our ambitions a reality.



We identified four research priorities – representing challenges in global health that affect many millions of lives around the world.



Climate change and sustainability



Infectious disease and pandemics



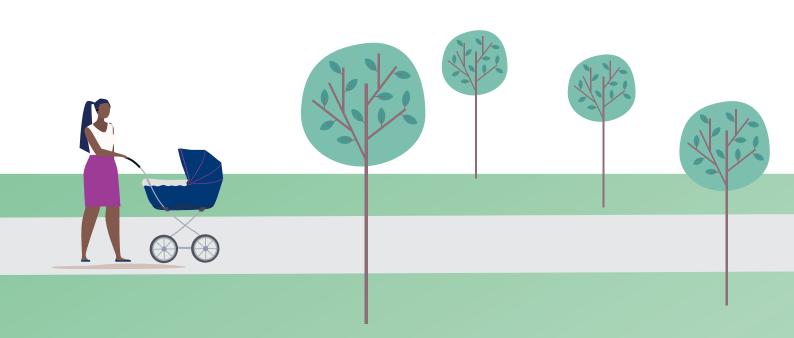
Multiple chronic conditions

Maternal, newborn and child health



We will renew efforts to drive down preventable deaths among mothers and children, from childbirth to adolescence. We will address the growing and complex challenge of supporting individuals with multiple chronic diseases. We will confront not only major infectious diseases like TB and malaria, but also emerging threats and neglected tropical diseases too. And we will bring our expertise in innovative research methods to bear on the major global challenge of climate change.

We are currently working in all these areas of global health – but we intend to greatly scale up our efforts through this strategy. We need research funders, partners, and governments all over the world to join us in our mission. We aim to attract funding to address these critical areas, and commission researchers to produce evidence that can help inform health decisions and improve lives. We are also extremely fortunate to have access to extensive experience and in-depth knowledge through our global Cochrane Community, and we will continue to collaborate closely with them to ensure that our priorities have global impact.



Our commitments

We are a values-led organisation, dedicated to improving lives by providing the very best evidence to guide health decisions. We have worked with our community of researchers, healthcare professionals and patients to place a series of commitments at the heart of our scientific strategy. These will shape the ways we produce trusted evidence and underpin progress in all areas of our scientific strategy.



Innovate in Methods



Promote health equity



Collaborate and involve



Champion research integrity

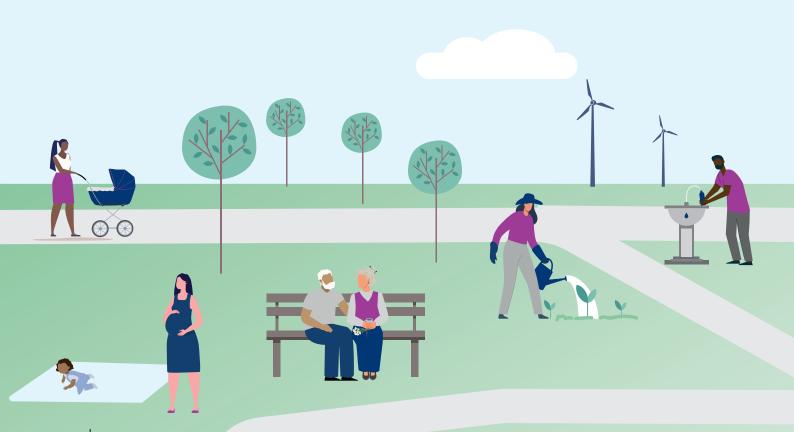


We will build on our world-leading expertise in the development of innovative research methods, including constructively harnessing the power of artificial intelligence (AI) to address the complexity of emerging health challenges, such as multiple chronic conditions and climate change.

We will be guided in everything we do by our desire to promote health equity, which will shape the questions we seek to answer, and the way we share our findings.

We will collaborate with global partners, national agencies and local healthcare consumers, recognising the power of working collectively to drive transformative change. And we will maintain and strengthen our leadership in research integrity so that we can continue to produce evidence that everyone – policy makers, healthcare professionals and patients – can trust to guide their health decisions.

Working in these ways can help to ensure that the evidence we produce informs the decisions of those with the greatest health needs – increasing life expectancy and improving quality of life.



Our diverse and inclusive research

Of course, humanity faces numerous health problems beyond our research priorities, and Cochrane will play its part in addressing these too. We will continue to support a diverse range of high-quality research across the full span of global health, by working with researchers to publish systematic reviews in the Cochrane Library. It's essential that we remain agile in response to changing global health needs.

We will champion diversity in other ways too. We will work to ensure we have broader representation, including from low- and middle-income countries, among our researchers and in our engagement with patients, carers and other consumers of health care. And we will draw from more diverse sources of evidence, by using our expertise in methods and new technologies to synthesise many different types of data.

Funding our strategy

We know that our scientific strategy is ambitious – and that we will only achieve its aims if we are successful at attracting new funding.

We believe that our scientific strategy can help shape the research agenda for global health and inspire funders to be a part of our mission.

Our intention is to attract external support so that we can commission researchers to carry out evidence syntheses that address our research priorities. We will also aim to attract funding to further our commitments, such as supporting our researchers to develop new methods or set meaningful priorities with stakeholders.

New funding would help to strengthen our capacity for publishing evidence syntheses. By providing support for staffing, analytical software, methods and engagement, we can help researchers address our strategic priorities. We will seek to fast-track the most pressing reviews, so we can have a rapid impact in changing health policy and clinical practice.

While we seek funding for the new priorities in this scientific strategy, we will continue to work with researchers all over the world as they carry out reviews in different areas of global health. We will continue to publish high-quality research in the Cochrane Library that advances our principles of trusted evidence, informed decisions, and better health.

Our research priorities



Maternal, newborn and child health

ACTION STATEMENT

We will seek to improve the health and well-being of mothers, babies and children by assessing strategies to prevent illness and deaths surrounding pregnancy and childbirth, improve prevention and treatment strategies for diseases and disorders in babies and children, and enhance sexual health and fertility services.

INTRODUCTION

Improving maternal, newborn and child health is a major global health priority, and yet in many parts of the world there are still far too many preventable deaths among mothers and young children. The World Health Organization (WHO) estimates that close to 300,000 women die during and following childbirth each year.³ Around 95% of those deaths occur in low- and middle-income countries - one of the starkest demonstrations of global health inequity.

Cochrane has a long and proud track record in furthering progress in maternal, newborn and child health. Much of our early work examined the evidence base for strategies to prevent ill health and deaths among expectant mothers and babies, contributing to international guidelines on labour induction and postnatal care. There have been significant improvements globally in maternal, newborn and child health over the last 25 years, but in more recent years, progress has started to stall. Cochrane is determined to lead strengthened and renewed efforts to eradicate preventable maternal and child deaths. We share WHO's ambition³ for pregnancy, childbirth and motherhood to be a positive experience, and for women, babies and children worldwide to reach their full potential for health and well-being.

³ Maternal Health, World Health Organization. Available at https://www.who.int/health-topics/maternal-health#tab=tab_1 (accessed 6 June 2024)

We plan to support global policy makers and health systems with the evidence they need to reshape services during pregnancy and childbirth, and to enhance antenatal, follow-up and paediatric care. We plan to create innovative methods to clarify conclusions from assessments of complex, multi-faceted interventions to reduce premature birth, ill health and preventable deaths. We will focus on affordable, practical strategies that can have the maximum possible impact in areas where rates of mortality and ill health are highest. We will also equip health systems with the evidence they need to provide women and adolescent girls with high-quality sexual health, family planning and fertility services.

WHAT WE WILL DO

In discussion with the Cochrane community, we have decided to prioritise the following activities.

- Assess strategies to prevent the major causes of maternal illness and mortality, with a particular focus on the top five causes of death: hypertensive disorders, unsafe abortion, problems and infections during labour, postpartum haemorrhage and sepsis.
- Seek to reduce foetal, neonatal and childhood death rates including reduction of miscarriage and stillbirth, with a particular focus on the most common causes of death in children under five years: preterm birth complications, birth asphyxia and trauma, pneumonia, congenital anomalies, diarrhoea and malaria.
- Assess the impact of nutrition on maternal, newborn and child health, with a particular focus on WHO's six global nutrition targets: stunting in children under five years, anaemia in women of reproductive age, low birth weight, childhood overweight, exclusive breastfeeding in the first six months and childhood wasting⁴.

⁴ Nutrition and Food Safety, World Health Organization. Available at https://www.who.int/teams/nutrition-and-food-safety/global-targets-2025 (accessed 6 June 2024)

WHAT WE WILL ENDEAVOUR TO DO

We will support efforts to deliver the following additional activities.

- Evaluate ways of preventing and managing serious neonatal conditions and the corresponding complications present during infancy and childhood resulting from chronic lung diseases, retinopathy of prematurity, necrotising enterocolitis, sepsis, diarrhoea and hypoxic-ischaemic encephalopathy.
- Seek to prevent or manage ill health in children by evaluating immunisation and infection control strategies, access to safe water and food, and adequate care by a trained health provider, including assessing healthcare models for disability or long-term effects of chronic, developmental or infectious disease.
- Evaluate approaches to promote mental health and psychosocial well-being in mothers and children, including addressing post-partum and childhood depression, and substance misuse.
- Seek to improve follow-up care of sick and small newborn babies after discharge from hospital into childhood, by assessing models of care and community-based interventions.
- Address over-medication and antibiotic resistance, including by assessing ways of preventing maternal, neonatal and childhood infection, and providing evidence to support effective antimicrobial stewardship.
- Assess the impacts of antenatal, perinatal and postnatal maternal care services on the lives and health of women and girls, alongside pre- and post-conceptual sexual health, family planning and fertility.



Case study:

simple, affordable life-changing interventions

Elly Salisbury went into labour at just 27 weeks, a precarious time for both mother and baby. Fortunately, her clinical team kept a keen eye on Cochrane reviews, where a recent review had found that magnesium sulphate can significantly reduce the risk of premature babies developing cerebral palsy.

Karen Luyt, professor of neonatal medicine at the hospital, was inspired to champion this life-changing intervention after reading the Cochrane review. Elly was one of the first mothers to be offered magnesium sulphate, which is now offered to all eligible mothers across England.

Cormac, Elly's son, is now a happy and healthy young boy. "Behind every infusion of magnesium sulphate is a little boy or a little girl, just like Cormac, and a family just like ours," says Elly. "Every single family should have that chance to be given this drug."

This intervention has prevented an estimated 367 cases of cerebral palsy in England between 2018 to 2023, with life-changing results. The team has since created resources to help clinicians in both high- and low-resource settings to offer the best possible care to premature babies. As well as offering magnesium sulphate, this includes Cochrane-informed guidance on ventilation, steroids and umbilical cord management.

Multiple Chronic Conditions



ACTION STATEMENT

We will confront the complex challenge of multiple chronic conditions by examining how health systems can best deliver co-ordinated, person-centred care, supporting prevention through lifestyle change and risk-profiling, and tailoring methods to support new complex questions.

INTRODUCTION

Across the world, the number of people living with more than one chronic condition is increasing - with all the complex challenges that brings for individuals and the organisation of their care. This global challenge is fuelled by a combination of factors – ageing populations, risk factors such as poor nutrition, smoking, inactivity and alcohol consumption, and in some regions, long-term infection. Poor health from multiple chronic conditions disproportionately affects those who are socially and economically disadvantaged. It is an established challenge in high-income countries and is now an increasing threat in low- and middle-income countries too.

Health systems traditionally operate in 'siloed', single-disease models, leaving patients with multiple chronic conditions to make the connections between care pathways themselves. Research also tends to be conducted within single disease areas, and clinical trials rarely involve people with multiple conditions. Managing people with more than one chronic condition presents unique challenges regarding co-ordination of care, interactions between different diseases, and prescription of medication. Patients and carers also face a heavy and intrusive burden of care, made worse by the fragmentation of health systems in many areas of the world.

Cochrane has already had an impact on the management of multiple chronic conditions – for example evaluating geriatric assessments for older people, strategies to prevent falls, and interventions for chronic obstructive pulmonary disease (COPD) adapted for people with additional conditions. We plan to strengthen our work in this area, taking major chronic conditions that often interact with other diseases as our starting point, such as heart disease, COPD, cancer or depression. This will help us understand common combinations of disease, learn more about interactions between physical and mental illness, and draw general lessons about the co-ordination of care. We will investigate the

best models of care for people with multiple conditions, and provide evidence on prevention approaches via lifestyle changes that can reduce levels of chronic ill health. We will develop innovative methods to assess outcomes across multiple conditions, synthesise varied types of data, and rapidly update evidence in living reviews. Our overall aim will be to help health systems confront the challenge of multiple chronic conditions, and ensure these patients get the right care at the right time from the right people.

WHAT WE WILL DO

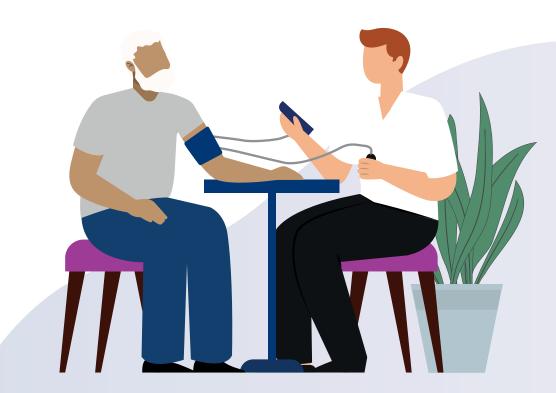
In discussion with the Cochrane community, we have decided to prioritise the following activities.

- Assess interventions that could improve quality of life, safety and other health outcomes for people who develop additional illnesses using common chronic conditions, such as heart disease, COPD, cancer or depression, as a starting point.
- Address fragmentation of care within health systems by identifying which models of care are best able to deliver co-ordinated, personcentred care for people with multiple chronic conditions.
- Support the investigation of multiple chronic conditions by developing and tailoring methods that synthesise diverse forms of data, and standardise measurement of outcomes such as quality of life.
- Assess whether public health programmes involving smoking, nutrition, alcohol, physical activity, preventative medication or other interventions can reduce the risk of developing multiple chronic conditions

WHAT WE WILL ENDEAVOUR TO DO

We will support efforts to deliver the following additional activities.

- Define components of care models that appear most effective for improving quality of life, safety and other health outcomes for people with multiple chronic conditions, to create a suite of options for decision makers.
- Support health systems in considering new interventions for people with multiple chronic conditions by assessing their effectiveness at improving quality of life, safety and other health outcomes.
- Evaluate the effectiveness of primary or secondary prevention strategies applied according to assessments of risk that consider existing chronic conditions and social determinants of health.



Case study: integrating care in community settings

Healthcare providers across the world are grappling with the challenge of providing high-quality, integrated care for people with multiple conditions. Research in this area is limited and has sometimes been contradictory, but Susan Smith, Professor of Primary Care Medicine at the Royal College of Surgeons in Ireland, has set out to determine what really works.

Susan led a Cochrane review to examine different interventions designed to improve outcomes for people with multiple chronic conditions in primary care and community settings. The results were mixed, but the team was able to draw clear conclusions to direct future practice and research.

Among the most effective interventions studied were those aimed at reducing depression in people with diabetes and cardiovascular disease. The team found that by offering more integrated care and recognising patients' needs and priorities, healthcare providers could improve quality of life and reduce depressive symptoms. This approach has since been adopted in national guidelines, helping to improve care for people suffering from depression alongside other conditions.

The review also highlighted important areas for future research, including the need to identify outcomes and priorities that are most meaningful to patients.

Infectious Diseases and Pandemics



ACTION STATEMENT

We will evaluate strategies to reduce illness and deaths from major infectious diseases, emerging threats and neglected tropical diseases, and to respond effectively to outbreaks and potential pandemics.

INTRODUCTION

Infectious diseases, caused by bacteria, viruses, fungi or parasites, are collectively one of the world's leading causes of deaths. The burden of infectious diseases falls particularly on people who are socially or economically disadvantaged and especially on young children. Malaria, TB and HIV infection have been a major cause of ill health for a long time, and remain in the top five infectious diseases for illness and death, even with improvements in management and infection control over recent years. Respiratory infections are also a major cause of death globally, sexually transmitted infections cause a substantial burden of ill health and infertility, and diarrhoeal infections and neglected tropical diseases are a major challenge in lower-income countries.

Alongside these established causes of ill health and death, new infections are emerging all the time, often driven by close contact between humans and animals, and accelerated by the effects of climate change. Over recent decades, diseases such as Crimean-Congo haemorrhagic fever, Zika virus and dengue have either emerged or risen in prominence, and the COVID-19 pandemic was the most damaging of a series of coronavirus infections to break through to humans. In addition, many diseases are starting to become resistant to established medicines, increasing their threat to human health.

Cochrane has played an important role in infectious disease research, for example, assessing testing strategies for TB, and evaluating interventions during the COVID-19 pandemic. We will now step up our work in this area – not only supporting efforts against longstanding infectious disease challenges, but also investigating newly emerging illnesses and the increasing threat of antimicrobial resistance, and helping to respond to outbreaks and potential pandemics. We will work with global stakeholders, and put in place systems, technologies and innovative methods, to adapt to the ever-changing

landscape of emerging and neglected infections. We will support policy makers to make prompt decisions during complex global health situations, by rapidly producing and disseminating evidence, and address inequity by focusing on diseases that affect low-income countries.

WHAT WE WILL DO

In discussion with the Cochrane community, we have decided to prioritise the following activities.

- Address major global infectious diseases, including malaria, TB, HIV and sexually transmitted infections, by assessing strategies for prevention, diagnosis, and appropriate use of antibiotics.
- Investigate clinical and public health interventions against emerging or growing vector-borne diseases, such as Crimean-Congo haemorrhagic fever, dengue, Zika virus, Lassa fever and neglected tropical diseases such as chikungunya.
- Confront the challenge of antimicrobial resistance by assessing interventions and practices to prevent resistance developing, methods for early detection, and management strategies in patients with resistant disease and areas where resistance is prevalent.
- Drive improvements in the diagnosis of infections, especially point-of-care testing and rapid diagnostic tests for emerging diseases.

WHAT WE WILL ENDEAVOUR TO DO

We will support efforts to deliver the following additional activities.

- Learn from the COVID-19 pandemic to develop ways of rapidly synthesising
 evidence in response to health emergencies and establish an evidence base for strategies to contain outbreaks.
- Evaluate the evidence base for digital health interventions, such as contact-tracing apps and online surveillance tools, in detecting, responding to and preventing disease outbreaks and antimicrobial resistance.



Case study:

resolving controversy during the COVID-19 pandemic

During the COVID-19 pandemic, an overwhelming number of research papers were published very quickly, and it was a major challenge to make sense of often conflicting findings.

Nothing was subject to such intense debate as whether hydroxychloroquine was effective for treating COVID-19 – with the drug vocally and controversially championed by some world leaders. With dozens of clinical trials claiming different results, clinicians and policymakers struggled to cut through the noise.

In early 2021, Bhagteshwar Singh and colleagues published a Cochrane review of hydroxychloroquine⁵, following our usual rigorous methodology. This concluded that hydroxychloroquine was not an effective treatment for COVID-19 and should not be studied further. The review provided muchneeded certainty – allowing researchers, clinicians and policy makers to confidently shift their focus to more effective treatments.

For this research, Cochrane won the University of Cambridge's Harding Prize for trustworthy communication. The panel noted the Cochrane approach "set the gold standard for clearly communicating accurate, trustworthy, transparent data without frills or spin".

Responding with similar speed and reliability to emerging infectious diseases is a priority under Cochrane's strategy – especially where there is pandemic potential.

⁵ Singh B, Ryan H, Kredo T, Chaplin M, Fletcher T. Chloroquine or hydroxychloroquine for prevention and treatment of COVID\(\text{Q19}\). *Cochrane Database of Systematic Reviews* 2021, Issue 2. https://doi.org/10.1002/14651858.CD013587.pub2.

Climate Change and Sustainability



ACTION STATEMENT

We will support efforts to reduce the environmental impact of health systems, create innovative methods for climate and health research, and assess evidence-based approaches to mitigate or adapt to the health impacts of climate change, focusing on protecting vulnerable populations.

INTRODUCTION

One of the biggest challenges society faces today is the combined threat of climate change and environmental degradation. We are already seeing the negative impact of carbon emissions and other pollutants, not only in rapidly increasing temperatures globally but also in an array of related effects on the environment and human health – from more frequent extreme weather events to rising rates of respiratory illness. Moreover, the people most immediately at risk are those least equipped to cope. As temperatures and sea levels rise, there is a disproportionate impact on people living in low-level coastal areas, flood plains, and regions already prone to hurricanes and droughts. The world's most socially disadvantaged people often live in places with degraded or polluted environments, and lack the resources to mitigate the negative effects of climate change.

We believe that Cochrane has an important role to play in helping to reduce carbon emissions and environmental impacts, to avoid the worst effects of climate change on global health. Unlike our other research priorities, climate change and sustainability is a relatively new area for Cochrane, and we will need to grow our impact over time by building from our existing activities. We are leaders in developing the research methods required to address such a complex area of science, and will begin by applying this expertise through methodological innovation and helping to set standards for climate and health research. We aim to support researchers as they assess climate-related interventions, and to play a growing role in providing policy makers with the evidence they need to balance strategies to mitigate or adapt to climate impacts.

One area where we can make a particular difference is in reducing the environmental impact of health systems – which are a major producer of carbon emissions and microplastics pollution. We will expand Cochrane's existing activity in identifying low-value or overused areas of health care as a means of supporting health systems to

become more environmentally and financially sustainable. Over the course of the five-year strategy, we will guide health systems in the introduction of more sustainable models of health care aimed at reducing emissions and waste, and also help them to become more resilient in the face of climate-related impacts on health. Climate change is a global challenge, but we will focus our efforts especially on those areas of the world where people and health systems are disproportionately affected.

WHAT WE WILL DO

In discussion with the Cochrane community, we have decided to prioritise the following activities.

- Take a leading role in setting standards and driving methodological innovation across climate and health research, to increase quality and comparability across the sector.
- Analyse the effectiveness of adaptations to help people cope with the effects of climate change, including strategies to improve water quality, food security, and disaster resilience and response.
- Support sustainability through optimisation of health care by identifying areas of low-value care offering little clinical benefit to patients, and building an evidence base to address over-diagnosis and overuse of health care.
- Evaluate the effectiveness of public health interventions to reduce carbon emissions, promote cleaner air and cut plastic waste, and the facilitators of and barriers to their implementation.

WHAT WE WILL ENDEAVOUR TO DO

We will support efforts to deliver the following additional activities.

- Identify ways of reducing the environmental impact of health systems by optimising energy use, cutting plastic waste, and reducing the carbon footprint of medical supplies, practices and drugs.
- Seek to assess the effectiveness of interventions to address the climaterelated emergence of bacterial and viral infections, their transmission, and the increasing rates of antimicrobial resistance.
- Support health and care decision makers in providing the evidence they need to take decisions on climate action assessing the wider benefits beyond health for interventions, including the economic impacts.



Case study: ——— engaging global

partners on climate change

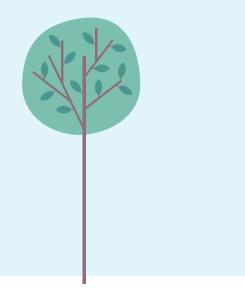
It's now widely accepted that climate change presents a major risk to humanity, but we still need better methods to quantify the impacts on our health and well-being, so that we can measure the effectiveness of climate interventions.

Cochrane is at the forefront of efforts to develop new methods that bring together different kinds of data to assess impacts on health and the environment. We are currently working with national statistical agencies across the world to determine which existing measures might reveal the impact of climate change on health, and identify gaps where more data are needed. This is part of a project to develop international standards for official statistics on climate-health interactions.

"There is an array of global climate initiatives, but with no recognised framework to directly measure the impacts of climate on health, we cannot know the true health burden of climate change. Alongside Cochrane's Planetary Health Thematic Group, we are working with several international partners to fill this evidence gap. Not only will this mean we can better understand climate impacts in a particular geography or community, but we will also be able to identify vulnerable groups in each area, helping leaders to plan health services and interventions." UK Office for National Statistics (ONS)

Our commitments

Cochrane's contribution to global health goes well beyond the work we are doing to address our research priorities. It is also about the cross-cutting activities we are carrying out to meet our commitments: to innovate in methods, to promote health equity, to collaborate and involve, and to champion research integrity. It is these commitments that will underpin progress right across our strategy, and ensure we achieve our strategic purpose by producing trusted evidence for those who need it most.









Innovate in Methods

We will innovate in the ways we synthesise evidence to address global health priorities, constructively harnessing the power of data science and partnering with others in utilising AI without compromising on trust.

People need to know that the methods used to produce evidence about their health and care are reliable and robust. It is essential that methods used to synthesise evidence are informed by the latest advances in science and technology, and can bring together and analyse rapidly growing, increasingly complex datasets. Cochrane has always placed the development of robust and innovative methods at the core of its work, helping to build its reputation as the home of high-quality evidence synthesis. Our innovative methodological work has often helped make sense of complex and diverse data to draw valuable conclusions for health and care. We recognise the immense potential of AI to speed up and enhance evidence synthesis. We aim to work with partners to build our expertise in AI, and together develop new tools adapted to our diverse research portfolio, and incorporating appropriate controls to ensure trust.

What we will do

- Investigate innovative ways to synthesise heterogeneous sources of data.
- Encourage methodological projects that use Cochrane reviews to investigate innovative approaches.
- Collaborate with researchers in digital technology to make databases available and to assess the effectiveness of AI tools.
- Create living reviews to update evidence rapidly, by embracing innovations such as online platforms, linked data, and use of AI tools.



Promote health equity

We will ensure all our research has an equity lens, focus reviews on addressing health inequity, and seek to increase the diversity of our researchers and stakeholders.

Across the world, levels of health differ enormously between social groups. People who are socioeconomically disadvantaged are consistently at increased risk of poor health, as are, often, racial, religious and cultural minorities, among others. Cochrane is strongly committed to achieving health equity – defined by WHO as when everyone, irrespective of their personal characteristics or social group, can attain their full potential for health and well-being.

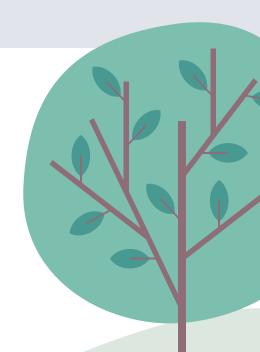
Cochrane has a track record of driving progress on health equity – training researchers to address equity in their reviews, and carrying out influential assessments of how community and behavioural interventions can reduce health inequities. However, addressing equity through evidence synthesis can be challenging. Primary studies often lack information on social groups who may experience health inequities, and often deal with the consequences of poor health, rather than the causes. Few studies focus on low-income countries, and not enough researchers from these countries are involved in interpreting the results.

Under our scientific strategy, we will strengthen our efforts to promote health equity. We placed the UN SDGs, with their focus on inequality, at the heart of our process for selecting new research priorities. We now plan to ensure health equity is a central consideration in all our research, and to commission reviews specifically designed to address health disparities in some social groups. We will have a special focus on the social determinants of health – the environments in which people grow up, live, work and age, including social challenges such as poverty, racism, gender-related disparities and disability. We will seek to ensure that our researchers and the stakeholders we engage are more diverse and more representative of the people we are trying to help.

Promote health equity

What we will do

- Include a mandatory section in Cochrane reviews to ensure all our research considers equity.
- Map Cochrane evidence against the UN SDGs to promote relevant reviews and identify evidence gaps.
- Conduct a priority-setting exercise to identify new equity-relevant reviews and updates.
- Work with Cochrane's Geographic Groups and our Consumer Network our community of patients, carers and other health consumers to ensure greater diversity of Cochrane contributors.
- Confront health inequities in low-income countries by supporting health systems with evidence on effectiveness and implementation to improve access to basic health services.





Collaborate and involve

We will involve patients, carers and other healthcare consumers in setting priorities and producing evidence, collaborate globally with partners and stakeholders, and support people locally in understanding and addressing their health needs.

Collaborating with and involving our partners and evidence users is vital to make sure our research really does address the most critical health needs for people all over the world. Working with consumers of health care – patients, carers and members of the public – helps to ensure that research meets their needs, increases trust and accountability, and maximises the chances that evidence will actually be used to guide health decisions. It is also important to work with researchers and healthcare professionals worldwide to help identify gaps in evidence, and support them in finding ways to address them. And we know that Cochrane cannot achieve the aims of this scientific strategy alone – it will be vital to collaborate with global organisations and national agencies in taking forward our shared priorities.

Cochrane has a strong and unique history of involving our network of more than 120,000 members and supporters, and 2300 healthcare consumers – consulting with them as we set our research priorities, and co-producing evidence with them to effectively address key questions for health. We plan to build on this work by supporting our researchers to reach a more diverse mix of consumers, and to ensure that the benefits of involvement are felt in our research programmes all over the world, including in low-income countries. We will also work with our Geographic Groups worldwide to help them identify priorities for their local communities, and to support researchers and healthcare professionals in low-and middle-income settings in producing evidence to meet their most pressing needs. We will take a highly collaborative approach to our research, working closely with global partners and national agencies to align research programmes, agree standards, and optimise use of funding.

Collaborate and involve

What we will do

- Working with our global Cochrane network, encourage greater involvement
 of healthcare consumers in Cochrane's work wherever in the world it is conducted.
- Provide authors with training and resources on co-production to improve how we work with healthcare consumers.
- Help healthcare consumers understand, use and disseminate Cochrane evidence.
- Support frontline healthcare professionals to be involved in research,
 especially in low- and middle-income countries, and seek their expertise to understand implementation issues in a local context.
- Collaborate with international partner organisations and national agencies to identify gaps in evidence, co-ordinate research programmes to optimise use of funding, and agree standards and approaches.





Champion research integrity

We will continue to lead the field in trustworthiness and transparency by evolving our practices to address the most pressing challenges in research integrity and respond to rapid advances in technology.

If research is to be trusted, it must be carried out to the highest standards of integrity and transparency – with robust procedures in place to deal with conflict of interest and allegations of research misconduct. Cochrane is known globally for its rigorous standards and resistance to commercial influence. Principles of research integrity form a strong foundation for everything we have done and will continue to do.

What we will do

- Define standards for the highest levels of research integrity and transparency in evidence synthesis.
- Develop processes for identifying and managing retracted publications associated with Cochrane reviews.
- Develop tools to ensure Cochrane reviews are based on trustworthy studies.
- Set standards for the responsible use of AI tools in evidence synthesis, including in understanding their accuracy, evaluation, validation and potential for bias.
- Evolve processes for protecting against commercial conflicts of interest in evidence synthesis.

Conclusion

For over 30 years, the Cochrane Collaboration has been at the forefront of improving global health and life expectancy. By producing trusted evidence, we help healthcare professionals, patients, researchers and users of our evidence worldwide to make informed decisions, influence health policies and enhance clinical practice.

As a global organisation, Cochrane is uniquely positioned to produce evidence that addresses the most pressing global health challenges. Our research priorities reflect the realities of today's world. We're focusing our efforts on the crucial challenges of maternal, newborn and child health, multiple chronic conditions, infectious diseases and pandemics, and the effects of climate change on health.

We are committed to convening our community and partners to innovate and advocate for health research that meets the world's needs whilst continuing to deliver trusted, high-quality evidence.

Acknowledgements

This strategy was made possible by the combined wisdom of everyone who collaborated with us and we are extremely grateful for their contributions. It has been a collaborative process involving people across the Cochrane community and beyond.

We are grateful to Cochrane's Governing Board and Editorial Board for their guidance, alongside the Scientific Strategy Advisory Group, Working Group and the consultative groups for each section of the strategy.

We would like to thank everyone in the Cochrane community for their input, including members of the Consumer Executive, Fields, Geographic Groups, Review Groups, Thematic Groups, Methods Groups and the Evidence Synthesis Units.

Beyond the Cochrane community, we would like to thank everyone who engaged with the strategy development process both formally and informally. This includes global health leaders, charities, policymakers, non-governmental organizations and academic experts from across the world.



Scientific strategy
2025-2030