

Grampians Local Health Service Network

Climate Handbook for Health Services

*A handbook to guide rural and regional health service
mitigation, adaptation and community leadership
actions in response to a changing climate*



July 2025

Summary

The Grampians Region Population Health Plan 2023–2029 identified climate change and health as a regional priority. Its first action was to develop a climate action framework for use by the health services of the Grampians region of Victoria.

To achieve this, the Grampians Public Health Unit (GPHU) convened a series of workshops in 2024 at which nominated staff from the region's eight public health services together discussed the imperatives for climate action, the range of climate actions that regional and rural health services could take, and strategies for partnering with communities in climate action.

That work formed the basis of the **Grampians Local Health Service Network (GLHSN) Climate Action Framework (CAF)**, which comprises three documents:

- 1 The *GLHSN Climate Handbook for Health Services* - this document
- 2 *GLHSN Health care in a changing climate: evidence for action* - a report detailing global, national and state health sector strategies, evidence and actions to address the impacts of climate change, and
- 3 The *GLHSN Health Resource Stewardship manual*¹ - which sets out methods to enhance resource stewardship and waste reduction in our region's public health services.

The *GLHSN Climate Handbook for Health Services* synthesises succinctly the case for why climate action is needed, evidence for ideas and feasible actions considered most relevant to regional, rural and smaller scale health services, and tools and tips for teams to assist in taking action.

This handbook sets out briefly **the why, the what, and the how of**

- o risk assessment to determine a health service's priorities for climate action
- o mitigation actions to reduce health care-related emissions
- o adaptation actions to manage risk and adjust to the changing climate, and
- o leading and/or supporting local communities in both mitigation and adaptation actions to advance health, wellbeing and sustainability of a health service and the community it serves.

The Handbook includes strategies and methods for measuring impacts and outcomes so that a health service can track the effectiveness of actions it takes.

*Detailed information about the need for health service climate action, information about international experience with such work, the evidence about successful climate action in health services, and various methods and tools to use in the work are set out in the accompanying report entitled **Health care in a changing climate: evidence for action**.*

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Tips for teams

Apply these tips within your own team to foster a culture of collaboration and shared ownership for climate action



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This handbook has been developed by staff of the health service members of the Grampians Local Health Service Network.

We live and work on the lands of the Wotjobaluk, Jaadwa, Jadwadjaili, Eastern Maar, Dja Dja Wurrung, Djab Wurrung, Wergaia, Jupagalk and Wadawurrung peoples of western Victoria, to whom we pay our respects to their Elders past, present and emerging and acknowledge millenia of inseparable connection to and careful stewardship of these unceded lands, waterways and the earth's resources.

It always was, and always will be, Aboriginal land.

1 Introduction



Our climate is changing in ways that will impact global and local **weather patterns**, our **lifestyles**, our **work practices** and our **communities** for decades to come.

Climate change is this century's greatest threat to the health of every living thing, with potential to reverse the public health gains made in the past 50 years including control of many communicable diseases, increasing access to clean water, achieving broader levels of childhood immunisation, and reducing morbidity and mortality from chronic conditions (*Watts et al, 2019 & 2021*).

Tackling climate change and its impacts on health has been a priority of the Victorian Public Health and Wellbeing Plan since 2019 (*VPHWP, 2019-2023*).

In March 2023, the Intergovernmental Panel on Climate Change (IPCC) published a report synthesising the research from its latest cycle of scientific analysis of all evidence regarding threats from climate change and the need to act with urgency given the “rapidly closing window” to avert potentially catastrophic climate-related global disruption (*IPCC, 2023*).

In Australia, rural areas are disproportionately affected by climate change and extreme weather events due to their compounding impacts on agricultural production and local economies (*Climate Council, 2016*).

Impacts on health and wellbeing are amplified due to rural areas and regions having higher proportions of at-risk populations compared with major cities, including those who are older, have underlying chronic diseases and have less economic resources.

Many regional and rural communities also exhibit great strengths of resourcefulness, innovation and resilience, supported by longstanding trusted local organisations such as health services – known as “anchor institutions” – which provide employment, services and business opportunities, and contribute to the health and well-being of their community on whom the anchor institution often depends for workforce and supply of goods (*Fleming, et al 2018*) (*Maguire, 2021; Gkiouleka et al, 2024*).

As highly regarded anchor institutions of the Grampians region providing critical functions to the community, the public health service members of the GLHSN have determined to respond to threats from a changing climate by undertaking to

- o assess risks to their operational sustainability from climate change,
- o innovate and act to mitigate the environmental impacts from our health services
- o design and adapt services as needed in response to climate change
- o support our local communities to prepare, adapt, and manage the risks and challenges of a changing climate, and
- o commit to ensuring First Nations people and their ways of knowing, being and doing are at the forefront of this work.

The *GLHSN Climate Handbook for Health Services* ("*The Handbook*") guides health service staff to take necessary steps to

- o Ensure operational sustainability of a health service
- o Advance environmental sustainability by stewarding resources, reducing waste and lowering emissions, and

- o Sustain the health and well-being of our communities.

The Handbook is designed so that a health service can determine for itself

- o the key risks it faces
- o the feasible, effective actions it wishes to take in responding to risks or to opportunities it may identify,
- o the timeframe and strategies for implementation of those actions, and
- o how to measure and report outcomes as a result of the action taken.

Health services staff have long worked to improve the quality and safety of health care – by careful use of precious resources such as antibiotics, by eliminating or managing key risk factors for adverse events, by re-designing systems to ensure timely care, and by listening to our communities and ensuring that we can meet their needs.

This handbook guides health services to tap existing staff skills to take climate action.

Scattered through *The Handbook* are **Tips for Teams**

These are ideas and tips for how climate action has been, or can be, integrated in the daily business of delivering health services.



The Handbook is in three sections

This **first section** has briefly introduced the idea of and breadth of climate action which can be taken by health services as the climate changes, to ensure operational, environmental and community sustainability.

The **next section** describes background to and lists the many ideas for climate action which came from the 2024 workshops attended by staff from GLHSN health services.

These ideas were considered feasible and achievable to implement in the health services of the Grampians region. Importantly, many of the ideas are able to be implemented for no additional investment or through re-designing existing structures and process.

Each idea is accompanied by example indicators by which to track how work to implement the idea is going, specifically:

- o whether the right processes are in place to get change underway,
- o whether those processes are producing the impacts and changes necessary in order to achieve the goal outcome, and
- o whether the processes in place and the changes made *are* achieving the desired goal outcome.

Many of these ways to measure action are already available to health service staff using information routinely collected by their health service, such as through using the Eden Suite program². The intention is that a health service chooses for itself how to track progress and outcomes of any project.

The **last section** contains tools and templates for planning, implementation and monitoring climate action work in a health service.

2 Climate Risk Assessment

The first step in identifying the climate actions which could or should be taken by a health service is to **understand the risks the health service is facing**.

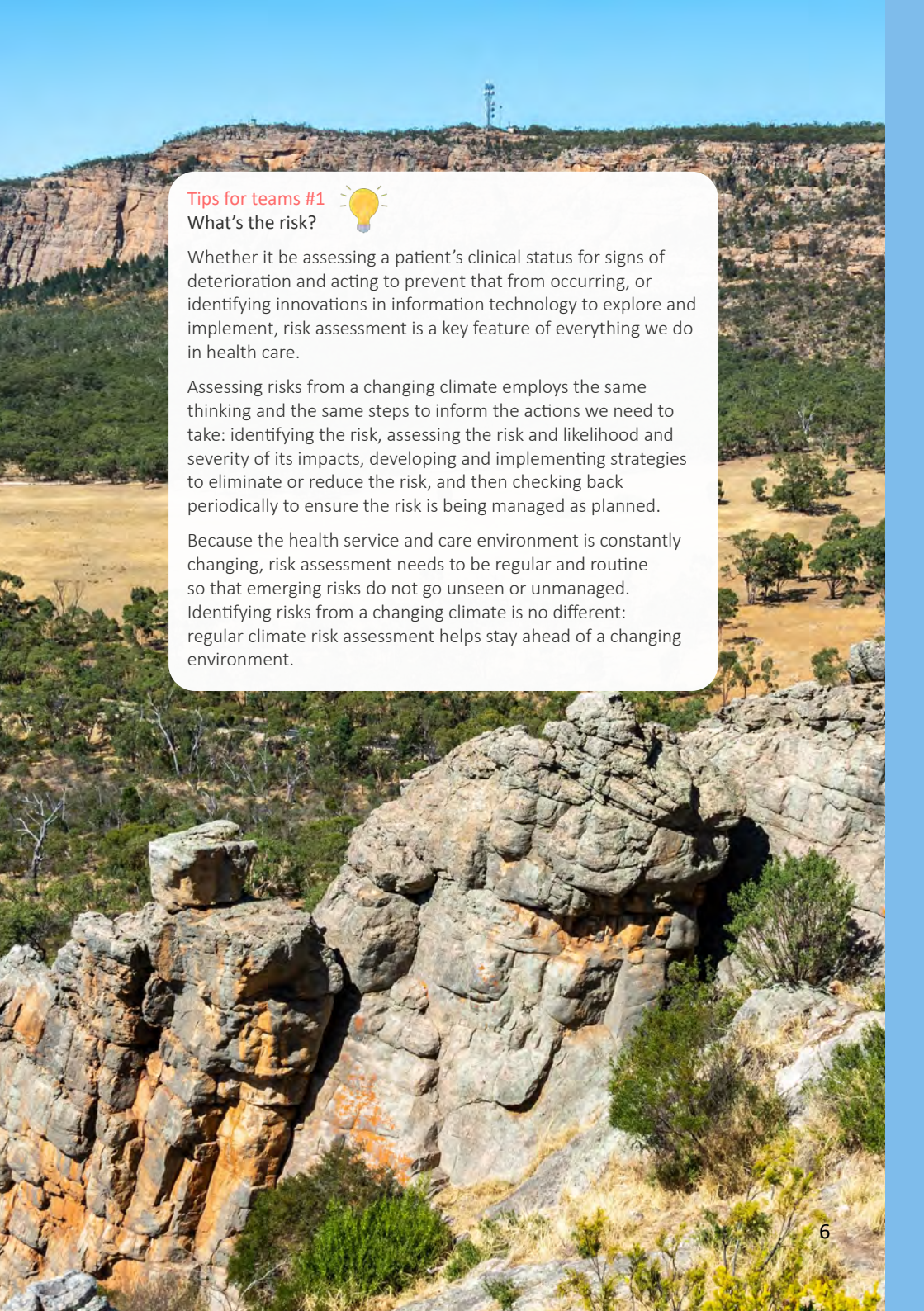
These could include:

- o Physical risks related to where a health service's buildings and structures are located, or due to the age of the buildings, for example risks from flooding or fire or severe storms
- o Risks to essential functions due to, for example, power or supplies being cut off or staff unable to get to work because of extreme weather events
- o Risks arising from being unprepared for out-of-season or compounding climate events, for example heatwave and fires followed by severe storms
- o Risks from disruptions elsewhere (which may in turn have impacts on travel, telecommunications or water quality for example), and
- o Risks arising from being overwhelmed by demand for health care due to, for example, a period of prolonged heat or drought, or a thunderstorm asthma event
- o Risks from reliance on carbon rich technologies, for example, models of care which rely on high use of petrol-powered cars
- o Risks from overuse of health resources due to lack of regular review and redesign.

Many health services undertake aspects of climate risk assessment routinely as part of their disaster preparedness and business continuity planning processes.

- o There are numerous tools freely available to assist in undertaking climate risk assessments, including developed by Victorian and other public agencies around Australia (links are included in the Tools section of this handbook)
- o Climate Health Victoria (part of the Victorian Department of Health) is publishing a step-by-step process for climate change risk assessments for use by Victorian health services
- o A health service's existing processes for disaster planning may be a good place to start
- o In Victoria many health services are also involved in contributing to their municipal community emergency risk assessment (CERA) process, coordinated by the Victorian State Emergency Service
- o Every local government area in the Grampians region has identified for their residents that heatwave and thunderstorm asthma continued to pose extreme risks even after all planned mitigations were put into action.





Tips for teams #1

What's the risk?



Whether it be assessing a patient's clinical status for signs of deterioration and acting to prevent that from occurring, or identifying innovations in information technology to explore and implement, risk assessment is a key feature of everything we do in health care.

Assessing risks from a changing climate employs the same thinking and the same steps to inform the actions we need to take: identifying the risk, assessing the risk and likelihood and severity of its impacts, developing and implementing strategies to eliminate or reduce the risk, and then checking back periodically to ensure the risk is being managed as planned.

Because the health service and care environment is constantly changing, risk assessment needs to be regular and routine so that emerging risks do not go unseen or unmanaged. Identifying risks from a changing climate is no different: regular climate risk assessment helps stay ahead of a changing environment.

3 Mitigation

Mitigating in relation to climate change means taking action to reduce those factors which are contributing to climate change or making climate change worse.

In health it means reducing the health care sector's contribution to making climate change worse, by reducing harmful greenhouse gas (GHG)-producing emissions as much as possible.



Every unnecessary use of a resource, whether that be energy, a product or a human resource, adds to unnecessary emissions because of the energy and materials which go into producing or transporting the item, supporting the unnecessary use of them, or managing waste when an item is no longer useful.

Resource use waste can be grouped loosely into waste associated with:

Energy and products

- o where principles of reduce, re-use and recycle are key to reducing waste

Models of care-related resource use

- o where principles of reduce, re-use and recycle are key to reducing waste

Human factors-related resource use

- o resulting from preventable events such as patient care incidents, duplication, delays, and safety shortcuts at work.

Stewarding health care resources through reducing waste saves money, reduces greenhouse gas emissions, reduces landfill, creates cleaner air around us and, by taking care to prevent adverse events, makes our work environment safer for staff, our patients and visitors.

Table 1 (*see page 8*) lists ideas for mitigation suggested by GLHSN staff at climate action workshops in 2024, and which may be useful for health services in the Grampians region.

Tips for teams #2 Our greatest ideas come from within



Many (if not most) people who have worked in health care have at some time experienced that feeling of having wasted time or effort, and have asked themselves “why am I doing this again?” or “why are we doing this at all...?” or have thought “surely there has to be a better way!”

Our people are our best asset and seeking ideas from all who daily work to support and provide care to our community- cleaners, clinicians, technicians, administration officers, managers, catering staff, drivers, payroll teams, educators and many more- means tapping into a richness of thinking that we just can't find elsewhere. The need for climate action presents a great opportunity to hear and learn from the daily experience of those who know our health services best.

Table 1 Ideas for climate change mitigation actions health services can take, with example indicators (green shading indicates Eden Suite can measure this)

Mitigation Actions	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Energy and Products				
Reduce unnecessary travel				
Pooling staff transport Reduce staff travel to distant meetings where fossil fuel car is needed	Fleet data* Alternate transport* Staff transport surveys	Service redesign discussions to reduce dependence on fossil fuel vehicles Policy established regarding use of fossil fuel cars	Service re-design being implemented Policy of use of fossil fuel cars enacted and adhered to	Reduction in use of fossil fuel cars for meetings and care Quality of care and patient experience and outcomes maintained after re-design
Increase telehealth use	% ambulatory appointments by telemedicine Patient kilometres travelled to attend care appointments	Technology logistics for staff and patients being resolved	Patient and clinicians using telehealth	% ambulatory appointments done virtually Patient kilometres travelled for appointments
Optimise use of on-line work meetings	% non-local meetings done on-line	Technology made available to staff	On-line meetings default unless all attendees can walk to meeting	Increase in proportion distant meetings done on-line
Optimise % staff time working from home	% Staff time worked from home Types of transport used by staff to get to work	Identify which roles able to be worked at home some of the time		Optimal % staff work time from home Staff satisfaction levels not reduced
Energy sources				
Establish alternate energy partnerships	Use of renewable energy	Discussion underway regarding switching fossil fuel energy with renewable energy	Plans made and being implemented	Quantifiable benefits in emission outputs Use and cost of alternative energy sources
Reduce energy in lighting, heating, cooling and other ways	Energy use*	Discussion underway regarding switching fossil fuel energy with renewable energy	Plans made and being implemented	Quantifiable benefits in emission outputs Without loss of amenity or risks to safety
Changing fleet fuel / how fleet is used	Fleet data* Alternate transport*	Consideration of switching from exclusive fossil fuel to hybrid or electric vehicles	Plans made and being implemented	Reduction in fossil fuel dependence for transport

Mitigation Actions	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Composting: Vegetable and suitable food waste from commercial kitchens	% Organics composted % Grease trap recycling	Foods for composting identified Workflow to collect and direct to recycling established	Identified foods being composted	Reductions in - food waste sent to landfill - weight and cost of waste management - use of synthetic nutrient - use on environments
Sourcing local food to reduce carbon kilometres	Types and proportion of food sourced within 50kms	Food identified which can be sourced locally; arrangements in place	Foods being sourced locally	Increasing % food which can be sourced is being sourced locally
Recycle waste	Volume of waste at baseline by type % waste recycled	Recycling program identifies products to be recycled	Staff engaged in recycling efforts Product recycling underway	Reduced use of product and increased % of product going to recycling
<i>Procurement and (quality) use of</i>				
Consumables including - Personal Protective Equipment (PPE) - Undersheets ("blueys") - plastic packaging and sterilisation wraps	Volume of items ordered and used over time	Staff engaged Staff ideas inform planning of programs to reduce use Training underway as needed	Health resource stewardship program underway targeting products where use could be safely reduced	Reduced use of consumables over time Reduced volume of consumables in waste
Paper and printing with e-comms substitution	Volume of paper purchased/ unit time Number of printer cartridges recycled	Project team established Communications to staff Identify where paper can be converted to electronic records or communications	Staff members aware of need to reduce paper e-comm substitution determined to be feasible Trial of substitution underway	Reduction in use demonstrated No impact on quality of record or communications Reductions in use sustained
Pathology	Number of tests ordered Number of sample tubes/pots ordered (inventory)	Clinicians engaged and leading in efforts to reduce unnecessary tests	High levels of understanding among clinicians about reducing overuse of testing	Reduction of unnecessary tests without reduction in patient care
Imaging	Numbers of diagnostic tests ordered without indication Frequency of tests ordered on same patient	Clinicians engaged and leading in efforts to reduce unnecessary tests	High levels of understanding among clinicians about reducing overuse of testing	Reduction of unnecessary tests without reduction in patient care

Mitigation Actions	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Surgical and medical equipment	Sterilisation / autoclave runs Single use ordering / inventory	Clinicians engaged in and leading where possible efforts to identify single vs multiuse equipment	Logistics resolved to facilitate multiuse where feasible	Reduction in single use items as much as feasible
Pharmacy and therapeutics	Medical gases and anaesthetic gases stocked and used	Clinicians engaged in and leading where possible efforts to switch to lower carbon	Supply of and use of higher carbon gases reduced	Higher carbon gases not used in health service
	Adherence to antimicrobial stewardship (AMS) National standard	Systems to support AMS	AMS program underway	% Inappropriate use of antibiotics
	Asthma devices stocked and used	Clinicians engaged in and leading where possible efforts to switch to lower carbon products	Use of higher carbon products being reduced	Higher carbon products not ordered nor used Quality of care maintained
Reducing human factors causes of waste				
Preventing adverse events: falls, medication error, missed or delayed diagnoses, healthcare associated infections, miscommunication Robust clinical governance; adherence to National Standards	Number of adverse events Number of days added to a person's hospital stay as a consequence of the adverse events	Continued and evidenced vigilance, training, audit and systems approach to improving quality of care	Refractory challenges targeted and specific program to reduce adverse events implemented	Reduction in specific adverse events and reduction in impacts (eg patient harm, additional bed days, use of diagnostic tests)
Optimising models of care				
Clinicians engaged in and leading where possible efforts to reduce overdiagnosis and overtreatment	Usual care pathways	Clinicians engaged in and leading efforts to reduce overdiagnosis and overtreatment, including asking patient what matters to them	Diagnostics used appropriate to clinical imperatives: definitely used when needed, but no more	Reduced use of diagnostics without clinical indication
Reduce need for hospitalisation through hospital@home, integrated care and other models	Usual care pathways	Clinicians inside and outside health service planning for home-based care	Patients and clinicians outside health service supported in providing and receiving home-based care	% change in volume and type of care delivered in hospital facilities
Prevent preventable admissions or preventable progression of a condition, including conditions exacerbated by climate-related events	Reduction in number of potentially avoidable presentations and admissions to hospital	Clinicians inside and outside health service engaged and supported to identify and manage risk factors for or make early diagnosis of disease to prevent progression	Risk factors for certain conditions understood and being screened for, including conditions exacerbated by climate-related events	Reduction in number of potentially avoidable presentations and admissions to hospital, including conditions exacerbated by climate-related events

Tips for teams #3



Reducing impacts on people, planet and the health system - it all adds up

Every time blood is taken for a test not needed, there are unnecessary impacts on people and the environment, and energy and materials have been used to produce a tube, a needle, a syringe, and the plastic bag for transport.

Collecting the specimen takes the time of the person having the test (and it might be painful for them too) and the person collecting the blood. Time is taken to label the specimen, prepare it for transport, and send it to the lab. Energy is used to transport it to a laboratory where it will be processed using humans and machinery.

Chemicals might be used to assist in the testing process; power is used to drive the machines which do the test, and waste products are produced. Results are checked and reported, and then results returned to the ordering clinician, who is obligated to review and act on the result. And having had an unnecessary test a person may experience unnecessary anxiety while awaiting a result for a test they didn't need to have. At worst the test is unclear although not abnormal, potentially prompting more testing, and so on.

While each element of waste may seem small, it all adds up: unnecessary chemicals, waste, power, time, anxiety and distress all cost something. To have avoided the unnecessary test saves time, money, waste, emissions, chemicals and peace of mind.

Let's save time, effort, the environment and dollars where we can.

Tips for teams #4



Think circular

All health sector workers can have an active role in reducing harmful greenhouse gas emissions, and circular economy (CE) principles are the key.

In contrast to a process which starts with mining or harvesting raw materials, and then creating, shipping, using and disposing the used product, a CE approach means making sure that every resource is used efficiently (or not at all) and repeatedly in some form, aiming to reduce waste as much as possible.

There is solid scientific evidence showing that applying ideas of rethink, reduce, re-design (including substitution), re-use, repair, repurpose, recycle, and recovering useful component parts are a great foundation for large and small collective action to benefit people and the planet.

Using CE principles to steward resources reduces waste and emissions and liberates dollars we would otherwise have spent to invest in care for those who most need it. Through improving the health of our communities these actions then reduce demand for health care, which reduces resource use and greenhouse gas emissions and liberates more dollars for re-investment in timely care for those who most need it.

Figure 2 (page 23) shows that the CE cycle can be continuous. As we improve the health of our communities we reduce the demand for health care, reducing resource use, reducing emissions, and liberating more resources for re-investment in timely care for those who need it most, improving the health of our communities and reducing demand for health care...and so on: circular economy action powers itself.

4 Adaptation

Climate change adaptation is a process of understanding the impacts of a changing climate and adapting to these changes, by making adjustments or by managing risks presented by those impacts, or taking opportunities that might arise.

Example: Taking the opportunity to re-design a care pathway in response to wanting to stop scheduling outpatient appointments for the hottest time of the day

In health care and delivery of health services, especially in smaller scale health services, an increase in the frequency, intensity, duration, and footprint of the severe weather-related events may be the most obvious manifestation of the effects of a warming climate. Accordingly, ensuring preparedness for extreme events is a key adaptive response.

Adaptation is **more than adjusting to the risk** from extreme events

Example: *Re-designing hospital spaces to reduce risks from hot weather may include*

- o re-orienting care spaces to reduce exposure to external heat
- o planting trees to provide shade
- o installing a lighter-coloured roof from materials which reflect heat rather than absorb it
- o installing good quality insect screens on high windows which can be left open overnight to permit evening cooling
- o Employing alternative low-tech and low-emissions ways of cooling people—such as cool compresses and lower power fans, especially in organisations where renewable sources of energy can be used.

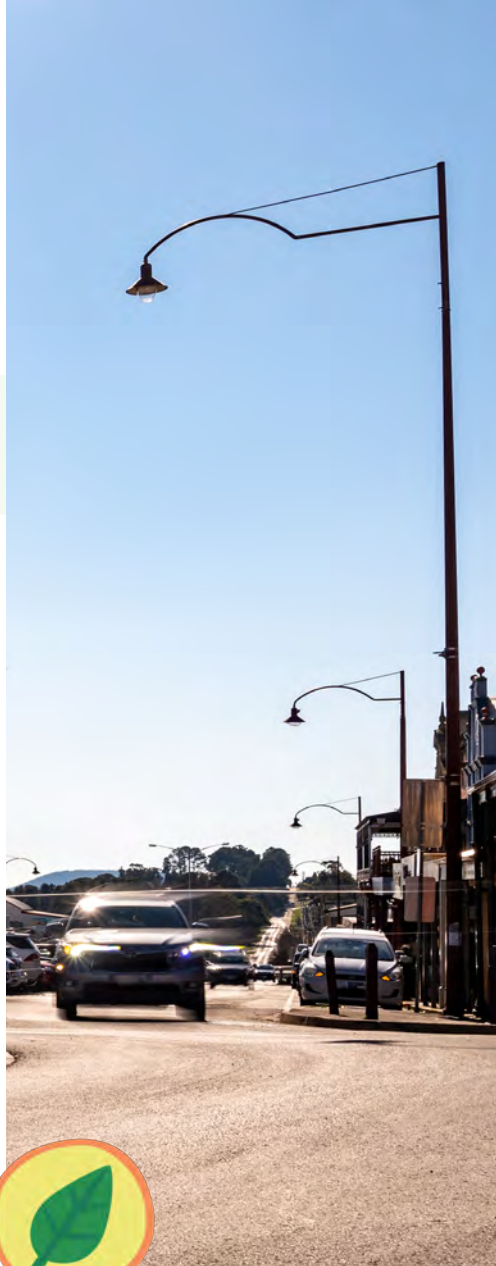


Table 2 (*see page 13*) lists ideas for adaptation suggested by GLHSN staff at climate action workshops, and which may be useful for health services in the Grampians region.

13 Table 2 Ideas for climate change adaptation actions that health services can take, with example indicators

Adaptation Actions	Implementation			
	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Identifying and managing risk				
Disaster risk preparedness (Include planning for loss of workforce due to personal impacts or cut roads/ school closures/ evacuation etc) Includes business continuity planning	Highest risks from extreme events identified: heat, flood, fire (direct and indirect)	Disaster plans reviewed	Disaster response plan enacted, reviewed and learnings incorporated into disaster plan	Lessons learned from last time enacted next time
Heatwave preparedness	Assessing readiness to function in a heatwave	Work tasks assessed for risk from excess heat	Spaces and tasks associated with risk adjusted to reduce risk from extreme heat	Number and severity of adverse impacts for staff in a heatwave
Ensuring those most at risk of severe harm are assisted to stay cool	Cost of cooling	Staff trained to and are identifying at risk clients	Clients supported to be safe during a heatwave	Reduced hospital visits due to complications of heat
	Capacity to provide refuge from heat for patients, staff visitors	Capacity to provide heat refuge considered	Heat refuges able to be established in response to heatwave trigger	Refuge established and used when needed
Reduce unnecessary travel for clients and staff or at times of high heat	Current timing and location of outpatient appointments	Timing and location reviewed for clients at higher risk	Timing and location of appointments altered to better suit clients at higher risk	Avoidable exposure to weather avoided
Building design adapted to climate through repurposing or re-designing spaces	Level of comfort of visitors, patients and staff	Visitors and clients and staff asked about their experiences and ideas	Actions taken informed by experiences and ideas of visitors, staff and clients	Changed levels of comfort for visitors, clients and staff
	Energy needed for heating and cooling	Rooms/environments needing change identified	Work underway to re-design	Rooms/environments better adapted to climate
Identifying opportunities				
Learn from First Peoples regarding adapting to environment	Level of input now into disaster risk reduction around extreme weather	First Peoples' voices welcomed and incorporated into plans and actions	Strategies enacted shaped by First Peoples' ideas and knowledge	Difference to outcome due to First Peoples's input identified
Leadership for action	Is there a committee now overseeing climate adaptation work in our facilities?	Committee meeting and considering adaptation actions, making plans for implementation	Adaptation work plan developed and being implemented	Adaptations in place and working as needed when required

Adaptation Actions	Implementation			
	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Building design adapted to climate through repurposing or re-designing spaces	Level of comfort of visitors, patients and staff	Visitors, clients and staff asked about their experiences and ideas	Actions taken informed by experiences and ideas of visitors, staff and clients	Changed levels of comfort for visitors, staff and clients
Engaging and training staff in new skills including in service re-design and project management	Level of staff knowledge and capacity to enact climate action	Staff training needs identified and training developed	Staff trained to lead or participate in climate action	Staff climate actions decrease risk and improve staff and client well-being
Examining process/ policies/ services/ workforce for risk and opportunity for education, re-orientation and improvement	Current awareness and knowledge of staff regarding impact of climate change	Staff helping to plan whole of organisation approach to climate change awareness and actions	Policies, orientation, processes and workflows examined and revised to reflect climate change risk	Climate risk considered in all policy, planning and program decisions
Seek to become employer of choice by demonstrating climate action underway	Current self-commentary regarding climate risk and action underway	Staff recognition that taking climate action attracts future staff; making work climate-safe	Employment conditions amended to ensure staff safety	Organisation known as employer of choice attracting staff
Support community volunteers and other civic leaders to build climate resilience	Working alongside community volunteers and agencies to together care for community	Complementary ways to build community climate resilience explored	Initiatives to share support of at-risk people being implemented	Persons at risk supported by network of carers to reduce climate impacts on their health
Education programs for clients not dependent on in-person contact with staff such as a registered nurse (RN)	Clients reliant on staff members for certain health resources or needs	Idea risk- and feasibility-assessed Discussions regarding logistics with stakeholders	Clients accessing resources they need without needing in-person contact with RN	Clients accessing needed resources and maintaining own health without RN visit



5 Community Leadership

Regional and rural health services are usually embedded within local communities, serve the local community, and seek to respond to and manage the demands for care from their communities.

Because of their size and role in their communities, regional and rural health services usually include community considerations in service design decisions, and as community needs change, services change too. Rethinking service needs and redesigning service delivery to meet needs is a chance to build mitigation and adaptation ideas into the organisation's operations.



Why now?

As anchor institutions, regional and rural health services in Victoria are key to health and wellbeing in local communities. Given the role of their organisations in their communities, health service leaders are looked to as community leaders also.

This presents an opportunity for health services leaders and their teams to work with other civic, social and business local leaders and agencies to

- o support and promote community-wide mitigation, adaptation and resilience building actions
- o grow resilience across community to extreme events by supporting community-wide risk assessment, planning and network building

- o reduce the levels of morbidity in the community by working with agencies to keep people active, engaged and connected
- o together lessen the negative impacts of climate change on necessities for a thriving community, such as social connectedness, essential services, food supply, housing and safety at home, and suitable outdoor and indoor spaces for recreation and activity.

Actions in partnership for sustainability

Collaborating with other civic leaders and agencies to keep the community healthy and adapting to the evolving climate is essential given we all serve the same community.

Supporting the community to plan for and manage exposure to climate change will not only help to promote health and prevent the progression of chronic conditions but also enhance community safety in times of extreme weather.

All of these actions will serve to grow sustainability in three ways:

- o sustaining the health and well-being of the population in general
- o keep the operations of local health services sustainable by maintaining capacity to staff the service and manage demand due to climate events
- o contribute to environmental sustainability by reducing resource use and waste

Table 3 (see page 14) lists ideas for community leadership suggested by GLHSN staff at climate action workshops, and which may be useful for health services in the Grampians region.

Table 3 Ideas for climate change-related community leadership actions health services can take, with example indicators

Community leadership actions	Baseline Indicators	Process Indicators	Impact Indicators	Outcome Indicators
Work in partnership with other agencies to lead or support civic disaster risk reduction planning and response	Health service (HS) is a member of Municipal Emergency Management Planning Committee and other relevant structures	HS contributing to community climate risk assessment processes. Community's risks from extreme conditions identified: heat, flood, fire, drought (direct and indirect)	Risks assessed, including for our workforce's ability to work and our service's ability to manage increased demand; risk mitigations and adjustments made	Mitigations effective at improving outcomes for our staff and our facilities and for those who seek our care; lessons learned from last time
Work in partnership with other agencies to lead or support local community resilience building	HS does not have a focus on building community resilience to climate change	Engagement and plans being made locally regarding local community climate resilience	Local community climate resilience building work underway	Community connectedness and resilience strengthened
Provide cool (in summer) and warm (in winter) hubs for community members	No hub locations	Potential locations identified and safety and logistics issues being resolved	Locations readied for use Community aware of hubs for their use	Locations safely used in times of extreme heat or cold
Support HS clients at risk from the impacts of extreme climate events by adjusting clinical care and joining with community partners and primary and community clinical teams to ensure safety at home	Extent to which care for patients is considered shared by primary community and acute care teams	HS clients at high risk of climate impacts identified Staff and primary and community colleagues trained to identify clients at risk of severe impacts	HS clients are assessed and have a health safety plan in place (eg medication supply, plan for transport for care if needed)	HS clients at risk kept safe in times of risk. Reduced impact of harms to health from climate effects. Reduced presentations requiring urgent care due to climate event
Support community volunteers (CVs) to support others	Level of engagement with CV organisations	CV organisations engaged and trained to support others	CVs supporting others in community under supervision	CVs contributing to building social connections in community
Consulting with community and clients regarding wish to change appointments during climate extremes	Current timing and location of outpatient appointments	Timing and location reviewed for clients at higher risk	Appointment timing/location altered to better suit clients at higher risk	Avoidable exposure to weather avoided
Promote adaptation activities at all levels	Assessing: HS functionality in a heatwave, Heat refuge capacity for staff and community, Public space temperatures on extreme heat days, Cooling costs.	Tasks to be deferred or changed to protect staff identified and alternate plans made	Tasks and locations altered to adapt to a heatwave. Employment agreements altered to accommodate conditions for staff safety	Number and severity of adverse impacts for staff in a heatwave
Leading or supporting community climate impact and mitigation workshops	Level of comfort of visitors, patients and staff Energy needed for heating and cooling	Visitors, clients, staff asked about their experiences and ideas Rooms/environments needing change identified	Actions informed by ideas and experiences of visitors, staff and clients Work underway to re-design	Changed levels of comfort for visitors staff and clients Rooms/environments better adapted to climate
Leading or supporting climate adaptation workshops: sun safe shelters, low water plants	No workshops	Engagement with community re topics for workshops. Workshops held.	Community members attend workshops	Attendees adopt climate adapted practices: eg planting drought resistant plants.

Tips for teams #5

Taking a whole systems approach



As we know and think about every day in health care, everything we do has consequences – some of which are intended and others unintended. This is why, in deciding what climate action to take, it is important to ask *who benefits from this action and who does not?*

Example:

A health service may decide to increase car parking fees to encourage staff to walk or cycle or catch public transport to work. While research shows that doing this may well increase walking and cycling among employees as a whole, it may also lead to unintended consequences. For example, there may be an increase in tripping injuries among employees if the footpaths around the hospital are uneven, or unfair costs to some because they have no option other than to drive, such as some people living with a disability. Walking, cycling or public transport may not be practical for parents or carers needing a car to collect children at set times after work. There may be no public transport for those who live a distance away. Some staff may have personal safety concerns, especially if starting early or working late. The streets where people can park for free may be just too far to walk on a hot day, risking heat-related harm.

In order to ensure the greatest benefit from an initiative, and avoid negative unintended consequences, consider the following key questions:

- Know the Why- define what is being done and why
- Who is affected by this initiative?
- Who benefits most and who might not benefit and why?
Consider whether personal characteristics such as gender, disability, cultural identity, age, socioeconomic position, sexual identity and religious beliefs might mean a person is sidelined or disadvantaged
- What actions can we take to make sure that everyone affected benefits as much as possible? Who can we ask about the idea to help plan and make sure this happens?
- And once the idea is underway, how can we track what happens to make sure that no-one is left behind or harmed?

In asking these questions, it is useful to collect evidence from a variety of sources and people, including staff members, volunteers, patients, clients, visitors and students.

Health services working with local community organisations can together help ensure that everyone potentially affected by an initiative gets to have a say about what it might mean for them.

6 Tools and templates for teams

6.1 Climate risk assessment

This section contains links to existing models and processes for climate risk assessment.

Please note that Climate Health Victoria (*a unit of the Victorian Department of Health*) is publishing a climate risk assessment step-by-step process for Victorian health services.

6.2 Climate action project prioritisation tool

This template can be used to score the urgency, feasibility, measurability, scalability and sustainability of a project idea, so that its degree of urgency, ease of implementation and the potential for impact can help determine which projects to do before others.

6.3 Project planning template

The LETTERS tool is a project planning template which teams can use to plan a project's implementation and evaluation by giving simultaneous attention to seven elements critical for success:

- Leadership and governance
- Engaging with people, processes and evidence
- Training and education
- Tools and resources
- Evaluation and audit
- Reporting and communication, and
- Sustainability from the start

6.4 Adopting circular economy principles

This section describes the “R” strategies of a circular economy and illustrates the benefits of adopting circular economy principles.

6.1 Climate Risk Assessment

All climate risk assessment models have in common the following steps

- o Identify a hazard (for example external climate events or related resulting hazards)
- o Identify risks posed by the hazard (could be physical, operational, strategic, reputational, transitional³)
- o Assess the extent of the risk in terms of likelihood and consequence
- o Develop risk treatments and assess residual risk
- o Track implementation of risk treatments and reassess risk.

Most states and the Australian government have developed guides and resources which may be helpful until the Victorian Department of Health's specific step-by-step advice for health services is available.

Victorian Government

VMIA (Victorian Managed Insurance Authority) has developed advice for the public sector in which it makes key points

- 1 Applying our existing risk assessment frameworks means we are applying the risk management standard
- 2 It is important to consider short, medium and longer timeframes for risks and their impacts.

See: [Using risk management to help you address climate change | Victorian Managed Insurance Authority](#)



New South Wales Government

NSW's model for climate risk assessment includes its writable [Climate Risk Assessment tool](#) and other templates easily familiar to our health services.

Australian Government

The methods used by the Australian Department of Climate Change Energy Environment and Water (DCCEEW) to prepare Australia's first [National climate risk assessment](#) (2024) are detailed in the document [National Climate Risk Assessment Methodology- DCCEEW](#).

Seven "first pass" snapshots include assessments for health and social services, and regional and remote communities. GLHSN public health services may find these to be useful background information for local climate risk assessments. See [NCRA first pass | Australian Climate Service](#).

³ The VMIA describes transitional risks as those relating to the compliance and business costs of transitioning to a low carbon economy as required by Victoria's Climate Change Act 2017 [Exploring Victoria's climate change risks | Victorian Managed Insurance Authority](#)

Tips for teams #6

Partner for sustainability



Increasingly, the operational sustainability and climate resilience of our health services depends on the climate resilience of the community.

Health services rely on local people to staff our facilities, to supply goods and to provide local services. In turn our local community relies on our health services to provide employment for locals and to meet their care needs too.

If climate change extreme events hit our unprepared communities, or if our localities become unliveable without shade or ways to keep cool, or if people in our community are becoming more unwell because the changing climate is making their disease conditions worse- such as mental health conditions- then we risk losing staff at a time when our communities need us most.

Supporting our communities to mitigate their greenhouse gas emissions and to adapt to a changing climate will build community resilience to climate change, and help us to manage an otherwise escalating demand for our services.

The sustainability of our health services is tied to the sustainability of the communities we serve.

Tips for teams #7

Climate action takes a team



It is easy to understand why caring for a community takes a team. We back each other, we provide support when someone is weary, we learn from each other, we celebrate successes together, our different skills add strength to our team and we pull together when there's a big job to be done.

Climate action requires the input and skills of many, given that it requires together identifying and responding to climate risks, developing the best solutions, and implementing the innovations for change, all while delivering high quality care: climate action takes a team.

Working as a team is how we work in our health services. We know how to plan and lead, and we know how to get things done.

As we have done many times before, we can have confidence for the future as we determine what climate action to take, and work in teams to take it.

6.2 Climate Action Project Prioritisation Tool

Informed by urgency, feasibility, measurability, scalability and sustainability of proposed climate action ideas

Considers	Asks	Score each item Yes = 2 Sometimes or somewhat = 1 No = 0
Urgency		
Degree of urgency may be driven by external and internal factors or risks	Does this project require attention in the next three months?	
	Is the reason for urgency beyond our control?	
	Are we ready to commence?	
	Are any needed resources available now?	
	Will we be able to demonstrate quick wins?	
Feasibility		
The engagement and capacity of leadership and stakeholders The alignment to existing work The likely efficacy of the project to address an identified need	Is the project likely to meet its aims?	
	Does the project align with the organisation's priorities?	
	Can risks associated with implementation be managed now?	
	Is the project effort considered to be worth the anticipated benefit?	
	Is the action supported by the people who need to be involved in its implementation?	
Measurability		
The capacity to understand the impact of the climate action and clearly describe this	Do we have ways already to measure our action is reducing emissions or enhancing adaptation?	
	Are these measures relevant to our wider climate action plan?	
	Are these measures reliable and likely to remain available?	
	Is the evaluation information we need easy to collect?	
	Can we be confident that our climate action is a main reason for any changes we see?	
Scalability		
The strength of effect and usefulness of the action	Could the climate action be useful in other health settings or communities?	
	Would tools and resources developed to support delivery of action be useful elsewhere?	
	Does our team already understand and are able to talk about climate action to community and others?	
	Will the project outcome be worth the project effort?	
	Can we support others in their use of the idea?	
Sustainability		
Leadership capacity and appetite to support on-going implementation	Can the climate action continue without additional funds into the future?	
	Is there likely to be funding available to expand or continue the intervention if needed?	
	Is the state health system likely to support this on-going climate action?	
	Is it likely that current stakeholders and those have supported the climate action will continue to do so?	
	Will the climate action keep going with little or automated attention only?	
		Total /50

6.3 Project Planning Template

The LETTERS tool for planning, implementation and building in sustainability

Name of program or project:	Team leader/ Contact person:									
Week or month	1	2	3	4	5	6	7	8	9	10
<i>Add or delete rows and columns as required</i>										
Leadership and governance										
• Identify leadership and project team members										
• Establish accountability and governance structure (+/- Terms of Reference)										
• Describe problem to be solved										
• Scope equity considerations asking <i>Who benefits and who doesn't?</i>										
• Ensure inclusion of Aboriginal and Torres Strait Islander Peoples perspective										
• Evaluate key risks, develop risk management plan and undertake regular review										
Engaging with people, processes and evidence										
• Identify stakeholders										
• Map what happens now by gathering information and talking to people										
• Identify what needs to change to solve the problem										
• Ask stakeholders for their ideas										
• Identify barriers and enablers to success and sustainability, including people who can help make the change										
• Identify ways to overcome barriers and strengthen enablers										
• Identify processes for making sure results from tracking progress are reviewed										
Training and education										
• Identify any training needs and who needs to be trained										
• Develop and implement training plan										
• Check that the training is giving people the skills they need for the changes ahead										
Tools and resources										
• Identify existing tools, templates, sources of information to aid implementation										
• Identify usefulness of <i>Eden Suite</i> to track progress										
• Develop additional tools as necessary, including for reporting to leadership team										
• Identify process for on-going review of tools and guides										
Evaluation and audit										
• Develop process, impact and outcome measures that reflect program aims										
• Identify where data are or can be collected routinely to track progress and results, including using the <i>Eden Suite</i> program										
• Develop evaluation and audit plan which uses routine data where possible										
• Adjust program informed by results as program progresses										
Reporting and communication										
• Develop and implement communications for people who need to know										
• Provide updates to leadership team or sponsoring Committee and stakeholders										
• Tell stories of progress and celebrate successes, including for new staff										
• Make plans, tools and resources available to others										
Sustainability										
• Plan from the start for how changes are to be sustained, tracked and reported										
• Work towards ensuring all aspects of the action are self-sustaining										
• Develop measures and key performance indicators of sustainability										
• Look for and address as needed any unanticipated consequences										
• Incorporate ongoing checks and KPI measures into usual organisational reporting										

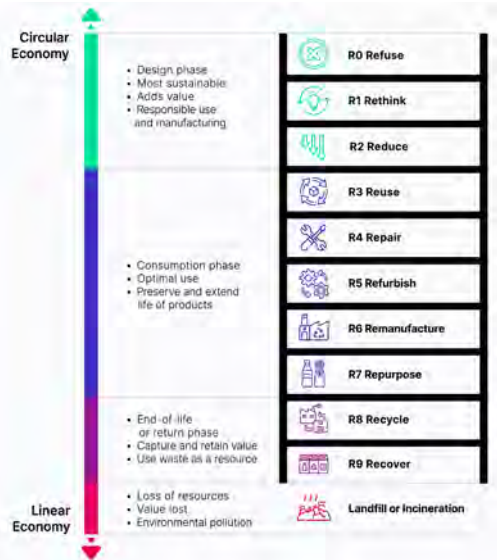
Source: Adapted from Grampians Region Population Health Plan 2023 - 2029, p.259

6.4 Adopting circular economy principles

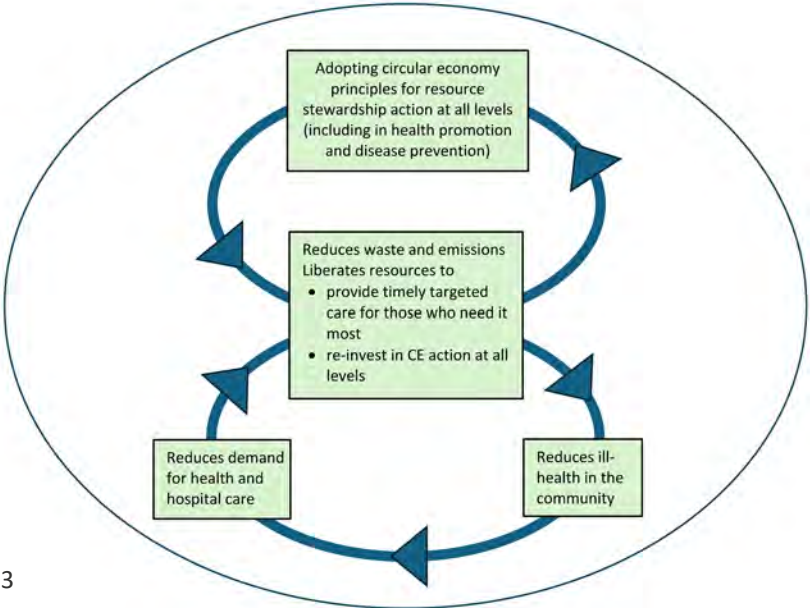
Applying the “R” strategies of a circular economy (Figure 1) to the use of resources enables all health sector workers to have an active role in reducing emissions by stewarding waste across energy and procurement, models of care-related waste and human-factors related waste.

Actioning a circular economy approach benefits people and the planet.

(right) Figure 1: R-Strategies for a Circular Economy
Source: R-Strategies for a Circular Economy. Circularise Blog. November 2023



(below) Figure 2: Adopting circular economy principles at all levels benefits people and our planet
Source: Aldrich, Sykes and Grenfell, 2023



Tips for teams #8

We can do this!



Climate action requires exactly the skills that our staff already have.

People who work in health as clinicians, non-clinicians, managers, accountants, drivers, volunteers, educators, cleaners, informaticians, technologists, analysts, and many more are smart, creative, hard-working and committed to serving our communities.

Staff members and teams adapt to new processes and challenges all the time, as demonstrated by the spectacular collaborative effort within and between our services when expert care continued to be delivered throughout the COVID19 pandemic.

This collective talent can be tapped, trained or supported as needed, and let loose to re-think and re-design care delivery and resource use, in all units and at all levels of work, to benefit both the people we serve and the planet.

Action at all levels makes the health care sector sustainable environmentally, and operationally, and helps achieve and sustain improvements in population health.

Our people are our best asset in our climate action efforts.

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