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Green Plan 2022

NHS Cheshire & Merseyside

NHS
Cheshire and Merseyside

NHS Cheshire and Merseyside Green Plan

Contents

"Saving our planet, lifting people out of poverty, advancing economic growth; these are one and the same fight.

We must connect the dots between climate change, water scarcity, energy shortages, global health, food security and women's empowerment. Solutions to one problem must be solutions for all."

Ban Ki-Moon
Eighth Secretary-General, United Nations
Office held 1st January 2007 – 31st December 2016

NHS Cheshire and Merseyside Green Plan

Foreword

Amid the unprecedented challenges to the NHS and society of the global pandemic, the climate emergency has not gone away, and the Cheshire and Merseyside Integrated Care System (ICS) remains absolutely committed to ending its contribution to climate change by 2040 (or earlier) in line with the national ambitions of NHS England and NHS Improvement.

The challenge of meeting our emissions reduction targets has undoubtedly become more difficult: COVID-19 has affected every aspect of our lives, with thousands of people losing their jobs, a fundamental shift in how we live and work in our local communities, and the NHS stretched to breaking point by the backlog of physical and mental healthcare that the pandemic has caused. The pandemic starkly exposed health inequalities within our society and we know that urgent work is needed to tackle the wider socio-economic and structural inequities that drive them.

Things must change …

We can design a better future and, coming out of the pandemic, put things back together differently. That is why we have committed to a Green Plan which captures the opportunities of a transition to net zero. That means progressing to become an Anchor Institution and embedding social value, working in partnership with our stakeholders and local populations to build greener communities, improve patient pathways, create less waste, utilise energy from sustainable sources and create green jobs, develop sustainable skills, and nurture good mental health and wellbeing.

This approach recognises climate change as the most significant health and human rights issue facing us today, and the transition to net zero as an opportunity to tackle inequalities and the wider determinants of health. It is an approach that is fundamentally important to the future survival of the NHS, the population, and the planet.

Raj Jain
Raj Jain
Chair

Graham Urwin
Graham Urwin
Chief Executive

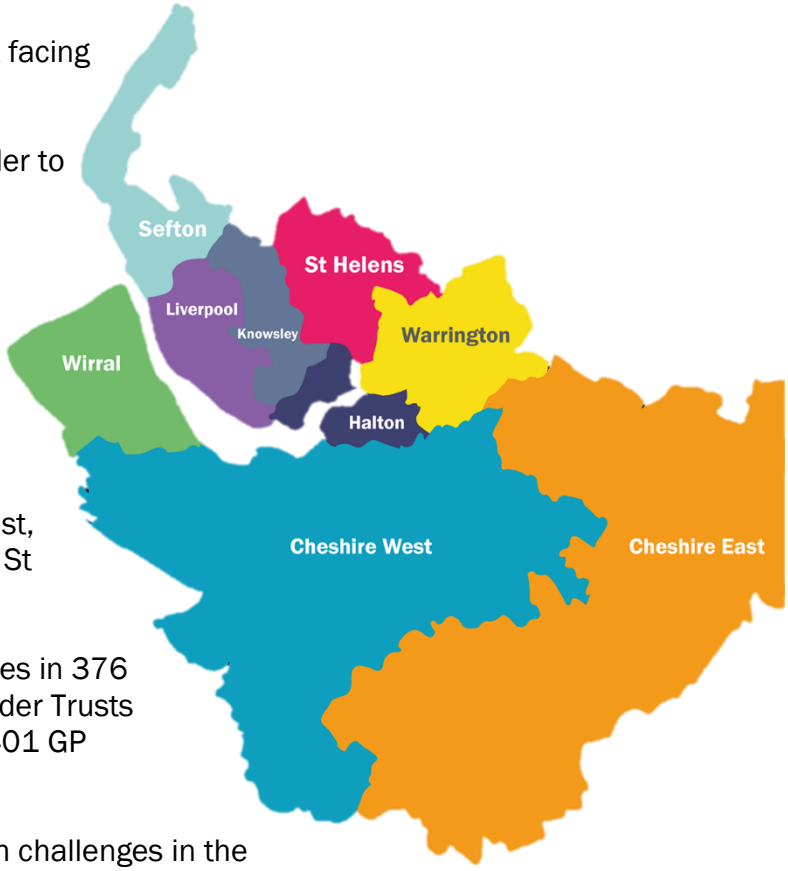
Dave Sweeney
Dave Sweeney
Associate Director of Partnerships & Sustainability

1.0 NHS Cheshire & Merseyside Green Plan Overview & Governance

1.1 Background

The NHS produces approximately 5.4% of the UK's greenhouse gas emissions, 40% of UK public sector emissions, and on a global level, healthcare generates so much carbon dioxide equivalent (CO_2e) that if it were a country, it would be the world's fifth biggest polluter.

Climate change is the greatest health threat facing the world, but it also offers the greatest opportunity for us to redefine the social and environmental determinants of health in order to provide sustainable health services across Cheshire and Merseyside and to deliver the ambitions as set out in Delivering a Net Zero National Health Service.



As England's second largest ICS the Cheshire and Merseyside region is home to nearly 3 million people across nine 'Places' which are coterminous with individual local authority boundaries, including: Cheshire East, Cheshire West, Halton, Knowsley, Liverpool, St Helens, Sefton, Warrington, and Wirral.

The ICB directly employs 1,198 staff, operates in 376 core buildings, and comprises 18 NHS Provider Trusts and 51 primary care networks (PCNs) with 401 GP practices.

There are many underlying population health challenges in the region; for example, in the Liverpool City region 44% of the population live in the top 20% most deprived areas in England, 26% children (0-15 years) live in poverty, and compared to the England average, the region performs significantly worse for premature cancer, cardiovascular disease (CVD) and respiratory deaths.

Whilst the levels of deprivation are not as high in Cheshire, there are stark pockets of deprivation and health outcomes for some long-term conditions, and alcohol and self-harm are worse than the England average.

Demand for health and care services in the region is very high and growing (exacerbated by the impact of the coronavirus pandemic). Our services are not sustainable without a different approach in how we work together, and a shift in focus away from the treatment of illness to one of prevention and wellbeing, which is reflected in both the strategic objectives of the organisation and within the ICS' Green Plan.

This Plan outlines our commitment to deliver sustainable and high-quality services for the people of Cheshire and Merseyside and highlights the ways in which we are working with our partners to positively impact the wider determinants of health to address health inequalities and to embed social value into every aspect of our work.

It should also be noted that whilst the Plan is largely focused on NHS related action, local authorities have well established climate change plans and there will be a need, as Place develops, to ensure that this Green Plan is aligned with local authorities' own sustainability plans going forward.

1.2 United Nations Sustainable Development Goals 2030

The United Nations Sustainable Development Goals are a universal call to action to end poverty, protect the planet, and improve the lives and prospects of everyone everywhere. The 17 Goals were adopted by all UN Member States in 2015, with the intention of achieving the Goals by 2030.

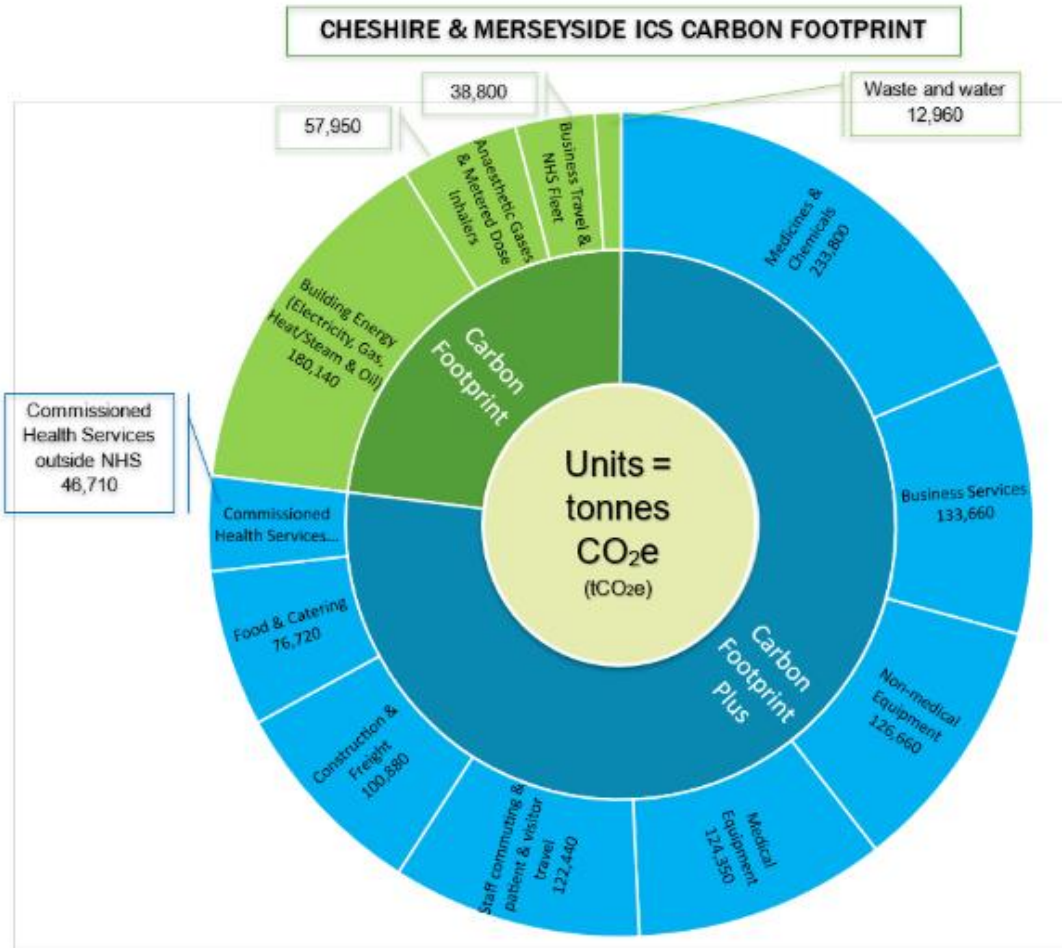
Our Green Plan, Social Value Charter and Anchor Institute Charter are aligned to these Goals, and we will continue to work with partners across Cheshire and Merseyside in encompassing these goals at the heart of everything that we do.

1.3 Overarching Ambitions and Progress

Two clear and feasible targets were set out for the NHS net zero commitment in Delivering a Net Zero National Health Service, these were based on the scale of the challenge posed by climate change, current knowledge, and the interventions and assumptions that underpin this analysis:

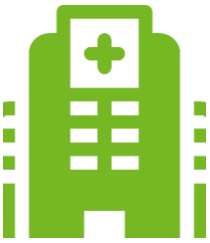
- For the emissions we control directly (*the NHS Carbon Footprint*), net zero by 2040, with an ambition to reach an 80% reduction (from 1990 levels) by 2028 to 2032.
- For the emissions we can influence (*our NHS Carbon Footprint Plus*), net zero by 2045, with an ambition to reach an 80% reduction (from 1990 levels) by 2036 to 2039.

An overview of the carbon footprint[1] of the ICS and interventions nationally required to meet these targets is provided below, accompanied by local interventions and priorities.



Ambitions	Local (Cheshire & Merseyside)	National
1. Our care:	By recovery and restoration of services and long-term, sustainable transformation of care. Sustainability principles will be included in service planning, commissioning, patient safety and quality improvement.	By developing a framework to evaluate carbon reduction associated with new models of care being considered and implemented as part of the NHS Long Term Plan.
2. Our medicines and supply chain:	By working together as a system to reduce emissions using greener medicines and anaesthetic gases, reducing overprescribing, patient education, and minimising waste. By collaborating with supply chain partners to reduce emissions and produce greener alternatives.	By working with our suppliers to ensure that all of them meet or exceed our commitment on net zero emissions before the end of the decade.

[1] Data obtained from collated NHS England 'ERIC' submissions from C&M Provider Trusts.

	By embedding social value, including carbon reduction, in all procurement across the system.	
Ambitions	**Local (Cheshire & Merseyside)**	**National**
3. Our transport and travel: 	By promoting the benefits of active travel to patients, staff and visitors and working with local authority partners and transport providers to improve routes and services and putting in place measures to encourage modal shift. Shift to zero emission fleet and lease vehicles (under 3.5 tonnes) by 2028.	By working towards road-testing for what would be the world's first zero-emission ambulance by 2022, with a shift to zero emission vehicles by 2032 feasible for the rest of the fleet.
4. Our innovation 	By transformation of outpatients, embracing digital advances, working as a system to create sustainable clinical pathways, and proactively horizon scanning.	By ensuring the digital transformation agenda aligns with our ambition to be a net zero health service and implementing a net zero horizon scanning function to identify future pipeline innovations.
5. Our hospitals: 	By ensuring that all new buildings (not only hospitals) are sustainable and incorporate innovative, sustainable technology, By ensuring all refurbishments conserve energy and remain flexible and viable for future use.	By supporting the construction of 40 new 'net zero hospitals' as part of the government's Health Infrastructure Plan with a new Net Zero Carbon Hospital Standard.
6. Our heating and lighting: 	By working with staff, patients, and contractors to reduce utility consumption/optimise energy use. Planned maintenance to be energy efficient, and investment in renewable energy technology is key.	By completing a £50 million LED lighting replacement programme, which, expanded across the entire NHS, would improve patient comfort, and save over £3 billion during the coming three decades.
7. Our adaptation efforts: 	By having an overarching ICS Adaptation Plan which includes Trust/ Place/ Local Authority Adaptation Plans and follows recommendations of the Third Health & Social Care Sector Climate Change Adaptation Report.	By building resilience and adaptation into the heart of our net zero agenda, and vice versa, with the Third Health and Social Care Sector Climate Change Adaptation Report in the coming months.

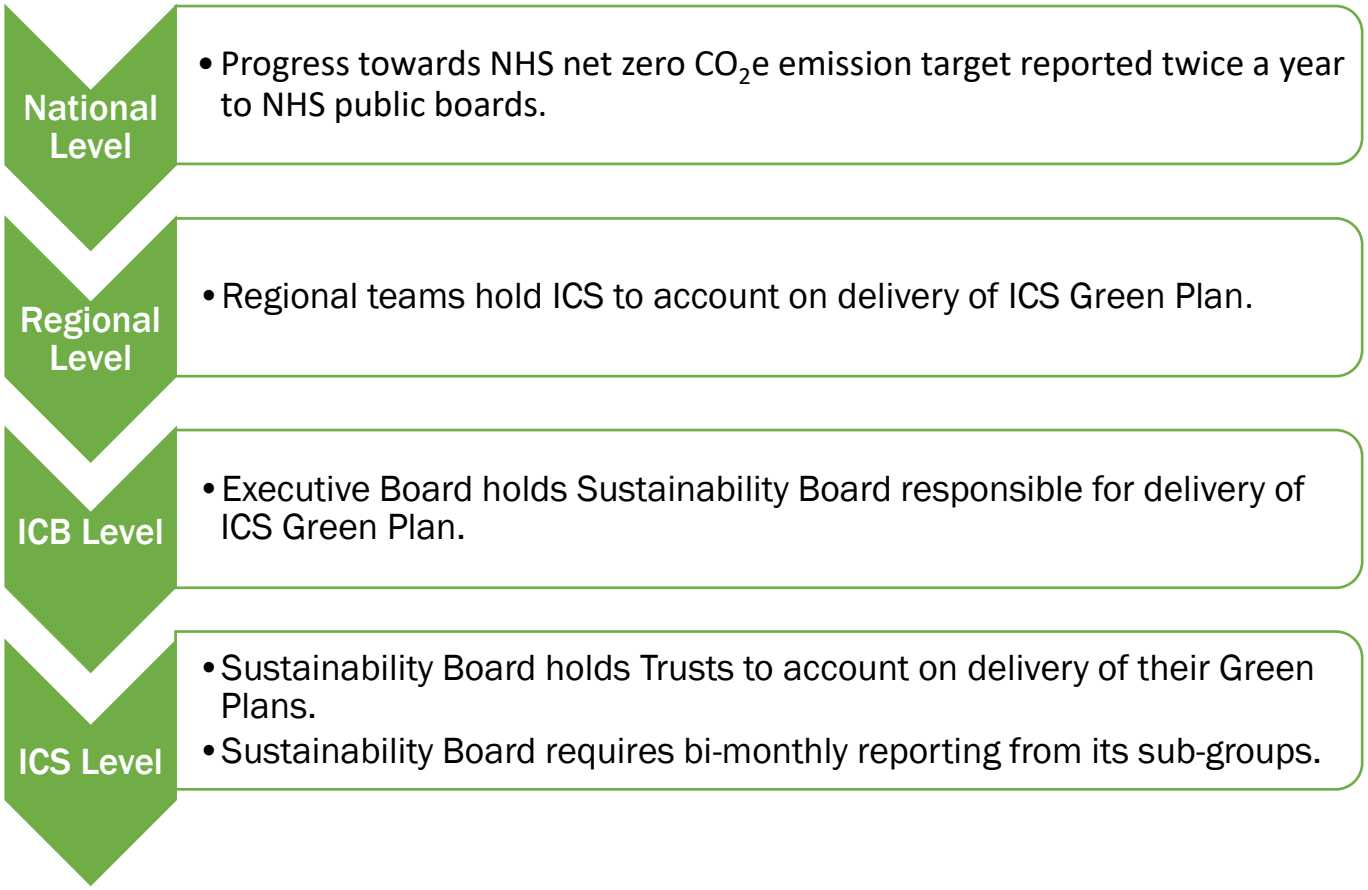
8. Our values and governance:	The values of the NHS Constitution, Long Term Plan and 'For a Greener NHS' are the foundations of our work. ICS board-level lead: Dave Sweeney, Associate Director of Partnerships & Sustainability. Dr Kiki Lam, GP – ICS Primary Care Sustainability Lead. Sustainability Ambassador: Isla Wilson, Chair - Cheshire & Wirral Partnership NHS FT. The ICS' 18 provider Trusts each have a board-level lead. All 9 local authorities within the ICS have board-level leads.	By supporting an update to the NHS Constitution to include the response to climate change, launching a new national programme '*For a Greener NHS'*, and ensuring that every NHS organisation has a board-level net zero lead, making it clear that this is a key responsibility for all our staff.

1.4 Governance and Reporting

NHS Cheshire and Merseyside's Sustainability Board will have oversight of the delivery of the Green Plan. The Board is a collaboration of colleagues from across the health and care system and wider system partners.

The ICS recognises that this is a live document which requires regular monitoring in order to ensure that the initiatives proposed are delivered according to the action plans and within or ahead of the recommended timescales.

Place based action plans will be developed to drive delivery and will be updated annually; these will also bring NHS plans into line with local authority plans. The Green Plan will be refreshed on a three yearly basis, taking into account new initiatives generated by staff and/ or partner organisations, advancements in technology and other enablers, and the increase in ambition and breadth of national carbon reduction targets. Progress will be reported on a quarterly basis as a minimum to the ICS' Sustainability Board, the public meeting of the Integrated Care Board and the Northwest Regional NHS Team.


National Level
• Progress towards NHS net zero CO_2e emission target reported twice a year to NHS public boards.
Regional Level
• Regional teams hold ICS to account on delivery of ICS Green Plan.
ICB Level
• Executive Board holds Sustainability Board responsible for delivery of ICS Green Plan.
ICS Level
• Sustainability Board holds Trusts to account on delivery of their Green Plans.
• Sustainability Board requires bi-monthly reporting from its sub-groups.

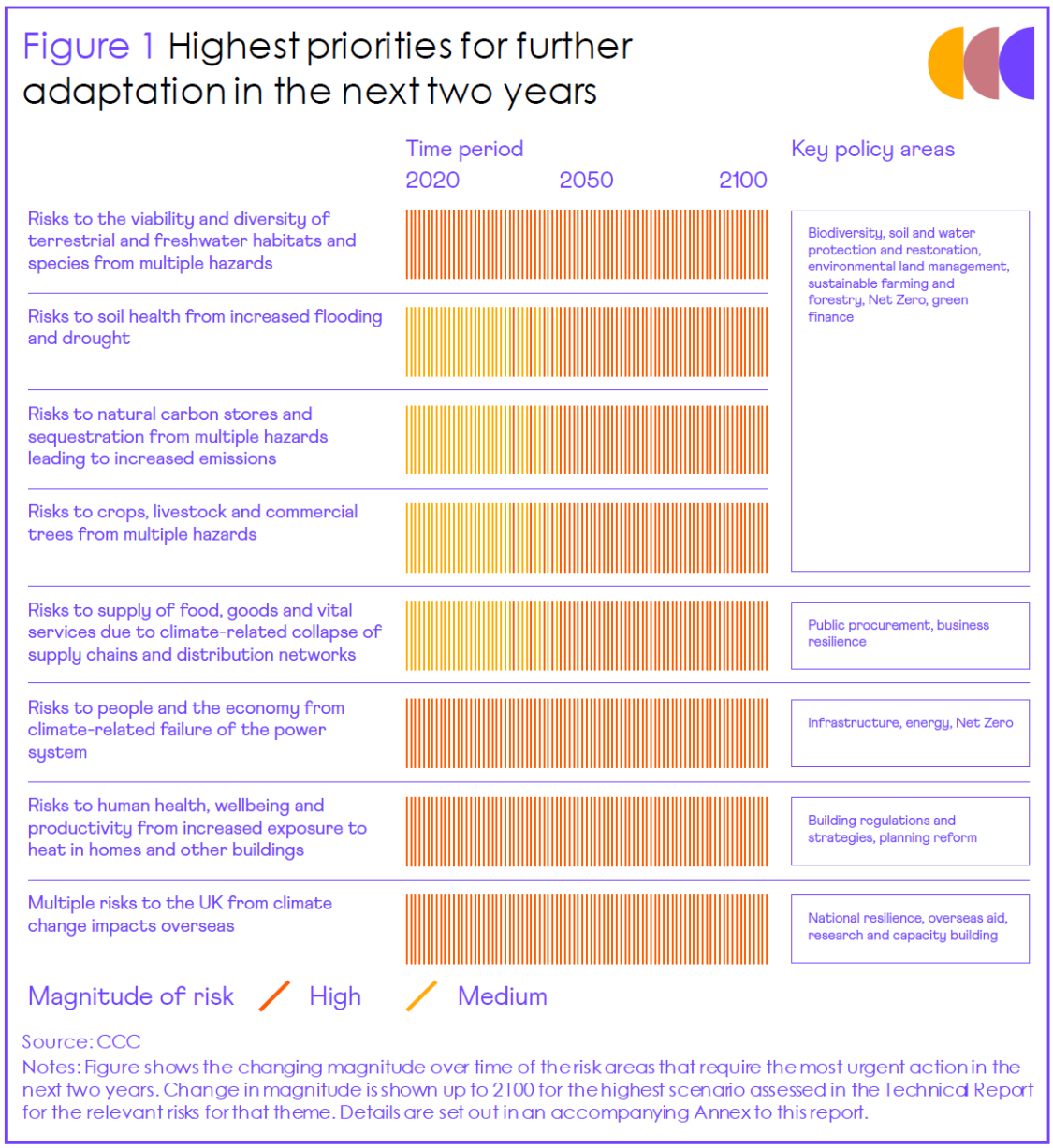
2.0 Adaptation Plan

2.1 Introduction

Climate change has become, and will increasingly be, an issue of central importance to the health and wellbeing of local communities. Changing weather patterns, more frequent extreme weather and rising temperatures have direct implications on our health and pose challenges to the way in which the NHS, public health, and social care systems operate.

The Independent Assessment of UK Climate Risk (CCRA3) published on 16th June 2021 set out 61 priority climate change risks and opportunities for the UK; of those risks, the Adaptation Committee identified eight risk areas that need the most urgent attention in the next **two years** (figure 1)

Figure 1 Highest priorities for further adaptation in the next two years



Source: CCC

Notes: Figure shows the changing magnitude over time of the risk areas that require the most urgent action in the next two years. Change in magnitude is shown up to 2100 for the highest scenario assessed in the Technical Report for the relevant risks for that theme. Details are set out in an accompanying Annex to this report.

Every single identified risk directly impacts on human health and delivery of health and care services, therefore strategies to address climate change are a key component of local planning and decision making for both the ICS and the nine local authorities, and can broadly be categorised into:

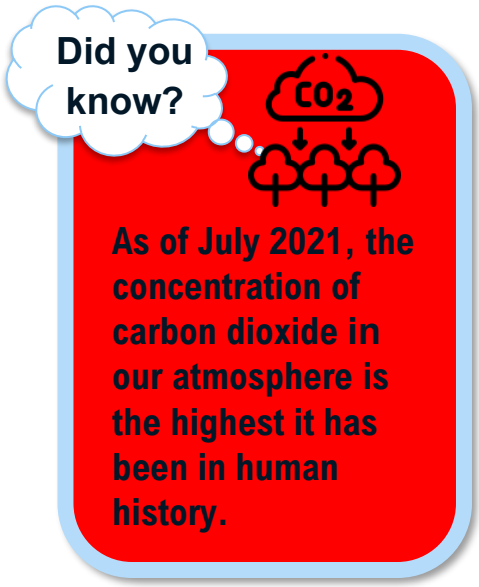
- Mitigation: reducing emissions and the human influence on the climate, and
- Adaptation: preventing avoidable impacts and health burdens through greater vigilance

2.2 Air Pollution

Air pollution is the largest risk to public health in the UK as long-term exposure to poor air quality can cause chronic conditions such as cardiovascular and respiratory disease as well as lung cancer. Short-term exposure can also affect lung function, exacerbate asthma, and give rise to increases in respiratory and cardio-vascular hospital admissions and mortality.

According to Public Health England (PHE)[2], it is estimated that long-term exposure to man-made air pollution in the UK has an annual effect equivalent to 28,000-36,000 deaths. The UK Health Forum and Imperial College London, in collaboration with and funded by PHE, developed a modelling framework, and estimated that a 1µg/m^3 reduction in fine particulate air pollution in England could prevent the following over an 18-year period:

- 50,900 cases of coronary heart disease
- 16,500 strokes
- 9,300 cases of asthma
- 4,200 lung cancers



Groups that are more affected by air pollution include:

- Older people
- Children
- People with existing cardiovascular or respiratory disease
- Pregnant women
- Communities in areas of higher pollution, such as close to busy roads
- Low-income communities

Air quality is a health inequality issue. Poorer communities experience the worst air quality and worst road casualties. Car ownership is low in poor communities and so people are facing the health consequences of travel choices made by others.

[2] Note – Public Health England was replaced by UK Health Security Agency and Office for Health Improvement and Disparities in October 2021.

2.3 *Extreme Temperatures*

Global warming does not necessarily mean milder winters, climate change is increasingly complex with unpredictable extremes of hot and cold. Over time the UK may experience fewer but more extreme cold spells, which can make some health problems worse and even lead to serious complications, particularly for the following people:

Did you know?

In the UK there has been a 53.7% increase in heat-related mortality in people aged 65+ in the past 20 years.

Extreme Heat

- Older people – especially over 75's
- People who have a serious or long-term illness including heart or lung conditions, diabetes, kidney disease, Parkinson's disease, some mental health conditions
- Those who may find it hard to keep cool including babies and the very young, bed bound people, people with a disability, pregnant women, those with drug or alcohol addictions, or Alzheimer's disease
- People who spend a lot of time outside or in hot places, such as those who live in a top floor flat, the homeless, or those whose jobs are outside

Extreme Cold

- People aged 65 and older
- Babies and children under the age of 5
- People who cannot afford heating
- People with long-term health conditions
- People with disabilities
- Pregnant women
- People with a mental health condition
- The homeless

2.4 *Flooding and Drought*

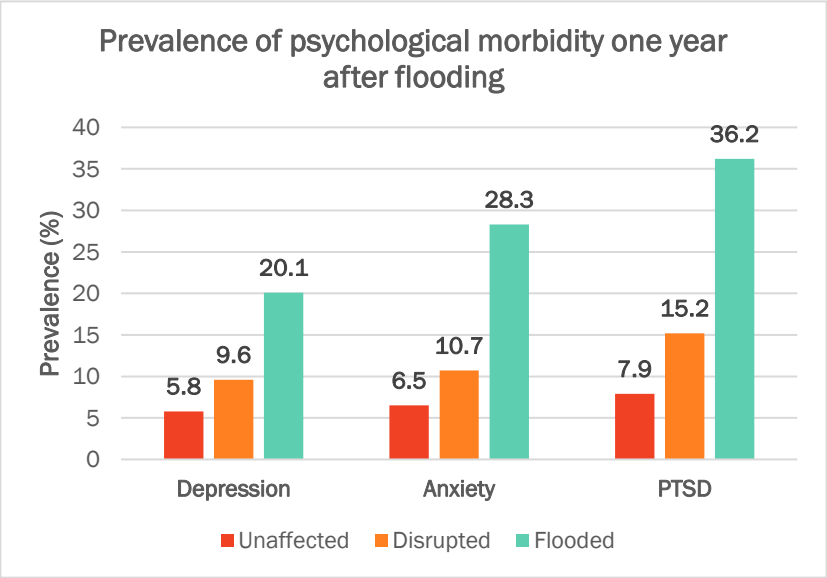
Climate change will affect the amount and timing of rainfall and will also impact the demand for water and its quality, as well as the way land is used – all of which will put pressure on water resources. Summers are likely to get hotter and drier, significantly increasing demand for water and winters are likely to get warmer and wetter.

Treatment plants, pumping stations and sewers may no longer be adequate to cope with the changes in climate, and some infrastructure, critical for providing water supplies, will be more vulnerable to flooding.

- Risks to people, communities, and buildings from flooding
- Risks to water quality and household water supply
- Reduced water for cleaning, sanitation and personal hygiene leading to increased incidences of waterborne diseases such as diarrhoea and gastroenteritis
- Respiratory difficulties caused by reduced air quality that would normally be washed away by rain

Figure 1- Map showing parts of Cheshire and Merseyside that could be underwater in the next 20 years. (Image: Climate Central)

- Mental health problems caused by stress, anxiety and increased financial hardship



PHE Study of Flooding and Health (Waite et al. 2017)

2.5 Food Security

Over half of the food consumed within the UK has been imported from one of over 180 countries around the world. Whilst this means that the UK is resilient to supply interruptions from specific countries, food supply and food security will be severely jeopardized across the world within a few short years unless climate change is addressed and action to mitigate the negative impacts of climate change is undertaken.

Climate change is already causing unpredictable and threatening changes to global weather patterns, and this has had a major impact in terms of things like reduced crop yields and damage to production infrastructure, but food insecurity is also experienced amongst people who regularly cannot afford to buy enough food. According to the Food Standards Agency (FSA) 20% of adults in England, Northern Ireland, and Wales face food insecurity annually, and The Food Foundation reported that over 3 million people across the UK went hungry in the first three weeks of the first COVID-19 lockdown.

2.6 *Priorities and Ambitions*

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Climate Adaptation Plans	ICS, Trusts, Primary Care and Place to create specific climate adaptation plans. Incorporate newly emerging climate related health care risks into contingency planning, such as the increasing prevalence of vector borne diseases.	Embed climate change as a strategic risk in corporate risk registers, update to include sudden demand on services, extreme weather, and environmental impacts. Adaptation Plans could form part of business continuity plans or emergency preparedness plans or be stand alone.	Provider Trusts to create Adaptation Plans by **March 2023.** Place Adaptation Plans to be co-created by health, third sector and local authorities by **December 2023.**	Create an overarching ICS Adaptation Strategy and develop and guide Trusts/ Places on the formulation of their Adaptation Plans. **September 2022.**
Climate Change Recognition and Mitigation	Recognise the impact climate change may have on service provision and ensure senior level staff have sufficient awareness to be able to deal with the operational impacts of extreme weather events caused by climate change and continue to invest in mitigation measures.	All senior level staff to undertake carbon literacy training.	**By end 2022**	**By end 2022**
Supply Chain	Work with NHS Supply Chain/ suppliers to develop contingencies to ensure the supply chain is not compromised by extreme weather events.	Build into procurement tender specifications and develop robust relationships with supplier.	**2022 ⇨**	**2022 ⇨**
Future Proofing NHS Estate	Plan and build future estate to perform better against	Follow recommendations of 3rd Health & Social Care	**2022 ⇨**	**2022 ⇨**

	extremes of weather with climate protection built into the building fabric not retrospectively added post build.	Sector Climate Change Adaptation Report.		
Working in Partnership with Local Authorities & Third Sector	Identify priorities with the LA/ Third Sector, and evaluate the extent to which communities, services and infrastructure are prepared and resilient to weather events and other crisis.	Consider undertaking 'tabletop' exercises at Place and ICS level using the Gold (strategic), Silver (tactical), Bronze (operational) command structure.	**2022** ⇨	**2022** ⇨

3.0 Biodiversity and Green Spaces

3.1 Introduction

The damage caused by humankind to planet Earth by the destruction of habitats, deforestation, pollution, over-hunting, and aggressive consumption of resources has led to imbalance in the ecosystem. Imbalance in the ecosystem means loss of biodiversity and loss of everything that humankind needs to survive food, clean water, medicine, and shelter.

In truth the planet cannot stand any more abuse, and in Cheshire and Merseyside we are striving to protect our green spaces, and to ensure that our biodiversity ambitions will be bold, will be brave and will deliver both social value and quality health benefits and outcomes for our local populations.

Did you know?

- **The UK has lost almost 50% of its wildlife and plant species since the Industrial Revolution.**
- **The UK is ranked in the bottom 10% globally and the worst among G7 nations for retention of natural biodiversity.**

3.2 NHS Forest Nature Recovery Rangers

Research has shown that hospital gardens can:

- Help reduce stress and enable patients to summon inner healing resources
- Help a patient come to terms with an incurable medical condition
- Provide a setting where staff can conduct physical therapy and horticultural therapy with patients
- Provide staff with a needed retreat from the stress of work
- Provide a relaxed setting for patient/visitor interaction away from the hospital interior

Fiona Megarrell, Liverpool Nature Recovery Ranger

To achieve the quantity and quality of green spaces to benefit in these ways will require proactive management. One of the proven successful ways of facilitating gardens and their efficacious use in healthcare settings is by bringing Nature Recovery Rangers onto hospital sites.

Rangers have been shown to transform and create wellbeing spaces and transform the ability of hospital staff, patients, and visitors to engage with those spaces and thus reap significant physical and mental wellbeing benefits. Green spaces development and engagement has been seen to reduce the length of pain relief medication requirements and hospital stays by speeding recovery and to decrease stress in hospital staff.

In Spring 2021 the Centre for Sustainable Healthcare, which co-ordinates NHS Forest, introduced Nature Recovery Rangers into hospital sites in Bristol, Liverpool, and West London. The Rangers, supported from the Government's Green Recovery Challenge Fund, are running projects to improve biodiversity while helping patients, staff, and community members to enjoy nature, alongside outreach work to involve new volunteers at the hospitals as well as enhancing green spaces.

In Liverpool, the installation of vegetable beds, beehives and composting is transforming Broadgreen Hospital into an Incredible Edible site, and staff are being trained to maintain these projects with patients in the longer term.

Future plans include training hospital staff to do butterfly transects, engaging students to build and install hedgehog homes, bat walks and surveys with staff and their families, pressing fruit from hospital trees to make juice to share with patients, wildflower meadow identification and painting sessions, early morning bird watching and identification, developing therapy gardens for patients, woodland management volunteer days, installing wildlife interpretation and more.

3.3 The Mersey Forest

The Mersey Forest is a growing network of woodlands and green spaces across Cheshire and Merseyside which has been creating 'woodlands on your doorstep' for over 25 years. The Mersey Forest is partnered and supported by all 9 of the local authorities across the Cheshire and Merseyside region, testament to the excellent and valuable work that the organisation undertakes in helping combating climate change and habitat loss.

Through community and partnership working The Mersey Forest has:

- Planted over 9,041,039 trees – these trees have absorbed 524,574 tonnes of carbon dioxide. (The target is 10m trees!)
- Achieved three times more tree planting than the England average
- Created over 3,000 hectares of woodland – that is the same as 4,322 full-sized football pitches
- Worked with more than half the schools in Merseyside and north Cheshire
- Improved the environment – 65% of people surveyed said that they have noticed that their environment has improved because of The Mersey Forest's work

Alongside this very valuable work, The Mersey Forest also runs Nature4Health - a project focussing on strengthening bonds between people and nature, with fantastic benefits for all

involved. The project uses the power of the natural environment to reduce loneliness, social isolation and improves wellbeing, as well as supporting physical health. Nature4Health programmes are open to all and offer a variety of activities for people to get involved with, including woodland walks, healthy conservation, and community gardening.

3.4 Natural Health Service (NaHS)

The Natural Health Service uses the natural environment to improve the health and wellbeing of individuals, families, and communities across Merseyside and Cheshire, via five evidence-based products. These 'products' use the natural environment as the basis for their delivery and effectiveness; these are available to the NHS, local authorities, and other commissioners as part of a holistic approach to health and social care.

3.5 Biodiversity in Action

Healthcare sites across Cheshire and Merseyside have already embarked on direct action to improve biodiversity in their green spaces including:

- Creating therapy gardens
- Cultivating food through allotments
- Supporting bees and other pollinators
- Encouraging wildlife with insect hotels, bat homes, and bird boxes
- Creating 'no mow' zones on the estate
- Providing beautiful spaces for staff, patients, and visitors to take time out to sit and reflect

3.6 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Biodiversity Planning	Consideration of the impact of activity on biodiversity and develop mitigation strategies.	Understand biodiversity/ habitat risks/ opportunities in procurement and ensure native species are considered and supported in the planning/ operations of estates. Prioritise the inclusion of green space and biodiversity in the design of all new buildings and refurbishments; consider green roofs, green walls, and wildflowers.	**2022** ⇨	**2022** ⇨
Nature Recovery Rangers	Explore employing Nature Recovery Rangers (or similar). Provide opportunities for staff, volunteers, patients, schools, and community to be involved in biodiversity/ environmental activities.	The provision of nature recovery rangers could be outsourced to NHS Forest, which has the expertise and training and support resources to ensure rangers achieve the green spaces recovery that enables patients, staff, visitors, and community to experience the health improvements they can bring.	Assess cost and benefits of Rangers. Consider jointly employing a Ranger across several sites or within a PCN. **2022** ⇨	Work with Providers, PCNs and Places to explore biodiversity opportunities and joint ventures. **2022** ⇨

4.0 Digital Transformation

4.1 Introduction

The coronavirus pandemic proved to be the catalyst for NHS organisations to achieve truly remarkable digital transformation at an unprecedented pace and scale. NHS Cheshire and Merseyside's ***Digital and Data Strategy*** aspires to build on that progress by focussing on ways to further harness digital technology and systems to streamline service delivery and supporting functions, improve use of resources and reduce carbon emissions. The programme will be based on the NHS Transformation Directorate's What Good Looks Like (WGLL) framework.

The WGLL programme draws on local learning. It builds on established good practice to provide clear guidance for health and care leaders to digitise, connect and transform services safely and securely. This will improve the outcomes, experience, and safety of our citizens.

Following the publication of the WGLL programme on 31st August 2021, the Cheshire and Merseyside Health and Care Partnership (forerunner to the ICS), commenced a refresh of the existing ***Digital Strategy***. The refreshed strategy launched in mid-November 2021 and will be published during 2022.

4.2 Development of the Strategy

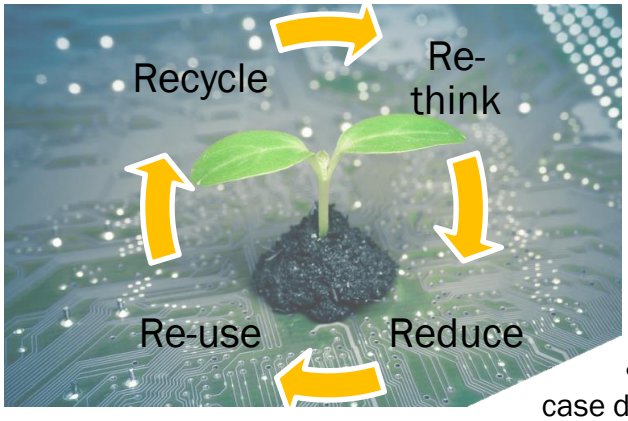
Digital transformation is at the heart of Cheshire and Merseyside ICS' Green Plan for a more sustainable health and care system. The What Good Looks Like framework sets out the policy context and direction of travel for the Net Zero agenda through one of its objectives under the Smart Foundations success measure. It states that all ICS' should ensure progress towards net zero carbon, sustainability, and resilience ambitions by meeting the Sustainable ICT and Digital Services Strategy (2020-25) objectives.

Within the context of these two documents, the ICS Digital team have developed a digital Green Plan through:

- Reviewing the digital sections (and other digital references) from individual Provider Green Plans
- Reviewing individual Trust Digital Green Plans or associated digital green documentation (where they exist)
- Engagement with the Cheshire and Merseyside Chief Information Officer (CIO) Group

This Green Plan links to other strategies and plans in development in the ICS including the Digital Inclusion plan, the Health Inequalities Action Plan and ongoing work with patient and public engagement.

4.3 Framework for the Sustainable Digital Strategy



The ICS has a fundamental role in incentivising sustainability behaviours through system levers and incentives to change culture, and this section looks at some of the things that can be done at system level to ensure that environmental impact has been fully considered.

4.4 Rethink

- Develop guidelines for digital business case development that address the green agenda
- Investment objectives to support the net zero agenda
- Options under consideration to have a clear dimension associated with sustainability.
- Options appraisal criteria to include consideration of climate change
- Procure only with suppliers committed to/ in the process of setting science-based targets for sustainability outcomes
- Management cases and business as usual service delivery models for digital services to be designed with embedded sustainability

4.5 Reduce

- Implement electronic patient records in line with national digital maturity guidelines to reduce paper usage including:
    - Reduce paper use for communication with care professionals/ patients/ residents.
    - Reduce paper use within organisations across all back-office functions.
- Reduce printers on-site to only areas where they are absolutely needed and put software in place to minimise printing and ink usage.
- Provide hardware (sensors, monitoring devices etc.) and software for patients to receive care in their usual place of residence rather than a hospital or other healthcare facility.
- Utilise e-learning to reduce travel required to attend training courses.
- Provide hardware, software, and other relevant infrastructure to ensure staff can work from alternative locations to reduce travel.
- Review and assure digital maturity and investment plans to ensure commitment to 'cloud first' and virtual machine approaches for existing infrastructure.
- Develop/ review/ update power management policies and protocols and embed solutions to implement the policies and report on power usage.

4.6 Re-use

- Refurbish and re-use old equipment for other purposes (for schools, charities, or UK/ overseas projects) as part of an organisation's corporate social responsibility.
- Share learning on digital initiatives to support sustainability with other organisations across Cheshire and Merseyside.

4.7 Recycle

- Recycle digital consumables wherever possible.
- Dispose or recycle digital equipment safely, securely and in line with relevant regulations.

4.8 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
ICS Funding Commitments	Ensure digital funding commitments from ICS to Providers/ Place have associated conditions/ assurance processes so investments are in line with sustainability strategies and policies	To be delivered.	Ensure that all proposed suppliers of digital systems and services meet minimum standards for sustainable procurement through the contracting process by **March 2025.**	Provide assurance that all ICS facilitated investments are in line with Sustainable ICT and Digital Services Strategy, by **March 2023.**
Models of Care	New models of care to include digital solutions where there is proven benefit.	Many ICS transformation programmes have embedded digital to support new care pathways where there has been a secondary benefit of supporting sustainability (e.g. NHS@Home, virtual ward, remote monitoring).	Collaborate to ensure identification, design and delivery of transformation programmes and clinical networks that have a positive impact on sustainability are identified as potential options in the overall solution design by **March 2024**	Ensure that digital and data capabilities being designed and deployed at ICS level have a clear link to supporting green objectives in new models of care by **April 2023.**
Electronic Record & Shared Care Records	Implement electronic patient records in line with NHSE/I/D digital maturity guidelines to reduce paper usage (ultimately to zero) Reduce use of paper for non-direct care process within organisations across all back-office functions. Support 'levelling up' of digital maturity across the	ICS is supporting EPR development in acute, community, primary care, and mental health. Some NHS organisations using fully electronic solutions for common HR processes such as travel expenses, annual leave booking, sickness reporting etc.	Introduce/ further develop EPR so patient records are 'paper light' by **March 2025** and fully 'paperless' by **March 2027.** Ensure all staff related HR processes are fully electronic by **March 2025.** Ensure all financial management processes are	Provide assurance/ support to enable system to become 'paper light' by **March 2025** and ultimately 'paperless' by **March 2027.** Support relevant back-office functions in the ICS (system wide) to digitise staff and financial management processes by **March 2025**

	system, particularly for electronic patient record (EPR) deployment across NHS providers. Driving the rollout of system wide and Place based shared care records to reduce paper referrals and communications between organisations and using this as a platform for patient access to their record to reduce paper-based patient communication.	Use of shared care records and other functionality (e.g., electronic care coordination in St. Helens Place) reduces paper communication Patient portal systems are in place across C&M (e.g., MyCareView in Cheshire East and the AMITY project elsewhere).	fully electronic by **March 2025.** Ensure access to system and Place based shared care records by **March 2025.** Introduce electronic care coordination systems across providers at Place by **75% in March 2025** and **100% by March 2030.** Ensure all patients can access a patient portal to access their health and care record and all care correspondence by **March 2025.**	Support/ drive shared care record development at in line with planning guidance requirements Ensure all patients have access to their electronic record via a patient portal solution by **March 2025.** Deliver digital inclusion work to increase active participation in patient access to records by **20%** by **March 2025.**
Remote Monitoring	Roll out remote monitoring for a wider set of 'use cases' than COVID virtual wards to enable more patients to be cared for at their usual place of residence, reducing both patient and care professional travel time.	Provision of hardware (such as sensors, monitoring devices etc.) and software to allow patients to receive care in their usual place of residence rather than a hospital or other healthcare facility.	Utilise functionality from C&M telehealth hub, along with any required local solutions, to further rollout virtual wards in line with planning guidance requirements by **March 2025.**	Invest/ roll out telehealth hub and ensure it has the capacity and support required to meet the needs for system and provider virtual ward and other remote monitoring applications by **March 2023.**
Integrated Virtual Consultation Solutions	Providing robust and integrated virtual consultation solutions that are used for a wider variety and number of patient interactions to reduce travel.	Replacement of face-to-face meetings with care professionals and patients with video consultation. Reduces travel and saves time for all involved. Remote consultation in primary care became	Roll out remote consultation in line with organisational objectives, with a particular focus on maximising virtual appointments by **March 2024.**	Invest in remote consultation platforms for use across the system by providers by **April 2022.** Review/ assure organisation digital maturity plans to ensure local investment in place to utilise ICS wide remote

		commonplace during the pandemic, and virtual outpatients has increased in popularity, particularly in appointments where no physical examination is required		consultation platform(s) by **April 2023.**
Remote Working	Ensure all relevant staff who have the potential to deliver their work away from their base location have the appropriate hardware and software to work remotely.	Provision of hardware, software, and other relevant infrastructure to ensure staff can work from alternative locations to reduce travel commitments.	As a result of the pandemic, organisations have enabled staff to work remotely through provision of laptops, remote access tokens etc.	Ensure all staff who have the potential to deliver their job away from their base location have appropriate hardware and software to work remotely by **March 2023.**

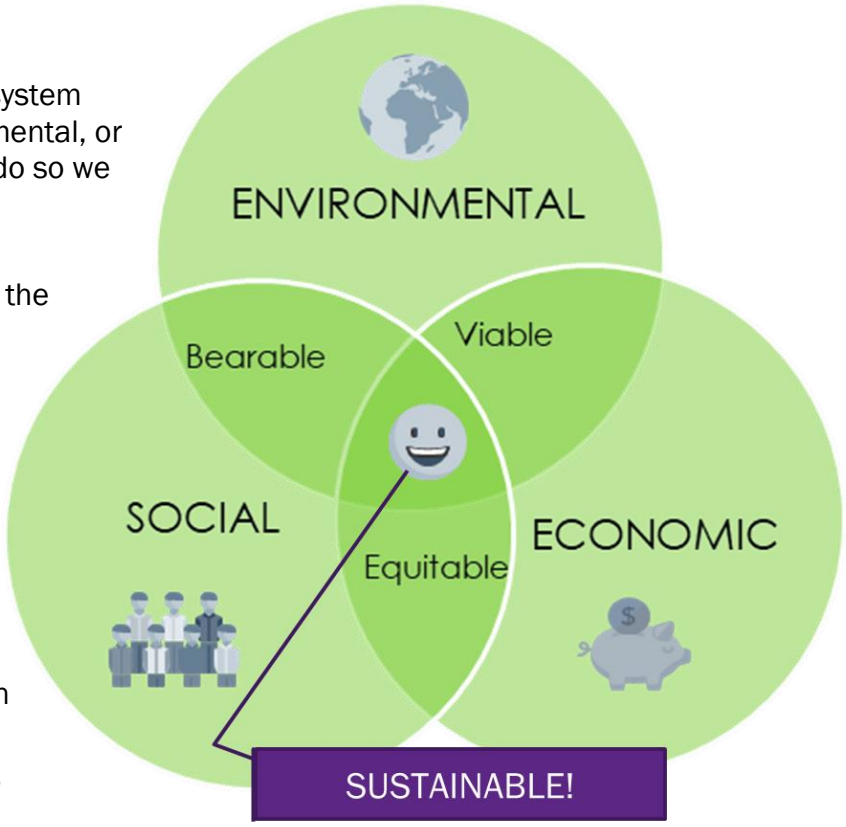
5.0 Equality, Diversity, Inclusion & Social Value

5.1 Introduction

Acting to promote equality, diversity, inclusion and increase social value has the potential to reduce demand on health and other services by improving the health and wellbeing of the population. Actions on equality, diversity, inclusion, and social value also help to reduce the wider determinants of health.

To achieve sustainable healthcare the system cannot be driven by economic, environmental, or social considerations in isolation, if we do so we are at risk of:

- Unlawful decision making
- Discrimination and its impact on the patient experience
- Financially driven decisions creating a void between policy and strategy
- Worsening of existing inequalities and/ or creating new inequalities
- Inefficient use of resources
- Impact on staff health and wellbeing
- Public and patient dissatisfaction



5.2 Equality, Diversity, and Inclusion Roadmap

The new ICS will need to coordinate and develop a single system approach to equality, diversity, and inclusion (EDI), which encompasses all organisations, people, Places, PCNs and population. Integration and unification of structures and systems, staff, and initiatives and of our different organisations is crucial. If we don't, we fail.

The responsibility lies with all of us.

In the short term this means:

- Communication of strategy and vision to aid clearly understood buy in
- Sharing with key stakeholders to gain insight and develop collaboration
- Research/ insight across leaders
- Building on what's good
- Accountability – contract levers, executive leads and developing an Equality Objective Plan

In the long term this means:

- Fundamental cultural shift in decision making and involvement – use resources to target robust research, data collation and evidence collection – properly triangulate results
- More sophisticated approaches to making changes to services, triangulating health inequality data, demographic/ equality data to inform
- Embedding good practice and high expectation from the top down and bottom up
- Communication reaches all levels of the organisation and engages
- Meaningful accountability in the system

Human Library Events – Mid Cheshire Hospitals NHS FT: Since 2018, MCHFT has hosted two Human Library events. These events focus on 'lending' people as living books to share their experiences of discrimination, prejudice, and misunderstanding.

The events were licensed by The Human Library Organisation, which invites people to 'unjudge someone'. On the day visiting 'readers' browse a catalogue, register at an enquiry desk and are introduced to their book for a 20 minute conversation.

5.3 Cheshire and Merseyside Marmot Community Programme

The COVID-19 pandemic and associated containment measures exacerbated existing inequalities in health and the social determinants of health – the conditions in which people are born, grow, live, work and age. In addition to socioeconomic and ethnic inequalities in infections and mortality, impacts on education, training, employment, income and living conditions have disproportionately affected deprived and vulnerable communities already experiencing poorer levels of health[3].

There are longstanding inequalities that exist between Cheshire and Merseyside and the rest of England, and between places within Cheshire and Merseyside that have undermined the health and wellbeing of our citizens. A third (33%) of Cheshire and Merseyside citizens live in the most deprived 20% of neighbourhoods in England[4] and the average life expectancy at birth is 82.7 years for women and 78 years for men, lower than the England average (83.1 years and 79.4 years respectively)[3].

The most disadvantaged areas in Cheshire and Merseyside experienced wide ranging health consequences from the pandemic, including higher rates of COVID-19 mortality and morbidity, chronic disease exacerbations, increases in mental health issues and unhealthy

[3] Institute of Health Equity and The Health Foundation (2020) *Build Back Fairer: The COVID-19 Marmot Review.* Available at: https://www.health.org.uk/publications/build-back-fairer-the-COVID-19-marmot-review [Accessed 3 December 2021]
[4] Institute of Health Equity (2021) *Interim Report. Building Back Fairer in Cheshire and Merseyside: Evidence for action and key approaches.* November 2021.

lifestyle behaviour[5]. Notably, alcohol intake increased, particularly among those drinking heavily prior to the pandemic, levels of physical activity reduced among the least active groups and levels of obesity rose[4].

Further to this, Champs Public Health Collaborative and the Cheshire and Merseyside Health and Care Partnership are working with the Institute for Health Equity (IHE) to develop an ambitious Marmot Community programme to improve population health, reduce inequalities, and build back fairer from COVID-19. A system leadership approach has been employed to collaboratively engage all partners in supporting whole-system transformation through implementation of appropriate policies, interventions, and services in line with the eight Marmot goals:

1. Give every child the best start in life.
2. Enable all children, young people, and adults to maximise their capabilities and have control over their lives.
3. Create fair employment and good work for all.
4. Ensure healthy standard of living for all.
5. Create and develop healthy and sustainable places and communities.
6. Strengthen the role and impact of ill health prevention.
7. Address racism and its consequences.
8. Pursue environmental sustainability and health equity together.

This has involved establishing programme governance, completing local, regional, and national data analysis, undertaking multidisciplinary consultation meetings and nine place-based workshops. A Cheshire and Merseyside Marmot Community Advisory Board has been established to drive delivery of the programme. It is accountable to the Cheshire and Merseyside Population Health Board, and in turn the Health and Care Partnership Board. The Marmot Community Advisory Board is supported by an operational Task-Finish Group, comprising of nominated leads from each of the nine places, to coordinate activity and share best practice.

A mixed methods approach, combining statistical data analysis, with qualitative consultation meetings and workshops with partners has been employed to explore current Cheshire and Merseyside initiatives to reduce inequalities and develop key system priorities and recommendations. A Cheshire and Merseyside Marmot interim report[3] has been produced, which outlines the baseline health inequalities position, local case studies of best practice, and several actions to create a health equity system. These include:

- Embed a systemwide social determinants of health approach
- Improve leadership for health inequalities
- Strengthen local partnerships.
- Co-create solutions with communities.
- Implement social value and anchor organisations
- Implement shared local indicators
- Strengthen the role and resources of local government and the NHS in reducing health inequalities
- Strengthen the role of business in reducing health inequalities
- Implement health equity in all policy approaches

[5] Liverpool John Moore's University and Champs Public Health Collaborative (2020) *Direct and Indirect Impacts of COVID-19 on Health and Wellbeing. Rapid Evidence Review.* Available at: https://www.ljmu.ac.uk/~/media/phi-reports/2020-07-direct-and-indirect-impacts-of-covid19-on-health-and-wellbeing.pdf [Accessed 3 December 2021]

Nine place-based workshops have been undertaken with 371 stakeholders to identify the key priorities for the Cheshire and Merseyside system and places to reduce inequalities and the required actions, capacity, and roles required by each system partner to achieve them. The findings are supporting the:

- Refinement of Place plans and health and wellbeing strategies to address the post-COVID-19 Marmot inequalities, in line with the launch of the NHS Cheshire and Merseyside Integrated Care System on 1st July 2022.

- Development of a final Cheshire and Merseyside Marmot report and five-year strategy to drive at-scale action on system-wide priorities, launching in May 2022.

- Finalisation and incorporation of a Marmot Beacon indicator set into the Population Health CIPHA dashboard. These are aligned with the Marmot themes considered critical in reducing health inequalities and 'levelling up' across the life course. This includes two new, innovative social value metrics to monitor the strategic impact of the social value and Anchor Institution programmes over time. The indicators will be monitored annually to track system progress in reducing the inequalities gap between Cheshire and Merseyside Places and England and hold system partners to account for improving outcomes.

5.4 Cheshire Mersey Adult Gender Identity Collaborative (CMAGIC)

CMAGIC is a service for transgender, non-binary and intersex people who need support either before, during or after their social or medical journey.
The service is provided by Cheshire Merseyside Adult Gender Identity Collaborative (CMAGIC) and provides access to experienced gender incongruence counsellors who patients can access for weekly one-hour appointments. The service is by self-referral and patients are placed on a short waiting list before being introduced to a gender counsellor.

Transgender people experience worse physical and mental health than the general population, largely due to the direct and indirect effects of the inequality they encounter. This results in multiple admissions across health and wellbeing services. Waiting times to be seen at any gender identity clinic in the UK are extremely long (up to 4 years in some cases), due to a steadily increasing number of referrals. The suicide risk in transgender people is also higher than in the general population, and there is a 17-year gap in life expectancy between transgender and cisgender people.

Transgender and non-binary people can feel isolated and do not always know who to turn to for help and support if they are considering or starting their social and /or medical journey, and this valuable service has saved many people from a deeper crisis by simply having someone who is a trained therapist to support them.

5.5 Key Ambitions

5.5.1 Navajo Merseyside and Cheshire LGBTQIA+ Charter Mark

The Navajo Merseyside & Cheshire LGBTQIA+ Charter Mark is an equality mark sponsored by In-Trust Merseyside and supported by the local LGBTQIA+ community networks– a signifier of good practice, commitment, and knowledge of the specific needs, issues and barriers facing LGBTQIA+ people in Cheshire and Merseyside. There are seven different elements to consider when applying:

- Practices and policies
- Training
- Staff recruitment and engagement
- Monitoring
- Service users and LGBTQIA+ engagement
- Leadership
- Meeting the Public Sector Equality Duty

Merseyside & Cheshire LGBTIQA Chartermark

Target

Several Trusts and local authorities within Cheshire and Merseyside have already gained the Charter Mark, but our ambition is for:

a. Cheshire and Merseyside ICS to achieve the Navajo Charter Mark standard by **April 2024**
b. All provider trusts and local authority partners across Cheshire and Merseyside to achieve the Navajo Charter Mark standard by **April 2025**

Gaining the Navajo award is free of charge and training and model policies can be provided.

5.5.2 Disability Confident Employer Scheme

The Disability Confident scheme supports employers to make the most of the talents disabled people can bring to the workplace. Disability Confident employers challenge attitudes towards disability, increase understanding of disability, remove barriers to disabled people and those with long-term health conditions, and ensure that disabled people can fulfil their potential and realise their aspirations.

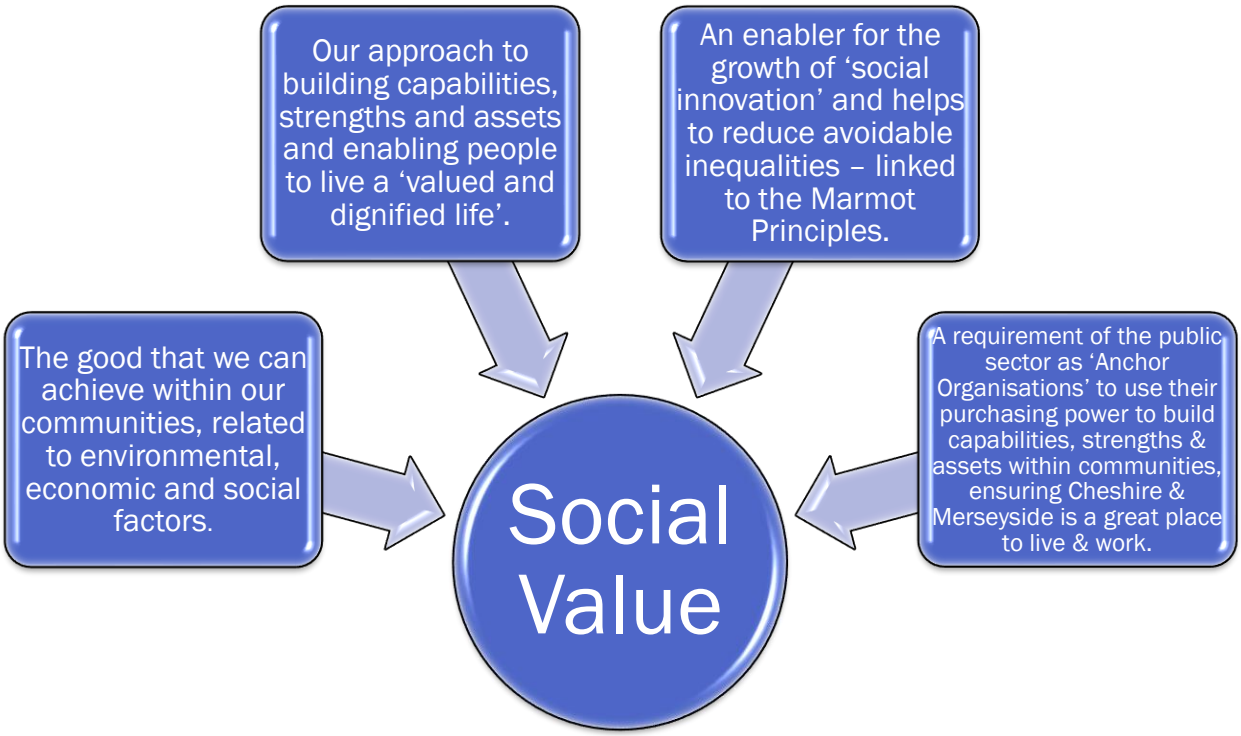
Target

Our ambition is for:

a. NHS Cheshire and Merseyside to achieve Level 3: Disability Confident Committed standard by **April 2024**
b. All provider trusts and local authority partners across Cheshire and Merseyside to achieve Level 2: Disability Confident Committed standard by **April 2024**

5.6 Our Role as a Social Value Accelerator Site

NHS Cheshire and Merseyside is one of a group of Social Value Accelerator Sites across the UK, dedicated to exploring and learning more about how social value can practically and effectively be embedded at scale across our area, within the NHS, local authorities and Voluntary, Community, Faith and Social Enterprise sector (VCFSE) organisations. Locally our definition of social value is:



5.7 Social Value Charter/ awards

NHS providers, local authorities, clinical commissioning croups (CCGs) and voluntary, community, faith, and social enterprise sector (VCFSE) organisations across Cheshire and Merseyside have signed up to our Social Value Charter, which launched on the 1st July 2019. Our Charter describes our local vision and principles for maximising the potential of social value across Cheshire and Merseyside.

The aim is to create social value through focussing on the health outcomes derived from activities which are primarily targeted at improving social, environmental, and economic outcomes for local people and places, for example:

- 47% of adult residents in Cheshire and Warrington claiming Employment and Support Allowance, have mental and behavioural disorders. 70% of those reporting worklessness in the region also report some degree of limiting long term illness or disability including mental illness.
- Journey First is a 3-year European Social Fund programme of £5.4m providing holistic training and employment support service for vulnerable young people and complex adults in Cheshire and Warrington. The project offers intensive 1-2-1 support to individuals and multi-agency teams focus on prevention, early intervention, and de-escalation of a range of complex problems that prevent individuals from being able to focus on progression into training and employment.

- 33% of the productivity gap with Liverpool City Region and rest of England is due to ill health and reducing this health gap would generate an additional £3.2bn in UK GVA.
- The combined authority has secured £29.5 million from the European Social Fund and Youth Employment Initiative to deliver a Ways to Work Programme which will be locally matched to create a total budget of £42 million to help young people and adults into training and work.
- 6,800 people, aged over 16 years, will be supported into work or education/training over the next three years, across the combined authority region of Wirral, Knowsley, Liverpool, Sefton, St Helens, and Halton.
- The Ways to Work programme will work with 18,000 people to help them into work through additional advice, work placements and targeted training. There will also be initiatives to specifically support young people leaving care, and other vulnerable groups and people who are out of work with a health condition.

5.8 The Sustainable Workplace

NHS Cheshire & Merseyside is conscious of the benefits of an environmentally friendly and sustainable workplace. As an employer we are becoming more aware of the importance of a strategic recruitment plan and practicing sustainable development in the current work force, both for the reputation it creates as an environmentally responsible organisation, as well as for the economic benefits, linking in with social value.

Initiatives currently being undertaken include:

- Futureproofing the workforce by regularly presenting to students and young people (from year 7 and above) the wide variety of roles within the NHS and encouraging young people to choose the NHS as a destination employer – current statistics indicate less than 5% of all employees within the NHS are under 25
- Widening participation by seeking to recruit 'career ambassadors' who are willing to talk through their experiences
- Supporting less advantaged groups (care leavers, refugees, SEND) with support, advice, and employment opportunities
- Working with the Department of Work and Pensions (DWP), Job Centre Plus, Prince's Trust and the Westminster Foundation to offer pre-employability programmes with a view to securing Kickstart roles, work placements, internships linking into bank work opportunities
- Engaging with ethnic minority NHS staff and community partners to widen the reach within our region(s), delivering information sessions with practical support to gain access to employment opportunities

5.9 Journey to Become an Anchor Institution

The ICS has established an ***Anchor Institute Charter***[6] with an agreed set of principles, anchored in local communities, for as many organisations across the region as possible to

6 An anchor institute is a place-based organisation invested in its local area and cannot relocate to another part of the country, such as local councils, universities, colleges, local housing associations and local emergency services. They also spend substantial amounts of money within the local area. Most of their employees are likely to live locally, and spend wages there, they also have significant procurement and investment spend which can also be spent locally. They have a collective interest in seeing their local area improve and are always looking for more opportunities to advance collaboration with them.

adopt. The Charter is reflective of local needs and determines the organisational behaviour required to deliver them.

The Five Anchor Institution Pillars

An anchor institution webinar was held at the end of November 2021 to provide an opportunity for partners from the voluntary, charity, faith, public and business sectors to work with Cheshire and Merseyside Health and Care Partnership and shape our region's development as a better place to live and work. Over 100 people from 74 different organisations across Cheshire and Merseyside attended including:

- Clinical commissioning groups[7]
- Colleges and universities
- Housing associations
- Local authorities
- Provider Trusts
- NHS: AQuA, Innovation Agency, NHS Confederation, NHS England/NHS Improvement
- Private sector companies
- Public Health
- Voluntary community, faith, and social enterprise (VCFSE) representatives

A further webinar/ workshop was held In January 2022, and the attendees had the opportunity to collectively shape 'anchor principles and priorities' which reflect local need and determine the organisational behaviour required to deliver them.

Principles

- ☐ Commit to the real living wage and create equality within our local job sector.
- ☐ Organisations will have achieved, or be willing to achieve, the C&M Social Value Award within six months of signing.

Pledges

- ☐ Provide education and raise awareness about Anchors to encourage a population approach and enable individuals engage in our work.
- ☐ Work with partners to tap into the wealth of assets and positive work taking place across C&M, utilising what already exists locally.

7 All Cheshire and Merseyside CCGs and C&M Health & Care Partnership became NHS Cheshire and Merseyside on 1st July 2022.

- To enable a new way of collaborative working we will need to consider processes to allow us to get there.
- Commit to employ and purchase, locally with an aim to support the wealth of local businesses within our geography.
- Anchors will be involved in/ sign up to the C&M Prevention pledge, driving a population approach to prevention.
- Commit to working collectively towards a shared aim that all involved are invested in with shared ethics, responsibility, and purpose.

An Anchor Institute Charter has been drawn up and an Anchor Institute Governance Framework will be aligned to that. Work is underway to ensure the framework has been worked up jointly with professionals and members of the local communities so we can have a clear understanding of the sorts of behaviours, values, and cultures that an employer in Cheshire and Merseyside should espouse.

5.10 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Positive Culture	Create a culture of positive health and wellbeing via policies and practices, treat colleagues equitably and fairly. Everyone belongs, has a voice and is equally important.	Enable a joined-up EDI approach across Cheshire & Merseyside to eliminate variation and fragmented practice, this to include setting equality assessment standards. Annual staff survey to monitor staff satisfaction & wellbeing. Promote a sustainable workforce via succession planning and progression.	**2022 ⇒**	**2022 ⇒**
Navajo Charter Mark	Navajo Merseyside & Cheshire LGBTQIA+ Charter Mark is a signifier of good practice, commitment, and knowledge of the specific needs, issues and barriers facing LGBTQIA+ people in Cheshire and Merseyside.	Several Trusts and LA partners have already achieved the Charter Mark. The ambition is for all to achieve it.	Trusts and LA partners to achieve Navajo Charter Mark Standard by **April 2025.**	ICS to achieve Navajo Charter Mark Standard by **April 2024.**
Disability	The Disability Confident scheme supports employers to make the most of the talents disabled people can bring to the workplace	Several Trusts and LA partners have already achieved the Disability Confident Level 1 standard. The ambition is for all to achieve it.	Trusts and LA partners to achieve Level 2: Disability Confident Committed standard by **April 2024.**	ICS to achieve Level 3: Disability Confident Committed standard by **April 2024.**

Education	Create Green Plan intranet pages for staff access and external webpages for other stakeholders, upload Green Plan content and progress updates accordingly.	Incorporate climate change and Green Plan into essential mandatory training. Introduce the sustainability culture of the ICS to new staff during induction and provide e-learning packages on climate change and health, and actions staff can take to help achieve net zero.	Incorporate sustainability and social value into all job descriptions from **July 2022** Introduce a mandatory sustainability/ climate change training module for all staff from **April 2023**	Incorporate sustainability and social value into all ICS' job descriptions from **July 2022**. Introduce a mandatory sustainability/ climate change training module for all staff from **August 2023**.
Embed Social Value Principles.	Embed principles of social value through every layer of our organisations and within every policy, practice, and project.	Build on Anchor Institute events and turn vision into reality by working across organisational boundaries, and delivering jointly for our communities.	**Ongoing priority**	**Ongoing priority**
Partnership Working	Work with key partners across public, private and VCFSE sector.	Improve employment opportunities/engage with local employers and develop schemes to advance skills and help unemployed into work. Work with suppliers to ensure onsite workers are subject to Real Living Wage, fair working practices & protections against discrimination. Develop a framework to support staff to undertake volunteering and other activities as part of the commitment to corporate social responsibility.	**2022** ⇒	**2022** ⇒

6.0 Estates and Facilities

6.1 Introduction

The NHS Estates and Facilities Net Zero Carbon Delivery Plan published in November 2021 sets out a clear, sequential four step investment approach to decarbonising NHS sites:

1. Making every kWh count: investing in no-regrets energy saving measures
2. Preparing buildings for electricity-led heating: upgrading building fabric
3. Switching to non-fossil fuel heating: investing in innovative new energy sources
4. Increasing on-site renewables: investing in on-site generation

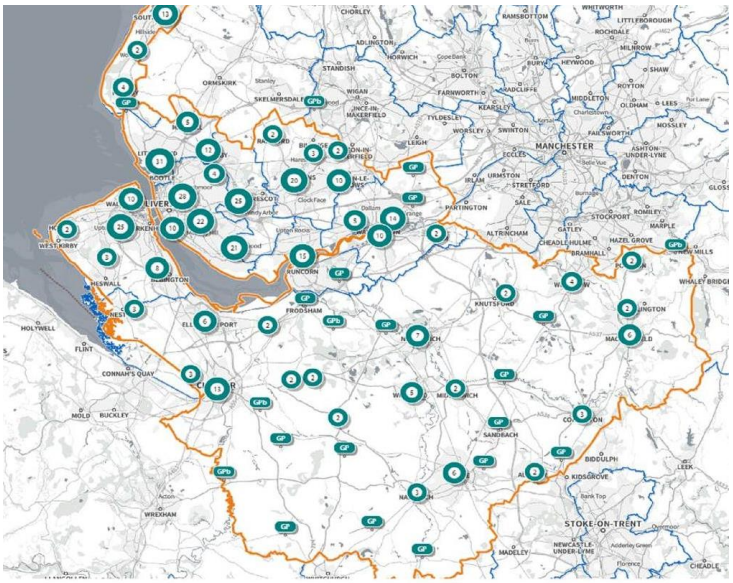
Emissions relating to the estates and facilities services span both the NHS Carbon Footprint and the NHS Carbon Footprint Plus, accounting for over 60% of the NHS Carbon Footprint (mostly due to emissions from energy use) and a significant proportion of the Carbon Footprint Plus, through staff travel, construction, catering, plastics and capital spend, food and the wider £9 billion estates and facilities annual supply chain spend.

6.2 Sustainable Estates in Cheshire and Merseyside

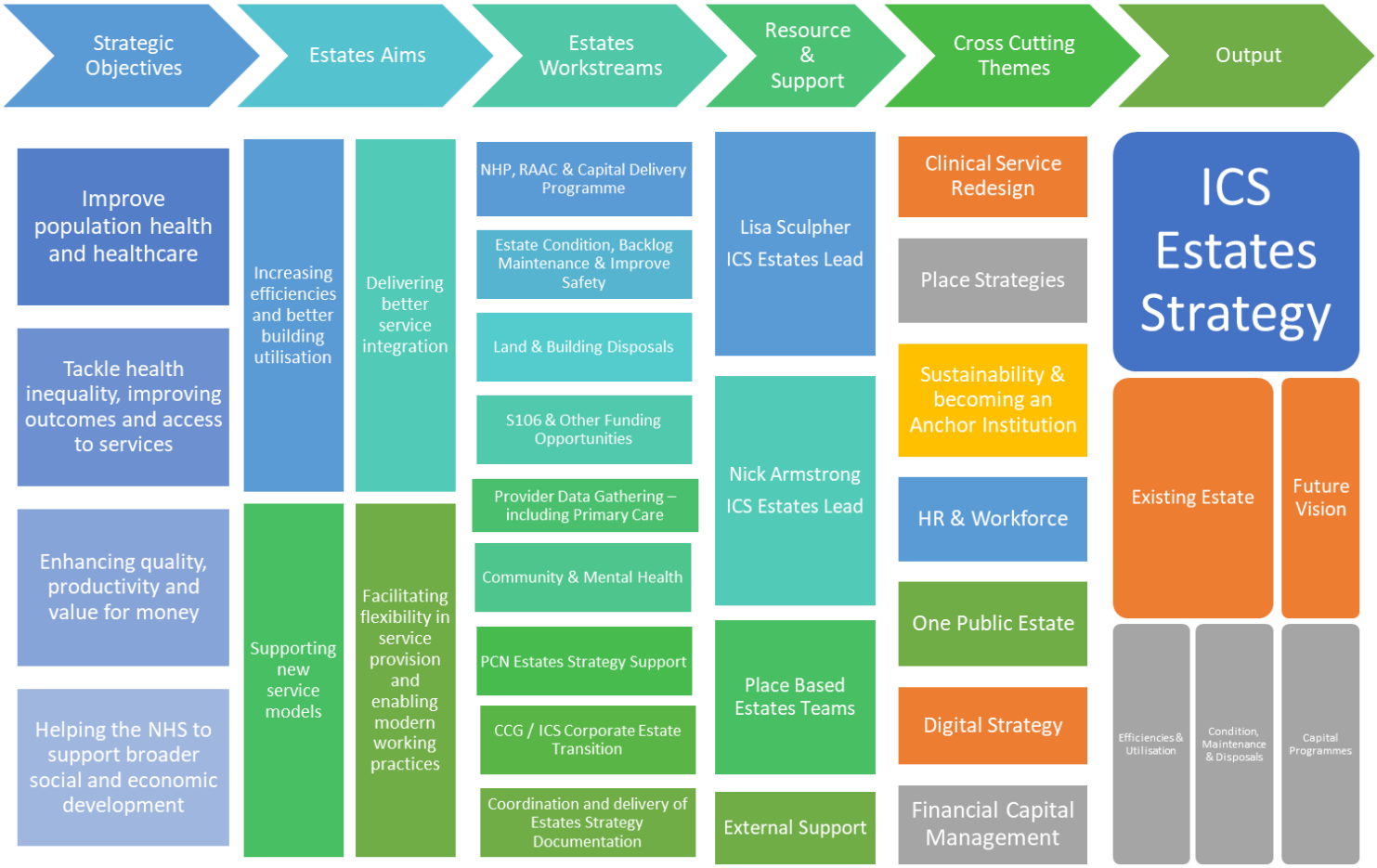
Several sustainability estates groups (SEGs) have been convened at a Place level across Cheshire and Merseyside. The SEGs drill down into what is happening at Place and feed into an overarching Estates Strategy which the ICS has commissioned gbpartnerships Group to produce, with sustainability being at the core of all work.

Baselining work is underway at a Place level across Cheshire and Merseyside and includes:

- Accommodation review/ rationalisation to identify potential property disposals
- Production of a directory of void and bookable space to share across the system
- An 'Open Space' booking tool is available in larger buildings – this will help NHS Property Services with increasing utilisation and identifying potential disposals



The table above has been sourced from SHAPE highlighting the complexity of Primary Care and NHS Trusts Estate across the Cheshire and Merseyside footprint


Strategic Objectives
Estates Aims
Estates Workstreams
Resource & Support
Cross Cutting Themes
Output
Improve population health and healthcare
Tackle health inequality, improving outcomes and access to services
Enhancing quality, productivity and value for money
Helping the NHS to support broader social and economic development
Increasing efficiencies and better building utilisation
Supporting new service models
Delivering better service integration
Facilitating flexibility in service provision and enabling modern working practices
NHP, RAAC & Capital Delivery Programme
Estate Condition, Backlog Maintenance & Improve Safety
Land & Building Disposals
S106 & Other Funding Opportunities
Provider Data Gathering – including Primary Care
Community & Mental Health
PCN Estates Strategy Support
CCG / ICS Corporate Estate Transition
Coordination and delivery of Estates Strategy Documentation
Lisa Sculpher ICS Estates Lead
Nick Armstrong ICS Estates Lead
Place Based Estates Teams
External Support
Clinical Service Redesign
Place Strategies
Sustainability & becoming an Anchor Institution
HR & Workforce
One Public Estate
Digital Strategy
Financial Capital Management
ICS Estates Strategy
Existing Estate
Future Vision
Efficiencies & Utilisation
Condition, Maintenance & Disposals
Capital Programmes

6.3 Energy

£1 in every £187 spent in the NHS is on building energy, which is the single biggest area estates and facilities can influence as it makes up 41% of the NHS' carbon footprint. The ambition of the ICS is to ensure that the power of nature is harnessed, with only green energy and renewable energy sources being used at NHS buildings across Cheshire and Merseyside by the end of 2025.

Renewable technologies including solar panels, wind turbines, ground-source pumps, biomass installations, air source pumps, and solar water heating have already been incorporated within several provider trusts and in general practice.

Solar Installation – Wirral Community Health & Care NHS FT: 306 solar panels have been installed at St Catherine's Health Centre, generating an estimated 84,607kWh p/a – enough to power 21 houses for a year! This clean energy generation will help avoid 27.9 tonnes of CO_2e emissions each year, which is the equivalent of planting over 130 trees.

Prior to installation, St. Catherine's bought around 121,000kWh of energy p/a year from the national grid. The new system now meets most of this requirement, at a unit cost nearly 60% lower in price, saving the Trust money and helping to tackle climate change.

There will be times when the solar generation exceeds consumption; the excess solar electricity can be sold to the grid and potentially provide income to the Trust of over £425,000 over the first 25 years.

Combined heating and power units (CHPs) are already installed within several Trusts including Countess of Chester, East Cheshire Trust, Warrington and Halton Hospitals, and Wirral University Hospital NHS Foundation Trust. CHPs capture and utilise the heat that is a by-product of the electricity generation process, which then can produce hot water, primary heating, and steam for sterilisation of clinical instruments. By generating heat and power simultaneously, CHP can reduce carbon emissions by up to 30%, and save around 20% of energy costs.

Several Trusts and Local Authorities are considering district heating (also known as heat networks)– a system whereby heat is generated centrally and then distributed through a network of pre-insulated pipes to different buildings, offices, factories, hospitals, and homes. They are a low carbon alternative and are increasingly being utilised across the UK.

Cheshire East Council is currently considering a heat network which would connect several key buildings across Crewe town centre and has further ambitions around the heat decarbonisation of future high streets.

6.4 Lighting

As many of our partners across Cheshire and Merseyside have already discovered, LED lighting is one of the sustainable 'quick wins'. LED lights use less energy than traditional light bulbs and have a longer lifespan, having a positive impact on greenhouse gas (GHG) emissions and our environment. They are also much cheaper to run!

LED Lighting Replacement – Mersey Care NHS FT: Mersey Care undertook a lighting replacement project in 2019-20 that saw over 1,500 light fittings across 4 hospital sites replaced with LEDs. In less than 3 years the savings from energy (5.5% reduction) and maintenance are more than the cost of the project.

Financial and environmental benefits:

- Reduced energy demand
- Reduced energy costs
- Reduced maintenance costs
- Reduces Trust CO_2e emissions by 110.09 tonnes

Operational benefits:

- LED lamps have an average life of up to 50,000 hours, 30x longer than incandescent and 5x longer than fluorescent lamps
- Easy to clean and maintain, longer life of LEDs will result in fewer call outs for the estates team to replace lamps.

Patient and staff benefits

- Enhanced patient environment
- Improved working environment for staff

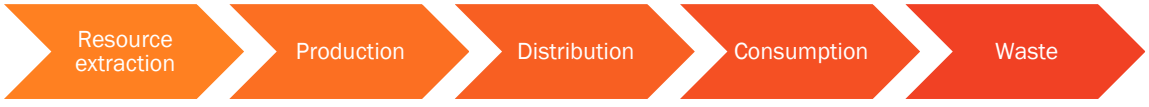
Since the success of that initial project, two further LED schemes have been completed.

6.5 Waste and Recycling

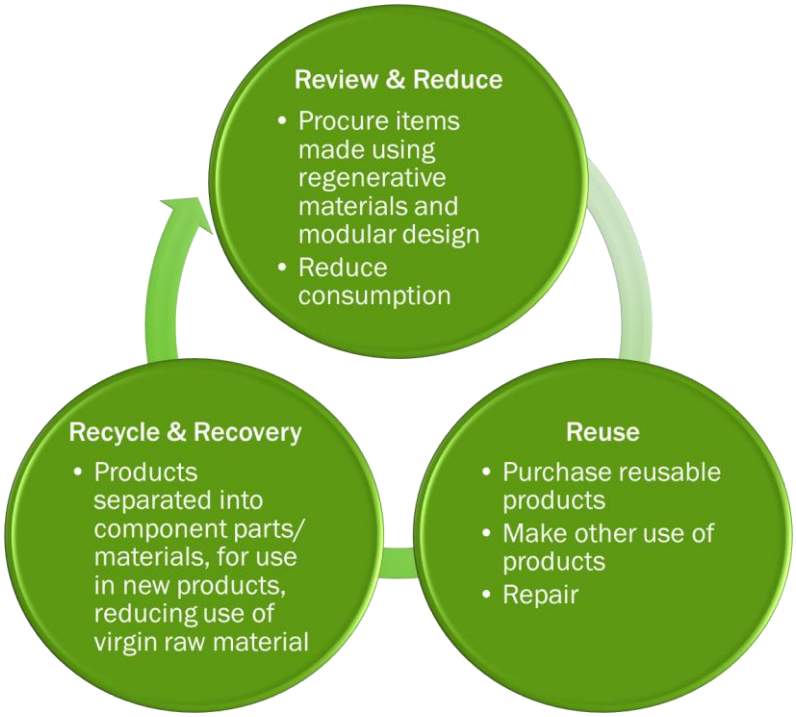
Managing waste in the NHS requires a strategic approach, and the ICS is committed to both supporting and challenging staff, providers, and contractors in better managing their waste and identifying practical solutions that could be adopted at scale across the system.

Central to this approach is moving away from the unsustainable linear economic approach and adopting the principles of the circular economy, developing strategic principles at each stage of our processes with the aim of reducing waste and to stop the overconsumption of natural resources.

Linear economy



For the NHS this means that we can use procurement and commissioning processes to impact on and encourage this model.



Education is key in relation to increasing reuse and recycling – from selecting products which use less material in their design and manufacture, to reusing and keeping products and equipment for longer through checking, cleaning, and repair.

The ambition of the ICS is to develop a 'zero to landfill' culture via the exploration and use of energy from waste and refuse derived fuel. We will also seek to ensure that contracts stipulate that all domestic waste must be treated locally[8] and recyclables must be processed within the UK.

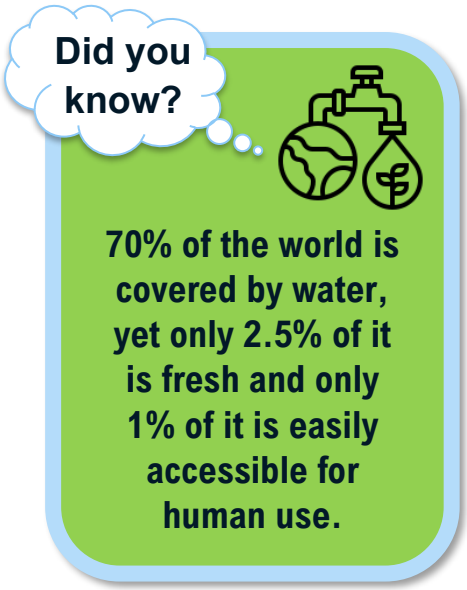
Did you know?

Each operating theatre produces around 2,300kg anaesthetics waste and 230kg sharps waste per year, approximately 40% of which could be reclassified as domestic waste or recycling with significant environmental and financial benefits.

[8] Ideally within a 50-mile radius but will be defined following further discussions with Providers and current arrangements.

6.6 Water

Throughout the UK the amount of water currently used domestically, by business and in agriculture is currently unsustainable, and over a third of water taken from the natural environment is wasted through leaks, treatment losses and in people's homes. The Environment Agency's Third Adaptation Report warned that public water supplies in the UK are expected to require more than 3.4 billion extra litres of water **per day** if no action is taken before 2050.



This is a major risk for us as a healthcare system and we need to work collectively to address sustainable water usage across **all** our sites and in our communities.

Taking too much water out of the environment (unsustainable groundwater abstraction) is not the solution and is harmful to wildlife and damaging for animals and plants.

Before we turn to ways of taking more water out of the environment, we need to conserve and use wisely the resources we have, for example one Cheshire and Merseyside Trust has seen a 36% decrease in water costs over the last 3 years since the installation of waterless urinals, cistern dams, and by making use of screensavers on staff computers to 'broadcast' green messages such as 'report a leaking tap' and so on. Most importantly, this all saves over 1 million litres of water annually.

6.7 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Sustainable Design	Incorporate sustainable design into construction/ refurbishment of buildings and infrastructure and use local businesses where possible. (Implement upcoming Net Zero Hospital Standard and BREEAM standards.)	Work with procurement to enable the specification of low and zero carbon materials and designs, as well as achieving waste reduction and other opportunities through contractor engagement.	Design flexibility into buildings to enable evolution during their life cycle and ensure the design process is informed by staff, patients, and community. Leased buildings to meet a 'green standard'. **2022 ⇒**	Leased buildings to meet a 'green standard'. **2022 ⇒**
Planned Preventive Maintenance	Planned preventative maintenance of facilities and assets should be energy-focused; a detailed building energy survey would provide energy efficiency recommendations.	• Thermal upgrades to buildings (insulation, air tightness etc) • Efficient LED lighting • Building control optimisation • Upgrading heating, ventilation, and air conditioning	Complete a detailed building energy survey – main ICS Place sites (non-provider). **2022 / 2023**	Oversee completed building energy surveys and consider where maintenance objectives against any planned disposals. **2022 / 2023**
Maximising the Value of Estate	Identify/ vacate ICS buildings no longer fit for purpose and carry out occupancy surveys to ensure maximum value of estate by delivering programmes in the most efficient manner possible.		**Ongoing priority 2022-2023**	**Ongoing priority 2022-2023**

Reducing Utility Consumption	Work with staff, patients, and on-site contractors to reduce utility consumption:	Instal passive infrared sensors in office areas. Introduce a 'switch off' policy to reduce energy wastage. Review heating, timing, and zoning controls	**Commence March 2022**	**Commence March 2022**
Purchase Renewable Energy	Estates and procurement to purchase renewable energy via power purchase agreements and work with landlords to adopt this across whole of the estate.	In April 2020 NHS Property Services signed new energy contracts, moving to 100% renewable electricity. Resulted in 37,000 tCO_2e saved and a 13% (£6.2m) cost reduction.	**Ongoing priority**	**Ongoing priority**
Invest in Renewable Energy Technology	Review potential investment in renewable energy technology, such as hydrogen, solar, thermal, and combined heat, and power (CHP) systems. Explore possibility of creating a district heat network with local partners.		**Research options 2022** ⇒	Liaise with LA's / other public sector organisations around the possibility of implementing district heat networks. **2022** ⇒
Implement the Waste Hierarchy	Implement across all services to improve/ increase re-use and recycling and reduce plastic usage across medical equipment.	Run repair and reuse schemes, and adopt standard equipment lists to prevent waste and aid easy refurbishment.	**2022** ⇒	**2022** ⇒

Waste Management	Explore alternative methods of waste management, including ozonation and refuse derived fuel processes – aim: 'zero to landfill'.	Review the food waste disposal process and eliminate food waste entering foul drainage via macerators.	**2022** ⇒	**2022** ⇒
Water Technologies	Work with staff and patients by communicating the importance of water efficiency and incorporate water efficiency measures within climate change adaptation work with the local community.	Utilise water efficient technologies, such as low flow taps, when replacing equipment and developing new sites. Evaluate the impact of reducing the capacity of toilet cisterns and the potential for waterless urinals. Encourage colleagues to turn off taps when not in use and report leaks – utilise green messaging on screensavers.	**2022** ⇒	**2022** ⇒

7.0 Food, Diet and Nutrition

7.1 Introduction

If food waste were a country, it would be the third largest emitter of CO_2e globally, and yet in 2020 between 720 and 811 million[9] people in the world faced hunger. Now, in 2022, with the highest inflation in over 40 years causing skyrocketing food prices, there are thousands of people across Cheshire and Merseyside experiencing severe food poverty, but tons of food still going to waste the length and breadth of the country.

7.2 Prevention Pledge

In December 2020 the Cheshire & Merseyside NHS Prevention Pledge was launched. The aim of which is to support NHS Trusts in taking a place-based approach to creating a sustainable and transformational shift in improving population health.

The C&M HCP Prevention Board, working with public health charity Health Equalities Group (HEG) & the Champs Public Health Collaborative, carried out extensive consultation with stakeholders across the sub-region to develop the Pledge and associated prevention commitments. The Prevention Pledge acts as a facilitating mechanism to address prevention within tertiary and secondary care, enabling and supporting Trusts to consider how services and environments are shaped to promote good health, increased healthy life expectancy, and reduce inequalities whilst:

- Meeting commitments set out within the NHS Long Term Plan and the NHS Phase 3 COVID response requirements
- Prioritising a renewed focus on prevention such as taking further action to embed Making Every Contact Count (MECC), incentivisation for brief advice, maximising social value and promoting environments to support healthier workforces, patients, and wider communities

The Prevention Pledge was developed in consultation with a wide range of NHS stakeholders across the sub-region and is based in-part on the framework and learning derived from HEG's 'Local Government Declaration on Healthy Weight', which has now been adopted by 16 local authorities across the Northwest region. The Prevention Pledge provides an opportunity for NHS Trusts to consider the impact of diet and nutrition as part of a whole systems approach to healthy weight, whilst the Pledge also encompasses wider prevention priorities including physical activity, alcohol, tobacco, mental health, and blood pressure. A strong focus on increasing the social value of NHS Trusts, and using existing delivery frameworks such as MECC, are also central features of the Pledge.

Liverpool University Hospitals NHS Foundation Trust and Warrington & Halton Teaching Hospitals NHS Foundation Trust were appointed for the pilot and testing phase of the Pledge. The pilot phase supported initial implementation and adoption of the Pledge, and developed the infrastructures, governance, and framework to develop an agreed set of

[9] According to the Food and Agriculture Organisation of the United Nations, noting the range of additional statistical uncertainty die to the COVID-19 pandemic.

actions based around the Pledge Commitments. This was complimented by a short process evaluation to enable shared learning, future action planning and a review of the pilot phase to support wider roll out.

7.3 The Sustainable Food System

A sustainable food system would link food production and health goals and would have the following positive environmental, economic and health impacts.

Environmental	Economic	Health
• Agricultural production methods that protect biodiversity and soil and water quality, and minimise the use of pesticides and antibiotics. • Reduced energy intensity of production. • Less waste and more reliance on reducing, reusing and recycling waste. • High standards of animal welfare on farms, in transport and at abattoirs. • Greater reliance on locally produced and seasonal food.	• Greater reliance on more diverse and smaller suppliers. • Reduced food miles/ • Fair and ethical trade and supply chain. • Fair, safe and legal conditions of employment. • Assurance codes that evaluate environmental impacts.	• High level of food safety promoted through traceability of food ingredients/food products, transparent labelling and better regulation. • Diets based on higher intake of fruit and vegetables, and less meat and dairy produce. • Healthier ready-made meals with lower saturated fat, sugar and salt, and more restricted use of additives. • More consumer awareness of the health consequences of how food is grown and manufactured. • Better nutritional standards in public sector institutions. • High levels of food hygiene and safety.

Across the NHS around 0.5 kilograms of food waste is produced per patient per week, and the ICS is dedicated to helping providers across Cheshire and Merseyside work to reduce food wastage and to dispose of any waste sustainably and eradicate poor practice such as maceration for disposal to sewer. For example, at Southport and Ormskirk Hospitals NHS Foundation Trust all food waste is collected and sent to a processing plant where it is broken down by anaerobic digestion to produce biogas which is supplied into the grid and bio-fertiliser for use on farmlands helping produce the next crop.

Improving the diets of the communities that use NHS services has long been an ambition across Wirral Community Hospitals NHS Foundation Trust. To that end, the Trust introduced a regular fruit and vegetable 'market stall' at St Catherine's Health Centre (situated

in Tranmere), providing staff, patients, and visitors with the opportunity to purchase healthy, low carbon produce from local suppliers. This initiative provided environmental, health and economic benefits and opportunities throughout, but has temporarily been suspended due to the COVID-19 pandemic.

7.4 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Fresh and Seasonal Ingredients	Use seasonal ingredients from locally sourced supply bases, and work with regional partners to identify opportunities for local and small to medium-sized enterprise food producers.	Link in with local farmers/ food growers. Use the expertise of Nature Recovery Rangers, Farm Urban, and local volunteers to grow some produce on-site if possible.	**2022 ⇒**	**2022 ⇒**
Increase Plant Based Meal Options	Several Trusts have introduced plant-based meal options for staff, patients, and visitors (at least 20% of all hot/ cold plates available as a minimum)	Showcase 'meat free Monday' events or 'virtual veggie lunches'.	Share feedback from staff and patients with ICS and continue to refine and develop the offering. **2022 ⇒**	Collate provider feedback and share as a system to ensure offering a plant-based menu is 'business as usual'. **2022 ⇒**
Education	Continue work with patients/ partners on the link between food, health, and obesity, as well as emissions impact on the environment.	Remove sugary drinks from sale.	**Ongoing priority**	**Ongoing priority**
Food Poverty	Work with the voluntary food networks VS6 and Cheshire Warrington Infrastructure Partnership, to tackle food poverty across our region.	Community engagement, education, sharing estate for food growing.	**2022 ⇒**	**2022 ⇒**

8.0 Medicines, Prescribing and Anaesthetic Gases

8.1 Introduction

With 15% of people taking 5 or more medicines per day year on year the money spent by the NHS on drugs continues to rise at a rate which is not sustainable. The most recent data from NHS Digital shows that in 2019/20 the overall drugs cost at list price[10] to the NHS was £20.9 billion, an increase of 9.9% from £19 billion in 2018/19.

The prescribing of medicines and inhalers plus the use of anaesthetic drugs also has a high environmental cost in terms of the packaging used, production processes, infiltration of surface waters during the manufacturing process, unused drugs being dumped into public water supplies and landfills, and emissions into the atmosphere.

8.2 Medicines & Prescribing

In 2018 the Government commissioned a National Overprescribing Review led by Dr Keith Ridge, Chief Pharmaceutical Officer for England. The review was guided by senior stakeholders from across the healthcare system, together with patient and third sector representation. It looked at reducing inappropriate prescribing, with a particular focus on the role of digital technologies, research, culture change and social prescribing, repeat prescribing and transfer of care.

The key recommendations from the review, which was published in September 2021 were:

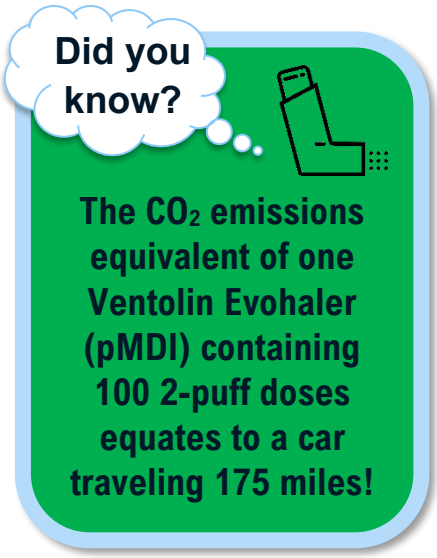
Staff	• New National Clinical Director for Prescribing to lead 3-year programme including research and training to help enable effective prescribing.
System Change	• System-wide changes to improve patient records, improve handovers between primary and secondary care, develop a national toolkit and deliver training to help general practices improve the consistency of repeat prescribing processes.
Deprescribing & Patient Centred Care	• Improving the evidence base for safely withdrawing inappropriate medication (deprescribing) and updated clinical guidance to support more patient-centred care. Ensuring GPs have the data and medical records they need and are empowered to challenge and change prescribing made in hospitals.
Culture Change	• Cultural changes to reduce a reliance on medicines and support shared decision-making between clinicians and patients, including increasing the use of social prescribing.
Information Sharing	• Providing clear information on the NHS website for patients about their medication and the creation of a platform for patients to be able to provide information about the effectiveness and the adverse effects of their medicines.
Net Zero Ambitions	• Development of interventions to reduce waste and help deliver NHS's net zero carbon emissions.

10 The list price is before any discounts have been applied.

The review also called for more research to investigate the reasons why overprescribing is more likely to affect older people, people from ethnic minority communities and people with disabilities.

8.3 Decarbonisation of Inhalers

The Primary Care Network (PCN) Directly Enhanced Service (DES) specification for structured medication reviews and medicines optimisation makes a requirement of PCNs to "actively work with their CCG to optimise the quality of prescribing of metered dose inhalers, where a low carbon alternative may be appropriate". The specification states that the NHS has committed to reducing the carbon impact of inhalers used in the treatment of respiratory conditions by 50%.



A Cheshire and Merseyside Inhaler Group consisting of pharmacists, GPs, consultants, medicines management and medicines optimisation colleagues, nurses and commissioners meets virtually on a regular basis, and is developing a strategy which will focus on reducing the use of higher carbon, more expensive pressurised metered dose inhalers (pMDIs), development of Cheshire and Merseyside respiratory guidelines, and implementation of an online training package and selection of effective inhaler technique resources.

Patients will be reviewed and where clinically appropriate it will be recommended that they switch to a dry powder inhaler (DPI) or a soft mist inhaler (SMI) as an alternative.

8.4 Net Zero Medicines Strategy for Cheshire and Merseyside

A key priority for the ICS is to develop a robust Net Zero Medicines Strategy for Cheshire and Merseyside. A Medicines Management and Optimisation Group, similar to the Inhaler Group, will be convened on a regular basis to formulate an overarching strategy to inform delivery at a Place/ PCN level.

It is expected that the Group will comprise colleagues from primary care, secondary care, medicines management teams, pharmacists, and advanced practitioners, with priorities in the following areas.

- Medication reviews – patient recovery/ change of medications
- Dispensing of prescriptions – habitual/ repeats (inc. patient stockpiling)/ prescription duration
- Patient non-adherence to medicines instructions
- Disposal of medications – care homes and patients
- Interface between primary and secondary care
- Green social prescribing

8.5 Anaesthetic Gases

Modern anaesthetic gases equate to 2% of the carbon footprint for all acute NHS organisations. Almost a quarter of this is from use of volatile agents (desflurane, sevoflurane and isoflurane), and over three quarters is from nitrous oxide (N_2O).

Desflurane is a greenhouse gas with a twenty-year global warming potential (GWP20) of 3714, meaning that every tonne of desflurane is equivalent to 3714 tonnes of carbon dioxide in the atmosphere.

As part of its efforts to reduce desflurane emissions across the board, the NHS targeted a reduction from 20% in 2020/2021 to 10% in 2021/2022 across all its providers. Draft planning guidance released in December 2021 has further reduced the target to 5% in 2022/2023. By September 2021 over 50% of NHS Trusts in England had reduced usage of desflurane to 10%, and 40 of these Trusts had eliminated its use altogether.

All Trusts across Cheshire and Merseyside have described plans to reduce or eliminate desflurane use and use the less environmentally damaging sevoflurane, which is also significantly cheaper.

Nitrous oxide (N_2O), commonly known as 'laughing gas', is a greenhouse gas with a global warming potential 310 times that of carbon dioxide. Over the past 150 years, increasing atmospheric N_2O concentrations have contributed to ozone depletion and climate change. A third of the NHS use of N_2O use comes from theatres, with the remaining two-thirds from use in obstetrics and emergency care, and N_2O wastage contributes significantly to the carbon footprint of the NHS.

At the northwest region Greener NHS Roadshow in November 2021, Baillal Shahid (ST5 Anaesthetics) of East Lancashire Hospitals NHS Foundation Trust described a nitrous oxide mitigation project, which looked at (amongst other things) manifold consumption of N_2O versus clinical use, resulting in the discrepancy as below at their Blackburn hospital.

Estimated manifold consumption: 4,000,000 litres annually	Cost: £12,800
Extrapolated clinical usage: 10,800 litres annually	Cost: £55

There was a major leak found in the theatre complex with a yearly environmental impact of: running 1L flow via sevoflurane vaporiser for 125 years, equivalent to the emissions of 400 households for 1 year or driving to the moon almost 23 times!

A CLEAR (Consensus for Lowering Emissions in the Anaesthetic Room) Northwest Group has been established to decide on the best aims and targets on reducing N_2O and desflurane use in the region, and to encourage more anaesthetic departments to reduce their CO_2e emissions, particularly as some of the actions which can be taken are quick wins. Initial priorities include:

- Every provider Trust (using anaesthetics) to have a designated environmental anaesthetist lead.
- Eliminate the use of desflurane or reduce use to ≤5% of all volatile gases by volume.
- All Trusts using N_2O to carry out an audit to identify system waste and improve medical gas management.

8.6 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Reduce Use of Pressurised Metered Dose Inhalers	Work as a system (primary care, Trusts, and pharmacies) to reduce the use of higher in carbon and more expensive pressurised metered dose inhalers. (pMDIs	Use dry powder inhalers (DPIs) and soft mist inhalers (SMIs) as alternatives where clinically appropriate.	**Ongoing priority**	**Ongoing priority**
Responsible Inhaler Disposal	Promote greener disposal of inhalers through reviews of Medicines Management and Waste Policies. Educate patients and staff on the impact of certain medicines on the environment.	If every inhaler user in the UK returned all their inhalers for one year this could save 512,330 tCo_2e. Encourage patients to return used inhalers to a pharmacy for safe disposal.	**Ongoing priority**	**Ongoing priority**
Inhaler Technique.	Proper inhaler technique helps patients manage symptoms better.	Work to improve patient inhaler technique, self-management, and adherence	**Ongoing priority**	**Ongoing priority**
Prescribing	Where clinically appropriate prioritise evidence-based therapies over pharmaceutical interventions and focus on reduction of carbon emissions by medicines optimisation supported by GP Prescribing Scheme published June 2021	• Cognitive Behavioural Therapy (CBT) • Social prescribing • Mindfulness • Pain clinic • Sleep clinic • Diet and exercise	**2022 ⇒**	**2022 ⇒**

Education	Educate patients how and when to take their meds to improve effectiveness and prevent discarded medicines polluting the environment.		**2022** ⇒	**2022** ⇒
Waste Reduction	Improve pharmacy waste management (Trusts) and explore reuse of pharmaceuticals and establish a method for costing waste of expired drugs.	Consider donating medical devices / pharmaceuticals to charities/ non-profit organisations where appropriate.	**2022** ⇒	
Engagement	Engage with anaesthetists regarding sustainable action and consider joining CLEAR Northwest.	Share learning across organisations and aim for regional excellence.	**2022** ⇒	
Reduce/ Eliminate Desflurane Usage	Reduce use of desflurane in surgical procedures to < 5%* of total volatile anaesthetic gas by volume. The alternative, sevoflurane, is considerably cheaper and has a lower global warming potential.	5%* is based on the draft guidance for 2022/ 2023.	**2022 - 2023**	
Total Intravenous Anaesthesia (TIVA)	Consider swapping volatile agent-based anaesthesia for a total intravenous anaesthesia (TIVA) technique.	The Walton Centre wants to encourage use of TIVA for cases as far as possible. The department has the highest number of TIVA pumps in the region.	**2022** ⇒	Will monitor and engage with Trusts on anaesthetics gases targets. **2022** ⇨
Nitrous Oxide (N_2O)	Avoid N_2O if possible and use oxygen/ air as the carrier gas; the effect of the	Aim to eliminate N_2O use by **2023**.	**2022 - 2023**	

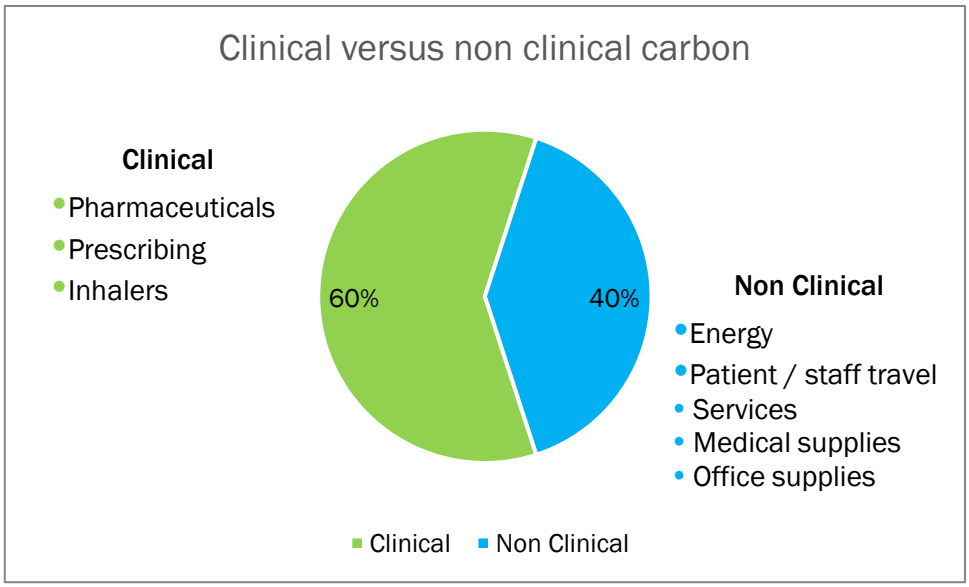
	increased use of volatile agent to achieve an adequate depth of anaesthesia is more than offset by the benefit of eliminating N_2O.			
Reduce Waste	Ensure all provider Trusts using anaesthesia have programmes in place to reduce waste of medical gases, including leakage.	Turn off anaesthetic gas scavenging systems when not in use.	**2022** ⇒	

9.0 Primary Care

9.1 Introduction

Primary Care is responsible for 23% of the total NHS greenhouse gas emissions. While general practice sites are much smaller than Provider Trusts, 90% of patient appointments, approximately 300 million consultations, take place in Primary Care each year, so the greenhouse gas emissions from the 401 practices across Cheshire and Merseyside is significant and will play a vital role in meeting NHS net zero commitments.

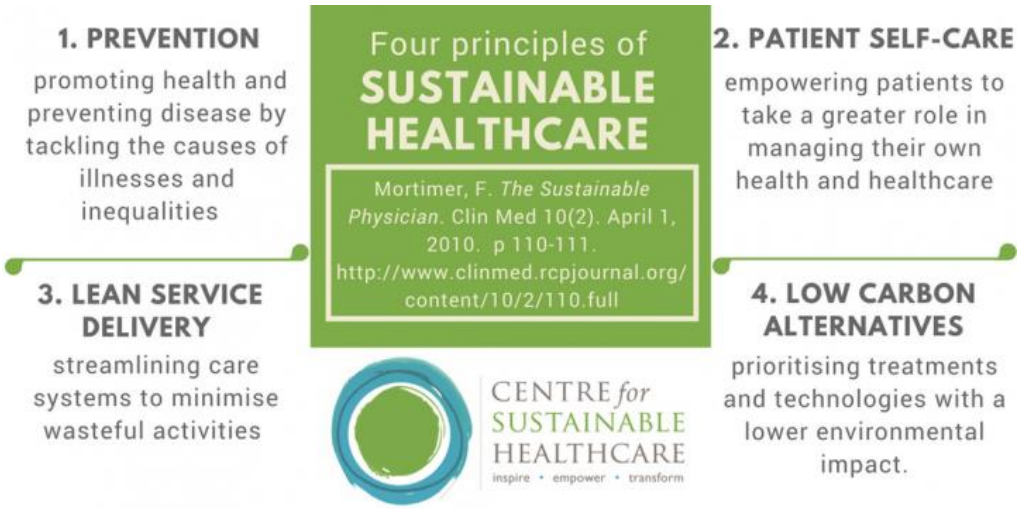
A quarter of NHS carbon emissions derive from medicines, over 55% of which are prescribed by Primary Care practitioners. Pharmaceuticals and prescribing account for at least 60% of Primary Care emissions and reducing this impact will be the priority for Primary Care action to achieve net zero in Cheshire and Merseyside.



Existing NHS priorities to improve health outcomes and reduce health inequalities align closely with actions to reduce the impact of prescribing. The Centre for Sustainable Health have developed Sustainable Quality Improvement principles which will be adopted in Primary Care approaches to net zero to ensure improvement in the quality of care, environmental, financial, and social factors. The full Sustainable Quality Improvement approach will be used as appropriate.

9.2 Principles of Sustainable Healthcare

The principles of sustainable healthcare listed in order of descending importance: 1) prevention of ill health, 2): patient self-care, 3) lean service delivery, 4) low carbon alternatives. There is also a fifth operational principle: efficient resource use-improving use of energy, transport, water, waste, and equipment. Further information can be found on the Royal College of Physicians website.



NHS commitments to personalise care, reduce overprescribing, empower patients, increase social prescribing, improve prevention and management of long-term conditions, and achieve healthier, connected communities are all essential to providing excellent care, reducing health inequalities, and achieving environmental, economic, and social sustainability in healthcare.

Consequently, these will be the prime focus of Primary Care led actions to tackle the climate crisis and improve quality of care, supported with practical actions as identified in the 10 Point Green Plan for Practices and the Green Impact for Health Toolkit.

9.3 Delivery

There are 401 GP practices across Cheshire and Merseyside, making up 51 Primary Care Networks (PCNs) and 9 Places. To deliver this strategy, actions will be supported by planning and co-ordination at ICS, Place and PCN level as appropriate to maximise the benefits of collaboration, shared learning and minimise duplication and effort in individual practices. Many of the required actions are already in train but require concerted and escalated application of effort to achieve health and environmental commitments.

Resources to support this work in Primary Care are stretched. The ICS has funded some GP time to support this agenda with a session a week for a GP lead and an ambassador role. Collaborative working between clinical and non-clinical sustainability leads will be vital to ensure necessary expertise and appropriate input. The role of pharmacists will also be crucial in addressing the priority primary care agenda and integration of overprescribing and net zero goals. Identification of resources to ensure delivery will be a priority for the ICS with necessary networks and structures established at ICS and place level, to support activity underway by existing Greener Practice groups.

9.4 Priorities

9.4.1 Time Resources and Structure

Establish appropriate mechanisms to enable delivery including clinical and non-clinical input from each PCN, with suitable support on a Place and ICS level, to be established following confirmation of sustainability budgets and ICS staffing structure. The ICS will identify resources to support the PCN input and will explore appropriate incentives for primary care delivery.

9.4.2 Respiratory Care and Green Inhalers

As detailed in section 8.3 of this Plan, the NHS has committed to reducing the carbon impact of inhalers used in the treatment of respiratory conditions by 50%. For practices, this involves a direct enhanced service (DES) specification, and the PCN Investment and Impact Fund (IIF), with targets focussing on reducing emissions from metered dose inhalers (MDIs) and supporting clinical best practice in prescribing and respiratory care. The Cheshire and Merseyside Inhaler Group, which consists of pharmacists, GPs, consultants, medicines management and medicines optimisation colleagues, nurses, and commissioners, meets virtually on a regular basis. It reports to the Cheshire and Merseyside Respiratory Clinical Network and Board, that in turn, is accountable to the Cheshire and Merseyside Integrated Care System. It has agreed an approach and action plan and delivery plans are now being developed at Place level. The priorities are:

- Reducing the use of higher carbon, more expensive pressurised metered dose inhalers
- Development of Cheshire and Merseyside respiratory prescribing guidelines
- Implementation of an online training package and selection of effective inhaler technique resources

It should be noted that the NHS is working on a national scale with pharmaceutical companies in the NHSE/NHSI Inhalers Working Group to create low emission MDIs and implement recycling schemes for inhalers. See also section 8.3.

9.4.3 Reducing Over Prescribing

As detailed in section 8.2 of this plan, the National Overprescribing Review was published in September 2021 with a number of key recommendations. NHS Cheshire & Merseyside and partners will implement NHS plans covering these recommendations to reduce overprescribing through:

- Appropriate prescribing and medicines optimisation
- Increased shared decision making between patients and clinicians
- Use of non-pharmaceutical approaches when appropriate
- Increased social prescribing for example to support mental health/weight management etc. and to address the wider determinants of health such as poor housing and poverty

The role of Primary Care prescribing is key to net zero medicines planning. In Primary Care, the current focus is on medicines reconciliation and structured medication reviews through the Primary Care Network Direct Enhanced Services (DES) scheme which is expected to re-commence (post COVID suspension) in April 2022. There is scope for the local enhanced service (LES) schemes and DES to be used within Primary Care to help achieve these goals on a wider scale, The ICS and Place leads will seek greater integration of health, medicines, and carbon goals within these schemes and in implementation, working closely with local medicines management teams and PCN clinical pharmacists. Going forwards this work will also integrate with wider prevention agendas, good patient information, as well as the social prescribing. Further work to integrate carbon reduction priorities into prescribing programmes will be reviewed and implemented on annually.

9.4.4 Green Social Prescribing

The benefits of social prescribing have been widely recognised and supported by investment in hundreds of social prescribers working in Primary Care. Much work is already underway to develop this workforce and programme area. Crucial to its success is not only effective utilisation by clinicians and awareness by patients but also effective support for the ultimate providers of socially prescribed activities, those the social prescribers refer to who are often the Voluntary, Community, and social enterprise partners in the ICS. Plans to address this are to be created on Place level to ensure that the potential of social prescribing is maximised – including its ability to empower patients, develop healthy communities and reduce health inequalities in line with Marmot principles.

Examples of good practice and social prescribing networks will be utilised to share learning and replicate good practice across the ICS. In Liverpool, an 'Advice on Prescription' scheme was commissioned so practices can refer people for support with financial problems, a known factor in poor health, which then expanded to a wider wellbeing support offer. This has now been boosted by the recruitment of social prescribers at a PCN level. A pilot programme funding referral activity will be launched in 2022/2023 as part of Liverpool's social model of health.

Researchers at Leeds Beckett University analysed the social value of wildlife trusts, nature conservation projects and community garden programmes that support people experiencing problems such as anxiety, stress, or mild depression. Prescribing contact with nature for people who have low level mental health problems is excellent value for money by improving people's wellbeing. For every £1 invested in regular nature volunteering projects which play a part in creating a healthy lifestyle by tackling problems like physical inactivity or loneliness, there is an £8.50 social return. For every £1 invested in specialised health or social needs projects which connect people to nature and cost more to run, there is a £6.88 social return. At Place and ICS level, a plan for funding referral activity will be considered in order to achieve the maximum impact on health inequalities and carbon reduction goals.

9.4.5 Active Travel and Active Practice Charter

Staff and patient travel is the second largest source of greenhouse gas emissions in Primary Care. Active modes of transport such as walking, cycling, or taking public transport have multiple health and environmental benefits, and link strongly with social prescribing as detailed in the previous section. Examples of schemes and projects currently underway are detailed in section 12.0 of this Plan.

Practices have some influence on staff and patient travel and will prioritise simple but effective approaches such as ensuring all practices provide secure, covered cycle parking and Cycle to Work schemes for staff, and cycle parking for patients. Collaborative work with local authority active travel agendas will be used to support these goals and the accessibility of practices by walking and cycling will be considered in any revisions to practice locations.

As part of the priorities for the Population Health Board, the ICS has commissioned Active Partnerships (Active Cheshire and Merseyside Sport), to jointly create a physical activity strategy over Cheshire and Merseyside, to work collaboratively with stakeholders to develop a Physical Activity Strategy for the region, further cemented by the development of the Marmot principles and physical activity's importance in tackling health inequalities.

The Strategy takes a whole-system approach towards physical activity, recognising that all stakeholders need to be involved in making a positive change, with an ambition set to enable 150,000 inactive people in the region to become more active by 2026.

The Strategy's framework has a consistent approach across the Cheshire and Merseyside region focusing on three strategic themes (early years and children, working age adults and older adults), however a place-based approach will be taken towards implementation, recognising that each of our places have unique needs.

Active Practice Charter: The Charter has been devised with the Royal College of General Practitioners (RCGP) and has identified and supports 50 GP practices across Cheshire and Merseyside in the areas of highest deprivation to put processes in place to develop an activity culture and environment within the practice.

- Practice 1, Sefton – 15% staff use active travel, 54% live within a 5-mile radius
- Practice 2, Sefton – 0% staff use active travel, 30% live within a 5-mile radius
- Practice 3, Wirral - 17% staff use active travel, 74% live within a 5-mile radius
- Practice 4, Warrington – 33% staff use active travel, 56% live within a 5-mile radius
- Practice 5, Cheshire East – 23% staff use active travel, 64% live within a 5-mile radius
- Practice 6, Cheshire West – 33% staff use active travel, 60% live within a 5-mile radius

Dr Stewart Leitch, GP, Northgate Medical Centre, Chester: "I gave up my car for work 2 years ago and got on my bike. I'd always cycled for leisure and thought it would be good rehab for a previously broken leg. The main reason though was the environmental impact of driving lots of short distances in a car.

Since then, I've cycled to work every day and made home visits by bike or on foot. I live in Chester and work in a city-centre practice though our practice population is far and wide. My GP bag clips on a bike rack, and a rainfall radar phone app helps me time showers if it's raining - I've only ever got soaked twice and simply changed into scrubs at work whilst my trousers dried out!

Visits take slightly longer, but I come back to surgery refreshed and energised. I love that I can use routes that are not available to cars and sneak down little alleys to get to places when traffic is grid locked. The look on patients' faces when I turn up on my bike is always worthwhile and it means I can truly preach what I practise. As well as keeping me fit I hope it inspires others to look at what is possible. Now I've given up my parking space I'm not going back."

9.4.6 Estates and Facilities

The ICS is currently progressing baselining work with primary care as follows:

- GP data gathering exercise with all GP practices across Cheshire and Merseyside which will include a Six Facet Survey of all sites[11] looking at:

    1. Physical condition of estate
    2. Quality
    3. Functional suitability
    4. Statutory requirements
    5. Space utilisation
    6. Environmental management

- Primary Care Network (PCN) review/ refresh to identify estate utilisation, opportunities, split between clinical and non-clinical. This will be shared with PCNs to inform decision making regarding staff development and clinical delivery.

There are several further practical initiatives which practices can undertake to reduce their emissions including:

- **Energy** - The NHS has made a commitment to using 100% renewable energy, and each Practice will be encouraged to reduce energy use and to switch providers where necessary to support this.
- **Procurement** - Individual practices can reduce unnecessary purchasing and purchase sustainable options where appropriate.
- **Waste** - Practices will be encouraged to reduce waste produced, re-use items where possible, recycle and then dispose of items in the least carbon intensive way. NHSE and NHSI are investigating approaches to facilitating reduced carbon emissions in practices through improved waste management streams.

[11] Excluding practices in LIFT buildings and those who have had a survey within the last 5 years.

9.5 Priorities and Ambitions

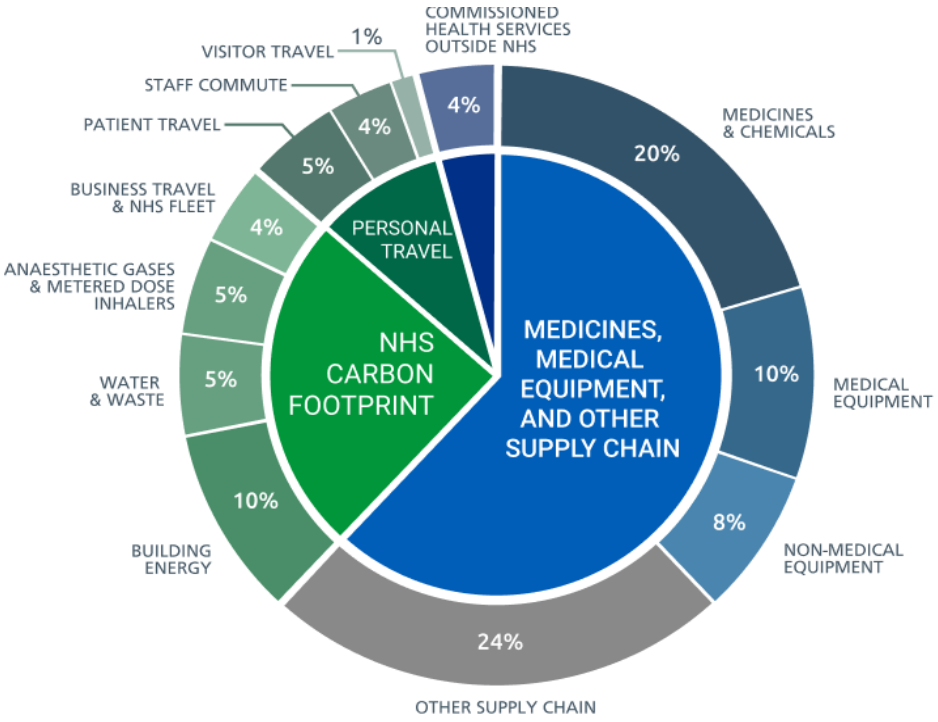
Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Respiratory Care and Green Inhalers	Practices to implement Green Respiratory Care processes and to liaise with secondary care/ pharmacy as necessary.	Conducting reviews and implementing inhaler switching as appropriate.	Establish Place based action plans for Green Respiratory Care by **September 2022**.	ICS co-ordination to support planning and monitoring, evaluation, and reporting procedures. **Ongoing priority.**
Prescribing	PCNs/ practices to implement action to reduce overprescribing and the greenhouse gas emissions associated with prescribing using the Sustainable Quality Improvement principles.	Complete medicines reconciliation and structured medication reviews. Identify future priority prescribing actions.	Develop place-based plans and communication and co-ordination mechanisms. **Ongoing priority.**	ICS co-ordination to support planning and monitoring, evaluation, and reporting procedures. **Ongoing priority.**
Calculating the Carbon Footprint of GP Practices	Practices to use free resources to calculate their carbon footprint.	Practices to follow Place action plans to reduce emissions.	All practices to have calculated their carbon footprint and reported it to Place by **April 2023** for generation of action plans for practices and PCNs.	ICS to support planning and monitoring, evaluation, and reporting procedures. All action plans to be finalised and submitted to the ICS by **October 2023**.
Engagement, Education and Sharing Best Practice	Communication and support for practices to be delivered at Place/ICS level. Dedicated training time for practices to engage with existing initiatives and training opportunities.	Members of each practice to join the Cheshire and Merseyside Greener Practice group. Online shared resource to be created by Place/ICS as appropriate.	Ensure all Practices are registered on Green Impact for Health by **April 2023**.	Communication of basic training opportunities Training schedules in place for roll out from **April 2023**.
Energy	Practices to move to 100% renewable energy tariffs.	Ambition is to move to a large-scale contract	Explore potential for collaborative energy	Explore potential for collaborative energy contracts at ICS as soon aa

		covering all Cheshire and Merseyside practices.	contracts at Place level by **2024**.	is practically possible depending on outcome of Place discussions.
Procurement	Practices to reduce unnecessary purchasing and to choose sustainable options where appropriate.	Align with the ICS' Digital and Data Strategy to reduce paper usage. Further examples are included within the 10 Point Green Plan for Practices.	To follow NHS Supplier Roadmap from **2022** ⇒	To follow NHS Supplier Roadmap from **2022** ⇒

10.0 Procurement and Single Use Plastics

10.1 Introduction

The ICS recognises that its procurement decisions have a significant impact on the environment, society, and the economy. We acknowledge the importance of being responsible, sustainable, and ethical in order to meet the needs of the present and leave a better environment for future generations.



Sustainable procurement focuses on the way we source our food, goods, and services. Improving the sustainability of food and procurement involves sourcing in a cost-effective way while reducing our environmental impact and driving social good in the community through suppliers.

More than **60%** of the carbon footprint of the NHS originates from its supply chain. Reaching net zero will require a strong partnership of action between the NHS and its 80,000+ suppliers.

In early November 2021 at COP26 in Glasgow, an international group of leaders from some of the NHS' largest suppliers came together to pledge their support for a greener NHS, in recognition of the unequivocal threat to health presented by climate change.

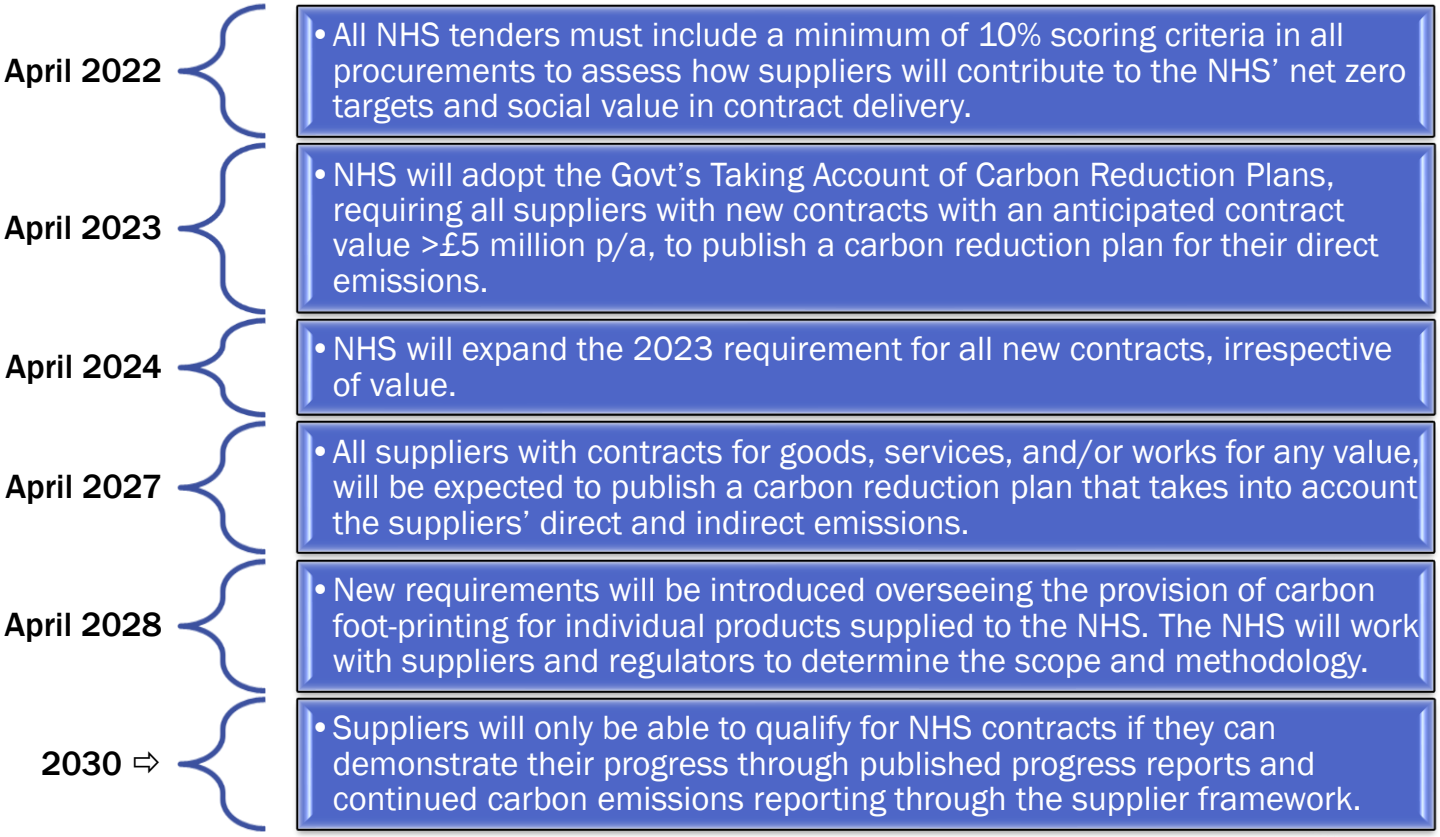
Writing in a letter published in the British Medical Journal Online, the group, including the Chief Executives of Unilever, GSK, AstraZeneca, Biogen, BT Group, Novo Nordisk, Microsoft, Smith and Nephew, Medtronic, and Elis, as well as Apple Vice President for Environment, Policy and Social Initiatives, called on other suppliers to join them in their commitment to reaching net zero emissions by 2045 or earlier across scopes 1, 2, and 3[12] to support a healthier future.

12 Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

10.2 NHS Net Zero Supplier Roadmap

In autumn 2021, the NHS England Public Board approved an NHS Net Zero Supplier Roadmap to help suppliers align with the NHS' net zero ambition between publication and 2030. This approach builds on the UK Government's procurement policy and the NHS' Procurement Target Operating Model (PTOM).

The Cheshire and Merseyside ICS has aligned its overarching strategy and timetable to the NHS Net Zero Supplier Roadmap, but our greener procurement ambitions will build on the fantastic achievements and hard work already underway within the primary care networks, providers trusts, and stakeholder organisations across our area.



10.3 NHS Net Zero Supplier Roadmap Timeline

As outlined in the NHS Procurement Roadmap, we recognise that not all our suppliers are at the same stage of their net zero journeys and there will be many challenges ahead. We commit therefore to working closely with regulators, suppliers and supporting industry bodies to shape our approach and give all suppliers the opportunity to align with our net zero ambition.

10.4 Procurement Across Cheshire and Merseyside

In Cheshire and Merseyside, a Sustainable Procurement sub-group of the Sustainability Board has been convened to focus on areas where procurement can exert an influence. The group comprises procurement managers from the provider trusts, CCG staff and colleagues from the ICS' Programme Delivery Office (PDO). The key areas where we can exert an influence are:

- Single use plastics
- Purchasing power, shared best practice and ethical sourcing
- Energy and carbon management
- Travel and transport
- Waste and recycling
- Awareness raising / championing
- Social Value
- Working with external suppliers

Procurement teams and the procurement sub-group are vital to the delivery of not only the ICS' Green Plan, but the Green Plans of the 18 provider Trusts. The sub-group acknowledges that working collectively has greater impact, avoids duplication, and delivers more powerfully.

The sub-group was founded in October 2021, and is already working with suppliers such to tackle:

- Where orders can be consolidated
  - Will have a big impact on the carbon footprint of the supplier and our Scope 3 footprint – some Trusts order a single product up to 15 times per week
- Packaging alternatives
  - Greener solutions to keep the products safe in transit and protected from deterioration

Defined issues for the sub-group to tackle collectively include:

- Some Trust systems auto re-order when items are used but do not collate orders
- Some Trusts have inventory management systems, others do not
- There are many different ordering points within a single hospital, with staff ordering products over 24 hours
- Orthopaedics – particularly problematic in setting up to get to one order per week
- Meeting new national NHS Social Value targets through procurement requirements

10.5 Single Use Plastics

The NHS launched its Plastics Pledge in autumn 2019 with an undertaking to cut 100 million single use plastics items in hospitals. Plastic items required for medical reasons are exempt from the Pledge, but in 2018 alone the NHS bought at least 163 million plastic cups, 16 million pieces of plastic cutlery, 15 million straws and 2 million plastic stirrers.

Trusts across our region have already made great strides in reducing single use plastic waste and are now addressing the wider use of single use plastics in clinical applications, packaging, operating theatres and in the supply chain.

Since the beginning of the coronavirus outbreak, an estimated 8.4m tonnes of plastic waste has been generated from 193 countries. Given that fact and the shortages of PPE at the start of the pandemic, reusable PPE is a priority across Cheshire and Merseyside.

In April 2021 Liverpool Heart and Chest Hospital NHS Foundation Trust (LHCH) commenced using reusable theatre gowns. Not only has it saved 23,520kg CO_2e per annum, but it has also netted savings of £22,200.

In May 2021, Liverpool University Hospitals NHS Foundation Trust (LUFT) anaesthetists at the Royal and Broadgreen made a swap from disposable plastic caps to reusable fabric caps. This was extended to the wider theatre staff soon after. The swap has removed 217,000 single-use caps per year and will avoid over 1 tonne of clinical waste. It has also provided a cost saving of £86,000 over a 4-year period. Following this success, the caps have now also been rolled out to staff at Aintree Hospital.

The fabric caps, which include an individual's first name and role, have improved patient care. Patients can now easily identify who they are speaking to and using first names provides a more personable experience.

This change has also improved communication between members of the team within theatres; particularly important given that 70% of adverse events in theatre environments are due to some form of miscommunication.

One of the Trust's Consultant Anaesthetists, Dr Mruga Diwan, is taking part in a study with the University of Birmingham to assess whether the fabric caps can be washed at temperatures lower than 60°C without compromising IPC standards. If this is successful, this would further reduce the environmental impact of the fabric caps.

10.6 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Defining Social Value and Measuring Impact	ICS wide adoption of Procurement Target Operating Model (PTOM).	Utilising PTOM in procurement. ICS Procurement Sub-Group developing pro forma to aid procurement teams to embed social value – will also aid measurement.	Adopt PTOM to support social value in procurement and contract monitoring. Review spend categories to identify SME/ local opportunities and make tenders more accessible by breaking down suitable tenders into smaller lots. Effective contract management. **2022** ⇒	Review with ICS partners, need to resource greater support in achieving inclusion, monitoring, and reporting of social value outcomes through procurement. **2022** ⇒
Complete Sustainability Impact Assessments as part of changes to services/ major projects.	Define what sustainability means to the contracting authority and tender and identify where social value can be added.	Test accessibility and proportionality and apply the model scoring criteria to tender documentation. Evaluate responses against KPIs and benchmarks.	**2022** ⇒	**2022** ⇒
Ensure tenders adopt social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts and adhere to requirements of NHS Sustainable Supplier Framework.	A minimum 10% social value scoring is required in all NHS tenders.	Select social value themes Utilise the NHS Social Value Calculator.	**Apr 2022/ Apr 2023** ⇒	**Apr 2022/ Apr 2023** ⇒
Reduction of Packaging	Identify high volume products with high	Urge medicine suppliers/ wholesalers to reduce	**2022** ⇒	**2022** ⇒

	packaging content and establish if sustainable alternatives are available.	waste. Consider including recycling and packaging removal in supplier contracts.		
Re-usable PPE	Consider alternative products, e.g., reusable tourniquets, aprons, wipes, face masks, theatre gowns and hats.	Work with NHS Supply Chain.	Trusts/ primary care to share case studies of successful reusable PPE schemes with the ISC to consider for implementation at scale. 2022 ⇒	**2022** ⇒
Keep products in service for as long as possible, via maintenance and repair.			**2022** ⇒	**2022** ⇒

11.0 Sustainable Models of Care

11.1 Introduction

To recover from the debilitating effects of the coronavirus pandemic, restore service levels, and be secure and sustainable into the future, we must affect hugely ambitious transformation, which embeds net zero principles during every step of the process.

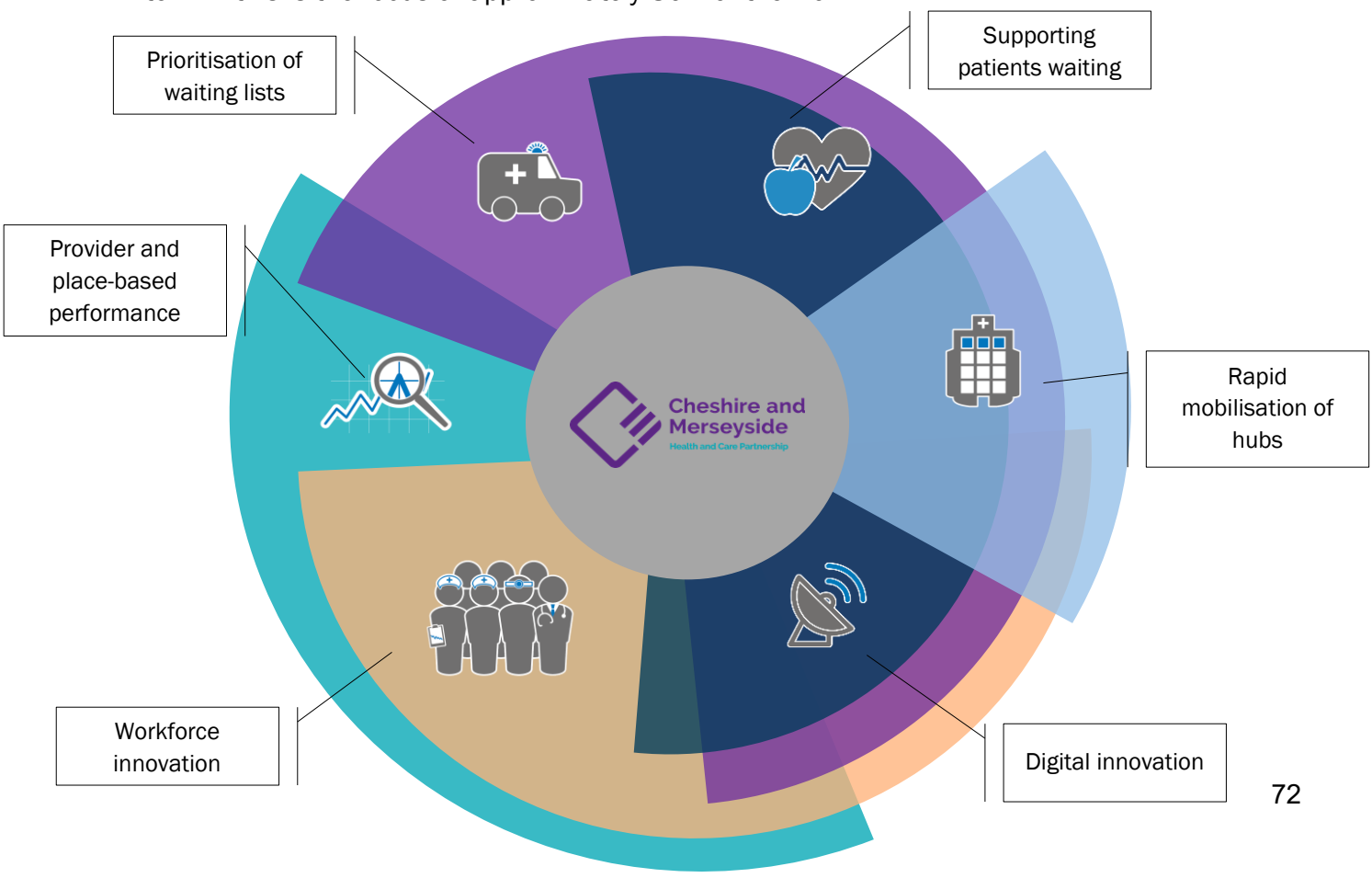
Such an ambitious transformation will need a well-trained and well-supported workforce, buildings that are fit to deliver new models of care, access to the best equipment, technological innovation, and digital solutions.

Our priorities will be shaped by our Places and stakeholders, and we will adopt the Marmot Principles, with our ambitions supported by Health and Wellbeing Boards, Joint Strategic Needs Assessments, and local plans in consultation with our communities.

11.2 Approach

The Cheshire and Merseyside Hospital Cell commissioned an Elective Recovery and Transformation Programme (ERTP) that takes a system approach to tackling the waiting list pressures and provides safe and timely care for patients. There are two facets to the programme:

1. Recovery and restoration of services: including the backlog caused by the pandemic
2. Transformation: making lasting improvement that will transform care for the long-term – this is the focus of approximately 80% of the work.



11.3 Sustainable Services in Action

In 2017, Mid Cheshire Hospitals NHS Foundation Trust (MCHFT) launched an innovative scheme which assesses patients with fractures before contacting them to advise on whether they need to re-attend in person. In 2019, the Virtual Fracture Clinic Project was recognised at the Patient Experience Network Awards in the category of *'Innovative Use of Technology, Social and Digital Media'*. The project has delivered a cost-effective service whilst ensuring patients are managed according to best evidence. Thousands of patients have benefitted from the virtual clinic, which allows patients to manage their broken bones safely and reduces the number of times they need to visit hospital. The project has also reduced clinic waiting times for those that do have to return to hospital for fracture appointments.

Wirral Community Health and Care NHS Foundation Trust is a leader in Virtual Ward development where health care professionals can support patients at home by monitoring blood pressure, pulse rate, oxygen levels and weight by phone. Any concerns can be escalated to the correct pathway of care for example, GP review, matron visits, rapid response visit or if required Accident and Emergency. This type of health care enables patients to be supported at home reducing their fears and anxiety, empowering them to manage their condition thus reducing hospital visits and improving outcomes and quality of life.

11.4 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Boost 'out-of-hospital' Care	Empower people to have more control over their health, increased focus on population health, and ensure location of care is closer to/ in patients' homes.	Reviews of clinical pathways – collaborative with primary, secondary, ICS, and third sector. Make things more streamlined whilst still delivering quality and excellent patient care. Decarbonise pathways by removing unnecessary diagnostics, etc.	Engage with patients to ensure appropriate signposting, improve health and well-being of communities, and embed prevention of illness in care models. **2022 ⇨**	Engage with patients to ensure appropriate signposting, improve health and well-being of communities, and embed prevention of illness in care models. **2022 ⇨**
Planned Care	Improve on managing demand for planned care.	Maximise capacity, and harness existing and emerging technology to support demand and capacity challenges into the future.	**2022 ⇨**	**2022 ⇨**
Develop framework to enable local GPs to utilise space for social prescribing i.e., use of external space. Invest in social prescribing and encourage evidence-based therapies and lifestyle changes over invasive procedures and pharmaceuticals	Work ongoing with Estates Teams to identify appropriate space in primary and secondary care estate. C&M HCP liaising with local stakeholders to identify shared space for social prescribing.	Develop a 'directory' of suitable shared space for social prescribing.	**2022 ⇨**	**2022 ⇨**
Address Impact of COVID-19	Focus on findings from PHE's 'Disparities Review' - obesity, diabetes, CVD and impact of COVID-19 on poor	Engage with local stakeholders to ensure plans are realistic, appropriate, and aligned to	**2022 ⇨**	**2022 ⇨**

	mental well-being, including alcohol consumption, poor diet/ deconditioning and impact on unemployment and inequalities.	expectations of patients/ their families. Liaise with Quality Leads, Third Sector and Clinical Leads to improve care model sustainability and deliver right care, at right time, in right place, and within available environmental, social, and economic resources.		
Incorporate sustainability into care models with a view to reducing waste, toxic and hazardous substances.	Follow Greener NHS guidance or support the development of greenhouse gas emissions reduction metrics linked with sustainable care actions, including establishing links between better health outcomes and the reduction in emissions from avoided care and reduced mileage / travel.	Monitor and record emissions reductions on inception of new pathways.	**2022** ⇨	**2022** ⇨

12.0 Travel and Transport

12.1 Introduction

Sustainable travel plays a significant part in reducing traffic on the roads, promoting health and wellbeing through exercise, and improving local air quality. Therefore, it is important that the locations from which our NHS services operate are well-served by bus, rail, and other public transport links, have good and accessible pedestrian facilities and are reachable by safe cycle routes, have secure cycle storage and provide charging points for electric vehicles.

This plan summarises the progress made across Cheshire and Merseyside to date and outlines the journey ahead in helping staff, patients, and visitors to reach our sites and communities safely, sustainably and with the benefit of improved health and reduced cost both in monetary and in environmental terms.

12.2 Active Travel and Public Transport

Active travel is one of the main pillars of the Physical Activity Strategy, and with the link up with the NHS Prevention Pledge work the ICS will be supporting NHS Trusts to implement initiatives to further encourage staff and patients to choose active travel for their journey. The benefits of active travel and increased use of public transport are widely recognised, however research amongst staff, patients and visitors has shown that there are barriers:

Staff	Patients and Visitors
• Lack of public transport • Reliability/ frequency of public transport • No direct routes • Convenience • Journey times • Health reasons • Safety • Cost • Childcare commitments • Shift patterns • Staff working at multiple locations/ in the community • No staff shower/ changing facilities on site • Bicycle storage non-existent or insecure • Cannot access the Cycle to Work scheme	• Lack of public transport • Reliability/ frequency of public transport • No direct routes • Convenience • Journey times • Health reasons • Safety • Bicycle storage non-existent or insecure

Organisations across the ICS are committed to addressing these issues, both to improve access to more environmentally friendly options and to reduce CO_2e emissions

Countess of Chester Country Park

around our sites and within our communities.

A Travel Advisory Group comprising membership from Southport and Ormskirk Hospitals NHS FT, Sefton Place, West Lancashire Place, local authority travel planners, private operators (rail and bus), Healthwatch, Public Health England, and equalities/ inequalities leads has been convened.

Health leaders in the Formby, Southport and West Lancashire area are in the process of developing a Travel and Transport Impact Analysis. The Travel Advisory Group will provide robust appraisal, review, and suggest proposals to improve the work and specify the scope, to ensure that proposed public transport plans for the area address and support the requirements and health needs of the local populations. The ambition is to expand this model throughout the ICS.

Similarly, the Countess of Chester Hospital NHS Foundation Trust continues to work with Cheshire West and Cheshire Council (CWaC) to assist patients, visitors and staff reach the hospital more easily. Two of the 'Park and Ride' bus routes stop directly outside the hospital; and the Trust has pledged to work with the Council to further improve services. The Park & Ride service currently ceases at 7pm, 15 minutes too early for staff working shifts. An expansion to the service would meet the needs of all Trust staff.

12.2.1 Cycle to Work Schemes and Cycle Hubs

Throughout the coronavirus pandemic various community partners worked with several Merseyside based NHS Trusts to encourage workers to swap their car/bus/train for a walking or cycling journey instead that could be scaled up further, especially with more cycling infrastructure being built across the region. Hype Merseyside, Cycle of Life and St Helens Pedal Power are just a few organisations that helped out.

Every provider Trust across Cheshire and Merseyside operates a staff Cycle to Work Scheme. Uptake has been reasonable, and Trusts have worked to provide on-site facilities such as lockable bicycle storage (or cycle hubs) and areas for staff to shower and change.

Several Trusts have recognised that *Cycle to Work Schemes* are not accessible to some part-time staff/ staff on lower AfC bands, as the salary sacrifice takes them below minimum wage. One Trust bought 100 street bikes and started a free bike loan scheme for staff – this enables lower paid staff to participate. The positive feedback has been great, lots of staff have gone on to buy their own bikes. One person had not ridden a bike for 15 years and now enjoys a 20-mile bike ride with her husband every weekend!

Staff surveys have indicated that barriers to cycling to work could be eliminated by the provision of:

- Fix-it cycle stations on site (including pump and tools, etc)
- Bike user groups / cycling buddies
- Cycling breakfasts
- Cycling proficiency lessons
- Dr Bike style maintenance sessions
- Dedicated and/ or safer cycle routes

12.3 Electric Fleet and Lease Car Schemes

With central Government plans to end the sale of new petrol and diesel cars by 2030, the UK is on course to be the fastest G7 country to decarbonise cars and vans.

In many areas across Cheshire and Merseyside vehicle emissions have become the dominant source of air pollutants, containing a nasty cocktail of carbon monoxide, carbon dioxide, volatile organic compounds (hydrocarbons), nitrogen oxides and particulate matter. Chronic exposure to these pollutants has detrimental effects on respiratory health.

Given that reducing CO_2e emissions of NHS fleet and lease vehicles will ultimately contribute to the reduction of the 5,700 lives which could be saved each year via improving air quality it has become a priority target to electrify fleet and lease vehicles across the ICS, including lease vehicles offered on the staff car lease schemes.

Did you know?

One electric car on the roads can save an average 1.5 million grams of CO_2 per year - the equivalent of 4 return London to Barcelona flights!

12.4 Remote Working

The coronavirus pandemic has forced innovation, particularly in the provision of healthcare, and working from home has given insight into how technology can be utilised to save time and cost all whilst addressing some of the key climate issues.

For those staff who are able to work remotely, most have indicated that they would not want to return to working from their base location on a full-time basis, preferring instead to retain a mix of working from home, at their base, or elsewhere in the community. The benefits are clearly visible and include:

- Savings to the environment in terms of travel – net positive
- Better work/ life balance for employees
- Remote workers can continue working through major weather events, such as floods, snowstorms, and heat waves

Ongoing support for the mental health and wellbeing of staff and employee engagement will continue to be of primary importance, and several initiatives are in place to enable this. Access to wellbeing services and mental health support, informal virtual catch-ups, virtual team meetings and regular check-ins will continue to be a priority.
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12.5 Priorities and Ambitions

Initiative	Description	Example	Organisation/ Place Objective	ICS Objective
Promote flexible and agile working across the ICS where practically possible.	Reduced numbers of staff in buildings, reduced CO_2e emissions and less car park demand. Significant numbers of staff already work from home for part of the week.	Monitor numbers / use Health Outcomes of Travel Tool (HOTT).	**2022 ⇨**	**2022 ⇨**
Promote benefits of active travel (running, cycling, walking) to staff, patients, and visitors. Senior staff to demonstrate leadership by travelling actively, and by declining incentives to drive (e.g., designated parking).	Reduced CO_2e emissions and less car park demand. Improved wellbeing and fitness.	Introduce an Active Travel campaign across the ICS. Ensure there are shower, changing and secure cycle storage facilities on site. Promote cycling/ walking routes. Monitor numbers / use Health Outcomes of Travel Tool (HOTT).	Measure current rates of staff travel across the ICB and set Active Travel targets. **January 2023.**	Sustainability Board Travel and Transport Sub-Group to develop shared resources to promote Active Travel. **September 2022.**
Collaborate with local transport providers and local authorities to develop improved access to local rail, public transport services, and walking and cycling routes.	Increased numbers of staff, patients, and public opting for public or active transport options.	Regular stakeholder meetings to identify improvements and issues. Monitor numbers / use Health Outcomes of Travel Tool (HOTT).	**2022 ⇨**	**2022 ⇨**
Car lease schemes to only offer ultra-low emission vehicles (ULEVs) or zero emissions vehicles (ZEVs).	Review contract/s, contact scheme operator, produce plan. As lease contracts come up for renewal phase out non-ULEV/ ZEV options.	UK Gov't phasing out sale of petrol and diesel vehicles – none on sale post 2030.	**2022 ⇨ 2025**	**2022 ⇨ 2025**

Add more electric vehicle charging points and draft electric vehicle charging policy for staff and public to support new charging infrastructure.	Monitor usage to ascertain infrastructure supports demand.	Supports ULEV/ZEV aims, convenient for users and a source of revenue.	Monitor usage via digital data capture. **2022/23 ⇨**	Monitor usage via digital data capture. **2022/23 ⇨**
Migrate existing fleet (under 3.5t) to 100% electric vehicles as vehicle leases expire.	As lease contracts come up for renewal phase out non—ULEV/ ZEV options.	UK Gov't phasing out sale of petrol and diesel vehicles – none on sale post 2030.	Review contract/s, contact scheme operator, produce plan. **2022 ⇨ 2028**	Review contract/s, contact scheme operator, produce plan. **2022 ⇨ 2028**
Senior level approval required for high carbon business travel (e.g., flights or high gCO_2/km hire cars).	Reduced high carbon business travel measured in both CO_2e and financial savings.	There are plenty of lower CO_2e options available – ZEV cars and public transport.	**2022 ⇨**	**2022 ⇨**

13.0 Next Steps

13.1 Introduction

The ICB is passionate about delivering real change and working at scale with and across other public and third sector organisations and partners in order to enable faster adoption of innovation, address the social challenges of ill health and to deliver our net zero promises.

Without innovation, the cost of delivering public services will continue to rise, and this cost comes at a very high price, not just in financial terms, but in terms of humanity continuing to damage the environment faster than it can recover.

13.2 Working at Scale and Place Based Partnerships

NHS Cheshire and Merseyside cannot deliver its sustainability aims on its own. Through working closely with local communities, local authorities, and other public bodies, third sector organisations and our suppliers we will achieve the ambitions as set out in this Green Plan. The ICS will actively engage in existing forums for collaboration and assist in creating new ones where they are needed, including:

- Working with the Innovation Agency to link projects, deliver programmes and spread innovation across Cheshire and Merseyside.
- Horizon scanning for technological and healthcare advancements.
- Working with sub-groups of the Sustainability Board to set targets and timelines.

NHS Cheshire and Merseyside Integrated Care Board (ICB) will arrange for some of its functions to be delivered, and decisions about NHS funding to be made in the region's nine borough places through Place-Based Partnerships.

The ICB will remain accountable for NHS resources deployed at borough place-level. The ICB will set out the role of designated place-based leaders within its governance arrangements and identify where and how each Place will contribute to the delivery of the Green Plan.

Health and wellbeing boards (HWBs) will continue to develop the joint strategic needs assessment and joint health and wellbeing strategy, which both the ICP and ICB will give due regard.

Working at scale gives greater potential to deliver jointly for a bigger transformational impact and working with place-based partners gives us the potential to develop innovative initiatives such as district heat networks.

The Collaboration at Scale (CaS) Board oversees programmes that deliver financial benefits, productivity improvements and those which reduce duplication and increase value for money through working collaboratively at scale across Cheshire and Merseyside. The main portfolios that sit under CaS Board are Procurement, Estates and Facilities and Single Ledger, other programmes from across the partnership often link in to provide oversight and highlight interdependencies. Many of the programmes that report into CaS have a sustainable benefit such as improving the use of resources and creating efficiencies across the system.

13.3 Conclusion

Many people across Cheshire and Merseyside are already taking action to help create a more sustainable NHS and more sustainable Places. In sharing and supporting our ambitions we need to harness this enthusiasm, knowledge, and energy so that we can deliver at pace the sustainable changes that are so vital to our continued existence and that of the continued existence of our planet.

14.0 Version Control and Acknowledgements

14.1 Version Control Information

Title	**Cheshire & Merseyside ICS Green Plan**		
Author	Mandi Cragg		
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03.12.2021	1.0	Mandi Cragg	Original draft
14.12.2021	2.0	Mandi Cragg	Update following circulation to Sustainability Board for comment
20.12.2021 ⇒	3.0 - 3.3	Mandi Cragg	Update following Sustainability Board sub-group meetings and inclusion of Digital and Data Strategy
07.02.2022	3.4	Mandi Cragg	Version approved by Executive Board – 01.03.2022
18.02.2022 ⇒ 25.03.2022	3.5-3.8	Mandi Cragg	Inclusion of Marmot Community Programme ambitions, updates following NW region feedback and addition of 'Primary Care' and 'Next Steps' chapters.
14.04.2022	APR_22 V1.0	Mandi Cragg	FINAL version: formatting updates in preparation for upload to C&M website.
22.06.2022	JUL_ V1.0	Mandi Cragg	New ICB logo included. Raj Jain added as ICB Chair, Isla Wilson added as Sustainability Ambassador. Organisation name amended to NHS Cheshire and Merseyside throughout, inclusion of C&M Anchor Charter in Appendix E.
Reviewed by:			HCP Executive Board

14.2 Acknowledgements

This Green Plan has been designed using resources from Flaticon.com.

15.0 Appendices

15.1 Appendix A ~ References

Appendix A - REFERENCES.pdf

15.2 Appendix B ~ Glossary

Appendix B - GLOSSARY.pdf

15.3 Appendix C ~ System Providers, Local Authorities & Clinical Commissioning Groups

Appendix C - System Providers, LAs and CC

15.4 Appendix D ~ Cheshire and Merseyside Social Value Charter

Appendix D - Social Value Charter.pdf

15.5 Appendix E ~ Cheshire and Merseyside Anchor Institution Charter

Anchor Institute Charter and Principles