



# South East London Green Plan 2022-2025

# Our plan for a sustainable integrated care system



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# Preface

#### The time for us to be carefree about the way we live and act is over.

Earth Overshoot Day is the day when we will have used up more from nature then the planet can renew in the year. We are currently living in a way that would need 1.7 planets to sustain us in the longer term<sup>a</sup>. And while it is only recently that governments and the public have started to understand the severity of the situation, if we do not make a significant and immediate difference, climate change could be irreversible in less than 10 years<sup>b</sup>.

I am proud of the NHS for leading the way in asking health systems to change the way they operate. We were the first in the world to commit to reaching net-zero carbon (by 2040, or 2045 including the supply chain). These are ambitious targets, but they must be made a reality. The science is clear – already the climate is costing the lives of people here in South East London, and it is going to get much worse. We cannot preserve the health of our residents – now or in the future – with an unhealthy planet.

This is not a positive way to introduce a plan, but I think people still believe that this issue will go away or is someone else's problem. Because you are reading this plan, I hope it means you are interested in making a change. Perhaps you work in a hospital, in primary care, or at the CCG/ICB<sup>c</sup> or a local authority in South East London. Perhaps you are interested in making a change personally, or you simply want to make sure we are taking our responsibilities seriously. Whatever brings you to this plan, please read on, and please have hope. Hope leads to action, and action leads to change. The world needs our help.

I believe this plan, supported by the fantastic people who work in South East London's Integrated Care System (ICS), can make a difference.

This green plan is our starting point, and we need to continue to review what is known and what can be done to embed a sustainable mindset in all our staff – over 50,000 people who work for the NHS in South East London.

The NHS is under pressure as never before, and it will not be easy to continue to learn about and take action on sustainability and carbon reduction, but the main message from this plan is that we are committed to doing so.

<sup>a</sup>Past Earth Overshoot Days - #MoveTheDate of Earth Overshoot Day

<sup>b</sup> IPCC – Intergovernmental Panel on Climate Change

<sup>c</sup>Shortly after this plan is published, the South East London Clinical Commissioning Group (CCG) will cease to exist and the South East London Integrated Care Board (ICB) will become operational. Actions currently being undertaken by CCG teams will be undertaken by ICB teams.

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There are multiple benefits as well. Supporting the environment and reducing the NHS' carbon footprint helps our residents to live longer and healthier lives.

Critically our residents who are more disadvantaged are often the people who suffer the effects of climate change most acutely.

Therefore, the mission of the ICS – to protect and improve our residents' health and reduce health inequalities – is supported by this work. We also recognise sustainability and carbon reduction are important to many of our staff. We owe it to them to put senior weight behind making a change. Not to mention, what is best for the planet is often best for our wallets, with many of the changes providing financial benefit in the longer term.

## What this plan means for you

If you work in a health, or a care setting, in South East London, please think about how you can apply the approaches in this green plan into your day-to-day work. You will have the opportunity to identify ways to be more sustainable.

Please have the confidence to suggest it to your organisation; although we will need to do what is practical, affordable, and critically in the best interest of patients, we are also all learning how to do this in the best way possible.

If you are a resident, this plan outlines the how we will make the local environment better for you, your family, and your friends. As we work through this programme of change, we hope to create opportunities for you to hear about our progress and for us to hear your ideas.

If you are in neither of those categories, you are still so welcome to read this plan and I hope you find it helpful.

Whoever you are, you do not need to read this plan from cover to cover, dip into it and read the parts that are most relevant. But please remember this – we are committed to making a change, and you can too. Thank you for reading.



**Christina Windle** 

ICS Sustainability Senior Responsible Officer

ICS Green Plan Sponsor

In shingt with



# Summary

The following summary shows SEL ICS commitments to, and Year 1 actions for, sustainability in each of the 11 Areas of Focus in the green plan.

*NB: The actions have been condensed; they are given in full in the respective Areas of Focus* 

#### Key for summary:

(T) = NHS Trusts
(ICB) = ICB/CCG
(NO) = NHS organisations
(ICS) = ICS
(P) = Primary care
\* Denotes actions representing the Foundations of a Green Plan as set out in NHS England's Green Plan Guidance (see Reference 1).

For other abbreviations, refer to Abbreviations (page 72).

Workforce and System Leadership Summary



# Commitment: We will make carbon reduction and sustainability part of our core business

- Have dedicated sustainability resource in place\* (T) (ICB)
- NHS board level leads to undertake sustainability training (T) (ICB)
- Educate and resource clinical climate champions aligned to ICS's 35 PCNs (ICB)
- Develop capacity of a steering group for primary care leadership in environmental sustainability (ICB)
- Ensure 1% per year of staff are given the opportunity to undergo sustainability training (NO)
- Develop an internal communication and engagement plan (ICB)
- Achieve 5000 pledges for personal sustainability commitments (ICS)



#### Air Quality Summary



Commitment: We will work collaboratively across the ICS to improve air quality in South East London

#### Actions for Year 1:

- Identify appropriate locations for borough air quality monitoring and install monitors (ICS)
- Mobilise a joint programme, and agree priorities for improving air quality (ICS)
- Install air quality monitors at major sites (T)
- Review air quality monitoring data and identify actions (T)
- Promote anti-idling at major locations (T)

#### Travel and Transport Summary



Commitment: We will reduce and decarbonise our travel and transport while supporting safe and active travel of staff, patients, and visitors

- For new purchases and lease arrangements, solely purchase and lease cars that are ULEZ or ZEVs\* (T) (ICB)
- Assess business use of flights, and ensure use is appropriate (T) (ICB)
- Implement a travel survey (ICB) (T)
- Support active travel for all NHS organisations (ICB)
- Deliver an education package for primary care professionals on benefits of active travel for patients (ICB) (P)
- Promote apps that promote safe cycling and walking routes (ICS)
- Identify additional mechanisms to incentivise active travel for staff (ICS)



#### Estates and Facilities Summary

Commitment: We will optimise our resource use and reduce emissions from our estate in line with the national target of 80% reduction by 2032

- Share best practice on energy efficiency and decarbonisation (NO)
- Continue to improve energy efficiency (NO)
- Develop a road map for decarbonisation for heating and hot-water systems (T)
- Procure electricity from 100% renewable sources\* (T)
- Support NHS Trusts by lobbying on REGOs (ICB)
- Measure baseline energy use within general practices (P)
- Support primary care with actions to reduce estates-related emissions (ICB)
- Make the assessment of sustainability part of the business case process and all estates and facilities projects (ICS)
- Implement sustainability criteria for refurbishments (ICS)
- Reduce printing for all meetings except for accessibility reasons (T) (ICB)
- Introduce recycling in all buildings (T) (ICB)
- Undertake a campaign to increase recycling rates (T) (ICB)
- Identify potential mechanisms to increase the return of equipment (T) (ICB)
- Ensure no clinical waste is sent to landfill (T)
- Ensure domestic waste is not disposed of in clinical waste (T)



# Sustainable Models of Care Summary

Commitment: We will review our existing and develop new models of care to reduce their environmental impact and improve social value

#### Actions for Year 1:

- Establish appropriate working group(s) for sustainable models of care (ICB)
- Establish approach to sustainable models of care (NO)
- Identify first pilot(s) for sustainable models of care (NO)
- Support PCNs to explore innovative models of care to tackle inequalities and create health (ICB) (P)
- Develop and improve approaches that prevent ill health (ICS)
- Discuss sustainability with patient groups/local service users involved in developing new models of care (ICS)

#### Digital Transformation Summary



**Commitment:** We will use digital transformation to improve the sustainability of healthcare without compromising the quality of our care and exacerbating inequalities in access to care

- Conduct outpatient appointments remotely where clinically appropriate, taking account of patient preferences, aiming for 25% to be delivered remotely overall\* (T)
- Evaluate different types of appointments to establish clinical appropriateness and patient preferences for remote consultations (NO)
- Continue with digitisation of patient records in general practice (ICB) (P)
- Identify baseline for digital transformation of primary care, good practice, and barriers to digitalisation (ICB) (P)
- Review a support package for patients, including remote monitoring where appropriate (ICB) (P)



### Medicines Summary



Commitment: We will reduce the environmental impact of our medicines through optimisation of prescribing, use of low-carbon alternatives, and appropriate disposal

- Measure and monitor anaesthetic gas usage annually (T)
- Reduce the proportion of desflurane volume to 5% of volume of all volatile surgical gases\* (T)
- Reduce the use of nitrous oxide (T)
- Collaborate on plan to tackle overprescribing and polypharmacy (NO)
- Analyse medicines data to identify patients at risk of overprescribing/ polypharmacy, or over-ordering at PCN or practice level (ICS)
- Improve asthma control (T) (P)
- Reduce the environmental impact of inhalers\* (T) (P)
- In collaboration with RRPG, run educational events about sustainable respiratory care (P)
- Develop recommendations and associated guidelines for adult asthma and COPD (ICS)
- Develop recommendations and associated guidelines for asthma in children and young people (ICS)
- Develop guidelines for inhaler prescribing with reference to environmental impact to help guide joint decision-making (ICS)



Supply Chain and Procurement Summary

Commitment: We will use our supplies more efficiently, consider lowcarbon alternatives, and collaborate on the decarbonisation of our suppliers

#### Actions for Year 1:

- Develop and implement a joint sustainable procurement policy and guidance across the ICS (ICS)
- Introduce a minimum 10% weighting on social value criteria for all procurement (T) (ICB)
- Develop and implement a supplier engagement programme to reduce supplier GHG emissions (ICB)
- Set up a system for sharing best practice on reducing single-use items and identifying opportunities for reuse (NO)
- Identify the most carbon-intensive clinical instruments and interventions to reduce their use (NO)
- Remove all single-use plastic in catering (T)

#### Food and Nutrition Summary

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Commitment: We will ensure all our inpatients have access to sustainable healthy food, and for food waste to landfill to be eradicated

#### Action for Year 1:

 Monitor food waste and associated carbon emissions and identify priorities for action (T)



#### Adaptation Summary



Commitment: We will mitigate the risks of climate change and ensure climate change does not impact on the ICS's ability to deliver core services and manage population health

#### Actions for Year 1:

- Develop a climate change adaptation plan (ICB) (T)
- Develop a climate change risk register to identify potential risks to service continuity and patient and population health (ICS)
- Review, in PCN estates survey, adaptation plans for heat and extreme weather events at GP premises (P)

Green/Blue Space and Biodiversity Summary



Commitment: We will contribute to the improvement of and equal access to South East London's green and blue spaces

#### Action for Year 1:

• Explore, with VCSE and other partners in the ICS, opportunities for nature-based prescribing (ICS) (P)



# **Reading this green plan**

This green plan has been developed in collaboration with health providers and commissioners in the South East London Integrated Care System (SEL ICS), with support from the Centre for Sustainable Healthcare (CSH) to set out SEL ICS's commitment to sustainability.

Within this green plan, there are 11 Areas of Focus (see Figure 1) that need to be addressed to improve the sustainability of health and care in South East London (SEL) and to contribute to the mitigation of climate change. The Areas of Focus are aligned to the main drivers of change (see Appendix 1) and the carbon hotspots across SEL ICS and the NHS at a national level:



Figure 1 Areas of focus



For each Area of Focus, the green plan describes the context, examples of what has been achieved to date, and our future commitments, aims, and actions, while highlighting the priorities for the first year. Actions representing the *Foundations* of a Green Plan as set out in NHS England's Green Plan Guidance<sup>1</sup> are marked with an asterix.

Actions in this green plan are attributed to the different organisations or groups:

- NHS Trusts: actions for NHS Trusts
- CCG/ICB: actions for the CCG/ICB in their own offices, as commissioners and as coordinators of the ICS
- Primary care: actions for Primary care with an initial focus on general practice
- NHS organisations: actions for NHS Trusts, primary care and SEL CCG/ICB on their own or together
- ICS: As well as being used as a term to refer to the whole system, this describes actions where it is necessary to work beyond the NHS and we know we will be working with partners

For all Areas of Focus, the sharing of information and best practice will be hugely beneficial for all SEL ICS NHS and wider partners. Additionally, there will be many actions described for the NHS that we hope will be spread and delivered further; however, confirmation of what will be delivered in partnership, and when, will be informed by future engagement.

In reading this green plan it is important to be aware of the following.

- It does not replace green plans that have already been published by ICS organisations, but it is intended to confirm common and collaborative actions and timelines
- A separate Primary Care Green Plan has been developed for South East London's general practices. Its priorities for Year 1 and some of its other actions have been included in this plan where suitable
- In recognition of existing plans in the process of being delivered, and to illustrate the system's commitment to sustainability, we have outlined some of the achievements already made
- Although most of the actions are for NHS organisations, we are committed to collaboration with partners in local authorities and beyond, and we hope that many of the actions can be delivered across the ICS
- At the end of Year 1 (2022/23), the green plan will be reviewed to monitor progress and ensure that the plan remains sufficiently ambitious and in line with national targets. We are also committed to publishing progress and change
- We have not quantified the anticipated impact of this plan for two reasons: (a) several of these activities are foundation activities which are key to accelerating delivery later on, and (b) the success of our sustainability ambitions is dependent on all sustainability actions across the ICS (many of which are captured in individual organisation's plans). An approach to measuring impact is in development.

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# Introduction

# Background

South East London Integrated Care System (SEL ICS) is a partnership of all the organisations involved in planning and providing health and care to the population of 1.9 million. SEL ICS includes:

- South East London Clinical Commissioning Group (CCG)/Integrated Care Board (ICB)
- Six local authorities: Bexley, Bromley, Greenwich, Lambeth, Lewisham, and Southwark
- Five NHS Trusts: Guy's and St Thomas's NHS Foundation Trust (GSTT), King's College Hospital NHS Foundation Trust (KCH), Lewisham and Greenwich NHS Trust (LGT), Oxleas NHS Foundation Trust (Oxleas), and South London and Maudsley NHS Foundation Trust (SLaM)<sup>d</sup>
- 1 community interest company, Bromley Healthcare
- 212 general practices
- Our academic health science partner, King's Health Partners
- Local voluntary and community organisations (VCSE)



<sup>d</sup> Dartford and Gravesham NHS Trust is outside the SEL area and is not included here; however, the Trust provides a considerable number of hospital services to Bexley residents.

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We come together to provide health and care support and services as a "system of systems" both as the SEL ICS and through:

- Acute, Mental Health and Community Provider Collaboratives
- Six Local Care Partnerships (LCPs)
- 35 Primary Care Networks (PCNs)

The five NHS Trusts provide acute and community services, adult mental health and addiction services, and child and adolescent mental health services for an ethnically diverse population.

The population is forecasted to grow by 9.5% by 2029 with growth among the older residents exceeding growth in the rest of the population<sup>2</sup>.



A high percentage of SEL ICS's population live in areas that are among the most deprived in England. The four boroughs of Lambeth, Southwark, Lewisham, and Greenwich rank among the 15% most-deprived local authority areas in the country. One in five children live in low-income homes.

Life expectancy for men and women remains below the national average for all six boroughs with considerable variations in life expectancy and healthy life expectancy between the most-deprived and least-deprived areas. Cardiovascular disease and cancer are the main causes of death in people under the age of 75 years.

In partnership with King's Health Partners, we have identified five key risk factors, the Vital 5, affecting both long-term conditions and premature deaths:



Figure 2: King's Health Partners' Vital 5



These risk factors are more prevalent among people in deprived areas. Addressing these risk factors will contribute to reducing existing health inequalities.

The sixth main risk factor important to the health and wellbeing of our population is air pollution. All boroughs exceed the World Health Organization (WHO) recommended levels for PM<sub>2.5</sub>, one of the air pollutants that affects health<sup>3</sup>. A tragic illustration of the importance of air quality to health is that the first person in the UK to have air pollution listed as a cause of death was a nine-year-old girl from Lewisham.

# Achieving net zero

Climate change is one of the greatest public health threats of this century, not only globally, but here in South East London. Climate change has been shown to increase mental illness<sup>4</sup> as well as diseases passed from animals (zoonotic disease) and insect bites from, for example, mosquitos, and ticks. It is estimated that with the continued increase in temperature, diseases like West Nile virus and dengue fever could spread to the UK<sup>5</sup>.

We have already seen some of the impacts of climate change through extreme weather events such as heatwaves, storms, and flooding. It is estimated that the heatwave in 2003 resulted in 2,000 excess deaths in England.<sup>6</sup> Climate change also affects health indirectly through the social and environmental determinants of health like clean air, safe drinking water, sufficient food, and secure shelter.<sup>7</sup> In addition, extreme weather events caused by climate change can disrupt both supply chains and healthcare access and delivery.

The NHS recognises the climate emergency as a health emergency and has declared the ambitious goal of achieving net zero by 2045 (see Box 1).<sup>8</sup>

#### Box 1

## Net-zero targets for the NHS

By 2040, for the NHS Carbon Footprint, with an ambition for an 80% reduction (compared with a 1990 baseline) by 2028 to 2032

By 2045, for the NHS Carbon Footprint Plus, with an ambition for an 80% reduction (compared with a 1990 baseline) by 2036 to 2039

The NHS carbon footprint includes GHG emissions associated with energy and water use, waste disposal, anaesthetic gas use, use of metered dose inhalers and business fleet and travel.

The NHS carbon footprint plus encompasses the NHS carbon footprint plus the GHG emissions of the NHS supply chain and staff, patient, and visitor travel.



The NHS is a major consumer of resources in pursuit of delivering safe, good-quality, patient-centred healthcare. In 2020, the NHS was responsible for 24.9 million tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e) (see Figure 3), contributing 4% of England's overall carbon footprint.

To meet the net-zero targets over the next 18-23 years will require every NHS organisation to play its part, and to go beyond decarbonising the NHS's energy use.



Figure 3: NHS carbon footprint plus

A considerable change to the way healthcare is provided will be necessary.

The creation of ICSs offers a unique opportunity to accelerate this transformation through greater collaboration between primary and secondary care, and healthcare and local authorities, and thereby strengthen the NHS's actions on carbon reduction.



# Green plans of SEL NHS organisations

Each NHS Trust has developed a green plan, which sets out their strategy for sustainability and carbon reduction. The SEL ICS Green Plan 2022-2025 serves as an overarching system-wide sustainability plan encompassing and aligning with the green plans of the five NHS Trusts (see Box 2), the Primary Care Green Plan for the ICS, as well as setting an ambition for collaboration with other organisations.

#### Box 2

Green plans of other SEL NHS organisations

Guy's and St Thomas's NHS Foundation Trust (GSTT) King's College NHS Foundation Trust (KCH) Lewisham and Greenwich NHS Trust (LGT) Oxleas NHS Foundation Trust (Oxleas) South London and Maudsley NHS Foundation Trust (SLaM)

Primary Care

# **Our Vision**

We are committed to developing South East London as an ICS leading in sustainability, working collaboratively with staff, partners and our patients and service users. We are focusing on making meaningful change to net zero as rapidly as possible to protect population health for our communities now and in the future.



# Current Status: SEL NHS Carbon Footprint

## **Overview**

The SEL NHS carbon footprint is estimated to be 769,652 tCO<sub>2</sub>e a year, this is equivalent to a single person taking 219,901 return flights from London to Hong Kong.

SEL NHS Trusts contribute 649,569 tCO<sub>2</sub>e (84%), primary care contributes 76,171 tCO<sub>2</sub>e (10%), and the CCG contributes 43,912 tCO<sub>2</sub>e (6%).

The largest contributor to greenhouse gas (GHG) emissions for the Trusts and the CCG/ICB is the supply chain, whereas the largest contributor in primary care is clinical emissions from items like medicines and inhalers.

# **NHS Trusts**

The NHS carbon footprint plus<sup>e</sup> of the five NHS Trusts in SEL ICS is estimated to be 649,569 tCO<sub>2</sub>e per year based on 2020/21 data. This is equivalent to a single person taking 185,591 return flights from London to Hong Kong. As shown in Table 1<sup>f</sup>, the supply chain is responsible for 78% of the carbon footprint plus of the five Trusts.

<sup>e</sup> The NHS carbon footprint plus includes GHG emissions associated with energy and water use, waste disposal, anaesthetic gas use, the use of metered dose inhalers, business travel, staff commuting, patient and visitor travel and the supply chain.

<sup>f</sup> NHS Trusts' GHG emissions have been estimated using the new SEL ICS reporting dashboard. The majority of the data is based on consumption and expenditure data from 2020/21; where this was missing, 2019/20 data was used as an estimate. The new dashboard will provide a consistent approach to calculating carbon emissions across SEL ICS in future.

#### Table 1: SEL ICS NHS Trusts carbon footprint

	GHG emissions (tCO <sub>2</sub> e)	Contribution
Supply chain & procurement	507,802	78%
Building energy	93,543	14%
NHS travel	36,553	6%
Anaesthetic gases & inhalers	8,751	1%
Business travel	1,126	0.2%
Fleet & leased vehicles	1,039	0.2%
Water & waste	754	0.1%
Total	649,569	

Emissions contributions from each source vary considerably among the Trusts. The emissions contributions associated with the supply chain and procurement vary between 55% and 85%. The contribution of building energy varies between 10% and 32%, that of NHS travel varies between 4% and 11%, and that of anaesthetic gases varies between 1% and 3%. For a detailed carbon footprint of each Trust, please see their respective Green Plans.

# Primary Care – General Practice

The carbon footprint of general practice in SEL ICS is estimated to be 76,171 tCO<sub>2</sub>e a year, this is equivalent to a single person taking 21,763 return flights from London to Hong Kong.

General-practice carbon emissions have been divided into:

- clinical emissions (medicines and inhalers), which contribute 59.5% to the total carbon footprint of general practice
- non-clinical emissions (energy, travel, goods, and services), which contribute 40.5% (see Table 2).

For a more detailed analysis of the SEL ICS carbon footprint for general practice, see the Primary Care Green Plan.

Table 2: Carbon footprint of SEL ICS Primary Care

	GHG emissions (tCO <sub>2</sub> e)	Contribution
Non-clinical	30,867	
Energy (estates)	7,521	10%
Staff Travel	10,531	14%
Patient Travel	6,050	8%
Business Services	4,510	6%
Goods and Procurement	2,255	3%
Clinical (all pharmaceuticals)	45,304	59%

The carbon footprint of general practice in SEL ICS excludes primary care services such as opticians, dentists, and pharmacies. Therefore, the carbon footprint of primary care in SEL ICS will be even greater than 76,171 tCO<sub>2</sub>e a year.

Estimating the carbon footprint of general practice was a desk-based exercise for which secondary data was extracted from databases held by the NHS, the Care Quality Commission (CQC), the National Travel Survey, and SEL ICS (refer to Appendix 1 in the Primary Care Green Plan for more information on the methodology used).

# Clinical Commissioning Group/ Integrated Care Board

The carbon footprint of SEL CCG/ICB is estimated to be 43,912 tCO<sub>2</sub>e a year based on 2020/21 data; this is equivalent to a single person taking 12,546 return flights from London to Hong Kong. As shown in Table 3, the commissioning of services not covered by the five NHS Trusts or 200+ general practices (GPs)<sup>7</sup> in SEL ICS is responsible for the majority of the CCG's/ICB's carbon footprint (70%). The commissioning of NHS Trust services and general practice has been excluded from the CCG/ICB carbon footprint because this has been included separately elsewhere (see Tables 1 and 2).

<sup>7</sup>This also includes local authority health and social care services



#### Table 3: Carbon footprint of SEL CCG

	GHG emissions (tCO <sub>2</sub> e)	Contribution
Commissioning (excluding Trusts and GPs)	30,766	70%
Procurement	12,590	29%
CCG office buildings (energy, water, and waste)	246	0.6%
Business travel	242	0.6%
Staff commuting	68	0.2%
Total	43,912	

Excluding commissioning, the carbon footprint of SEL CCG is estimated to be 13,146 tCO<sub>2</sub>e in 2020/21. As shown in Figure 4, procurement is responsible for the majority of the CCG's/ICB's carbon footprint (95.8%).



Figure 4: SEL CCG/ICB carbon footprint plus

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As shown in Figure 5, most of the emissions associated with procurement come from business services (51%), which include legal and professional fees, audits, advertising, and service charges. Information and technology services (e.g., computer software, networks, data lines and mobile telephones) contribute the second largest percentage (24%), and rent (10%) contributes the third largest percentage of procurement emissions. Combined, postage and publishing services, food, catering and hospitality services, and office equipment contribute only 1% of procurement GHG emissions.



Figure 5: CCG/ICB procurement emissions breakdown



GHG emissions from CCG/ICB office buildings and travel contribute 556 tCO<sub>2</sub>e, 4% of the CCG's/ICB's carbon footprint excluding commissioning. As shown in Figure 6, most of the CCG/ICB office and travel GHG emissions come from business travel (43.5%) and energy (43.3%).



Figure 6: CCG office buildings and travel GHG emissions

This carbon-footprint information is important because it shows the 'hotspots' where we can make the most impact. The results of carbon footprinting have been used to inform the development of the green plan; however, there is a need to balance addressing the highest contributors to emissions against what can practically be delivered within the timeframe for the plan.

# Areas of Focus Workforce and System Leadership Context

To drive the net-zero agenda with the urgency that is needed, system leadership and investment in our workforce are essential.

It is important for the leadership team of NHS organisations to show their commitment to address the urgency of climate change and their organisation's own impact on the environment, driving positive change from the top.

It is vital that staff and external stakeholders recognise that carbon reduction is part of the organisation's core business and understand their role in this. Embedding carbon reduction into all operations needs to be inclusive with a particular focus on disadvantaged populations. This is especially important when addressing travel, sustainable models of care, digital transformation, air quality, and green and blue space.

In addition to leadership, staff need to feel enabled and encouraged to implement sustainable change on the ground. Staff training in climate change, health and sustainable healthcare coupled with staff networks, e.g., green champions network, will be important components of supporting staff in embedding sustainability in their everyday work.



## Achievements to date

- The five NHS Trusts and the CCG/ICB have board-level sustainability leads and sustainability operational leads who are actively involved in driving change both collaboratively and in their individual organisations
- The Trusts have recognised the importance of climate-change mitigation for a few years and have already identified and delivered several actions
- Staff networks are in place in each of the Trusts and the CCG/ICB to engage staff in sustainability and carbon reduction
- Training programmes ranging from introductory courses to specialist sessions have been secured and will enable interested individuals across the CCG/ICB, Trusts and primary care to learn more about sustainability and carbon reduction and bring learning back into the organisation
- KCH now includes sustainability as part of all staff job descriptions and inductions
- The ICS has launched a platform which will run at least until March 2023 to encourage and enable staff to make personal pledges to improve sustainability. The platform has a leader board of organisations across the ICS, using friendly competition to encourage action
- A South London Greener Practice group has been established and GPs from South East London are being encouraged to join

## Commitment

• We will make carbon reduction and sustainability part of our core business



Workforce and System Leadership

## Actions for Year 1

- 1. NHS Trusts and CCG/ICB to have dedicated sustainability resource in place at board- and operational level to help drive the organisational net-zero agenda and grow the resource over time\*
- 2. Board-level leads at all NHS Trusts and the CCG/ICB to undertake sustainability training
- 3. CCG/ICB in collaboration with primary care to identify, educate, and resource clinical climate champions aligned with the ICS's 35 PCNs, who will in turn be supported by ICS-level leadership with protected time to work on the primary care green plan
- 4. CCG/ICB in collaboration with primary care to establish and develop the capacity of a steering group for primary care leadership in environmental sustainability
- 5. NHS organisations to ensure 1% of staff are given the opportunity to undergo sustainability training, and then annually thereafter until March 2025
- 6. CCG/ICB to develop an internal communication and engagement plan on behalf of all NHS organisations to influence sustainability changes
- 7. ICS to achieve 5000 pledges across the ICS for personal sustainability commitments

# Aim 1: All major NHS organisations to have a strong leadership commitment to sustainability

# Actions for CCG/ICB in collaboration with primary care

- Identify, educate, and resource clinical climate champions aligned with the ICS's 35 PCNs, who will in turn be supported by ICS-level leadership with protected time to work on the primary care green plan by March 2023
- Establish and develop the capacity of a steering group for primary care leadership in environmental sustainability by March 2023
- Explore the opportunities for clinical fellowships, to help support the implementation of the primary care green plan and sustainable quality improvement (SusQI) by March 2025

# Actions for NHS Trusts and CCG/ICB

- Have a dedicated sustainability resource in place at board- and operational level to help drive the organisational net-zero agenda and help grow the resource over time by March 2023\*
- Board-level leads to undertake sustainability training by March 2023



Workforce and System Leadership

### ICS Green Plan 2022-2025 27

Aim 2: All SEL NHS staff to be aware of the importance of carbon reduction and to be confident to drive sustainable change in their work and personally

#### Actions for NHS organisations (coordinated by the CCG/ICB)

- Ensure 1% of staff at all NHS organisations are given the opportunity to undergo sustainability training by March 2023, and then annually thereafter until March 2025
- Offer all staff the opportunity to join a staff engagement forum on sustainability by March 2024

## Actions for NHS Trusts and CCG/ICB

 Promote the e-learning for health module 'Introduction to Sustainable Healthcare' to all staff on an ongoing basis by March 2025

#### Actions for CCG/ICB

- Develop an internal communication and engagement plan on behalf of all NHS organisations to influence sustainability changes by March 2023
- Facilitate the dissemination of learning, examples of best practice, and resources for primary care by March 2025
- Develop and implement a rewards scheme (certification) to recognise and acknowledge achievements by individuals, general practices, and PCNs in carbon reduction and sustainable healthcare by March 2025

#### **Actions for ICS**

• Achieve 5,000 pledges across the ICS for personal sustainability commitments by March 2023 Workforce and ystem Leadership

# South East London ICS Air Quality

# Context

Burning fossil fuels not only results in GHG emissions, but also causes air pollution. Owing to its concentration of nitrogen oxides (NOx) and particulate matter (PM<sub>2.5</sub>), poor air quality can have a detrimental impact on health. Exposure to air pollution affects lung function, exacerbates asthma, and increases the risk and severity of respiratory and cardiovascular diseases, leading to reduced life expectancy.<sup>9</sup> According to Imperial College London, 3,600 to 4,100 people die from air pollution in London each year<sup>10</sup>.

On the 4 March 2022, representatives from the CCG, the five trusts, the six local authorities and general practice came together in the first ever 'Sustainability Summit' in South East London and agreed that a key Area of Focus for health and social care in South East London to collaborate on should be Air Quality.

Since December 1997, each local authority in the UK has been carrying out a review and assessment of air quality in their area. If a local authority finds any places where the national air quality objectives are not likely to be achieved, it must declare it as an Air Quality Management Area<sup>11</sup>. This is the case for all boroughs of London:

- All South East London boroughs have an Air Quality Management Area (AQMA) in respect of NOx and all, apart from Bromley and Lewisham in respect of PM<sub>25</sub>
- In Lambeth, the whole borough has been declared an AQMA
- In Lewisham, most of the borough has been declared an AQMA
- Southwark estimates that 200 deaths in its borough are caused by air pollution. Improving local air quality has been designated a priority of Southwark council, with 45% of Southwark's residents regularly exposed to high levels of NO<sub>2</sub>



## Achievements to date

- Most of the achievements to date and planned actions to address air quality fall under the Areas of Focus concerning travel and transport, energy use, and green/blue space, and will be discussed in the respective sections of the green plan. However, there are several successes and planned actions that are not covered in these sections.
  - Air quality monitors for major Trust locations and one per borough have been secured for two years
  - In 2020, Lambeth council implemented five trial Low Traffic Neighbourhoods to reduce vehicle traffic and improve air quality in neighbourhood streets, with plans to implement two more in the future
  - Southwark council implemented a 'School Streets' campaign which encourages schools to close roads outside of the school during certain times of the day, e.g., morning drop-off and afternoon pick-up



Clean Air Village Project

The Clean Air Village project is an engagement initiative run by the Cross River Partnership in 16 'villages' across 12 London boroughs identified as having high levels of air pollution. The programme involves businesses, hospitals, and the wider community in tackling air pollution and traffic congestion. King's College Hospital was the first hospital campus to join the project. Hospital staff codesigned an air quality monitoring project which identified air pollution 'hotspots' and clean-air spaces. The results were used by staff to develop interventions to help patients and staff avoid polluted areas and to reduce air pollution through anti-idling campaigns and the promotion of decreased car use.

## Commitment

• We will work collaboratively across ICS to improve air quality in South East London



Air Quality

## Actions for Year 1

- 1. ICS to identify appropriate locations for borough air quality monitoring and install monitors (nodes)
- 2. ICS to mobilise a joint programme, and agree priorities for ICS action to improve air quality
- 3. NHS Trusts to install air quality monitors at major sites
- 4. NHS Trusts to review data from air quality monitors and identify actions
- 5. NHS Trusts to promote anti-idling at major locations

Aim 1: Launch a joint programme across the ICS to take action on air quality

#### Actions for ICS

- Mobilise a joint programme and agree priorities for ICS action to improve air quality by June 2022
- Identify appropriate locations for borough air quality monitoring and install monitors (nodes) by September 2022
- Evaluate actions completed and their impact, as well as overall air quality across SEL, by March 2025
- Provide training for primary care staff on the health impacts of air pollution by March 2025

Aim 2: Improve the understanding of air quality at NHS estates and promote air quality improvements

#### **Actions for NHS Trusts**

- Install air quality monitors at major sites by May 2022
- Review data from air quality monitors and identify actions by March 2023
- Promote anti-idling at major locations by March 2023

Air Quality



# South East London ICS Travel and Transport

# Context

Reducing unnecessary travel and transport and changing travel and transport modes not only contribute towards carbon reduction but also improve air quality and therefore health. Promoting active travel has additional health co-benefits by increasing regular physical activity.<sup>12</sup>

In South East London, staff commuting and patient and visitor travel accounts for around 6% of the five NHS Trusts' carbon footprints, varying between 4% and 11%. For general practice, patient travel contributes 8%, and staff commuting 14%, a total of 22%.

Over 50,000 staff work at the five NHS Trusts and in primary care. There are 3.45 million outpatient attendances a year and 1.9 million patients registered with SEL GPs. Reducing and decarbonising their travel can have a substantial impact on lowering GHG emissions.

## Achievements to date

The majority of NHS Trusts have started to implement initiatives that reduce travel and transport-related emissions, including:

- Installing electric vehicle (EV) charging points
- Initiating decarbonisation of the business fleet
- Delivering pathology samples between acute sites by electric cargo bikes
- Promoting active travel, in particular bike-to-work schemes
- Introducing an anti-idling campaign
- Consolidating patient transport and deliveries (see Case-study 2)
- Have developed or are currently developing sustainable travel plans

GSTT are piloting a riverboat delivery service that could replace three delivery trucks which cover around 1,500 miles a week. Each truck removed from the road could save approximately 708 kgCO<sub>2</sub>e a week.



# Consolidation of deliveries

In 2019, a new consolidation centre was opened by GSTT in Dartford eliminating 35,000 truck deliveries (90%) to two hospital sites. Deliveries from the consolidation centre are undertaken by electric trucks. There are plans to scale up this new delivery model across SEL ICS partner organisations, with the aim of removing 100,000 truck deliveries a year.

## Commitment

 We will reduce and decarbonise our travel and transport while supporting safe and active travel for staff, patients, and visitors



## Actions for Year 1

- 1. NHS Trusts and CCG/ICB, for new purchases and lease arrangements, to solely purchase and lease cars that are ultra-low emissions vehicles (ULEVs) or zero emissions vehicles (ZEVs)\*
- 2. NHS Trusts and CCG/ICB to assess the use of flights for business, and ensure these are used appropriately
- 3. CCG/ICB and NHS Trusts to implement travel surveys, measuring patient, visitor, and staff travel to gain an understanding of travel patterns and any barriers preventing staff, patients, and visitors from using active travel
- 4. CCG/ICB to support active travel for NHS organisations with the training of champions, confidence training, and other measures
- 5. CCG/ICB with primary care to develop and deliver an education package for primary care health professionals to enhance the dialogue with patients and service users about the benefits of active travel
- 6. ICS to promote apps that promote safe cycling and walking routes
- 7. ICS to identify additional mechanisms to incentivise active travel for staff

# Aim 1: To reduce fleet and business travel related GHG emissions

#### Actions for NHS Trusts and CCG/ICB

- For new purchases and lease arrangements, solely purchase and lease cars that are ULEVs or ZEVs from April 2022\*
- Conduct those business/operational meetings that do not necessitate travel virtually/remotely using appropriate technology (ongoing)
- Assess the use of flights for business, and ensure these are used appropriately by March 2023



Aim 2: To reduce travel emissions by increasing active travel and the use of public transport by staff, outpatients, and visitors

#### Actions for NHS organisations (coordinated by the CCG/ICB)

• Explore whether additional facilities to support active travel are needed (e.g., bike racks, showers) by March 2024

#### **Actions for NHS Trusts**

Develop a Sustainable Travel Plan by March 2024\*

#### **Actions for ICS**

- Promote apps that promote safe cycling and walking routes by March 2023
- Identify additional mechanisms to incentivise active travel for staff by March 2023
- Promote and increase uptake of inclusive bike hire schemes, e.g., Wheels4me, an equitable, affordable, and accessible scheme to enable as many disabled people as possible to benefit from the opportunity to hire a bike by March 2024
- Work with partners to advocate for improvements to public transport connections to healthcare sites by March 2025
- Identify and promote walking and cycling routes between healthcare sites by March 2025

#### Actions for the CCG/ICB

- Support active travel for NHS organisations with the training of champions, confidence training, and other measures by March 2023
- Implement a travel survey for NHS organisations, measuring patient, visitor, and staff travel to gain an understanding of travel patterns and any barriers preventing staff, patients, and visitors from using active travel by March 2023
- Develop and deliver an education package for primary care health professionals to enhance the dialogue with patients and service users about the benefits of active travel by March 2023

#### Actions for primary care

 Offer patient-focused cycling sessions from general practice surgeries by March 2025

Aim 3: To reduce travel emissions associated with deliveries

#### Actions for NHS Trusts

- Consolidate deliveries to and between sites by March 2025
- Use EVs or electric cargo bikes for as much inter-site transport as possible by March 2025
- Work with suppliers to decarbonise the transport fleet by March 2025

#### Actions for CCG/ICB

• Work with local pharmacies on decarbonising home deliveries by March 2025


## Estates and Facilities Context

#### **Buildings**

As the NHS is one of the UK's largest estate owners and with new hospitals, practices, and facilities continually being built and refurbished this creates a considerable challenge in aligning with net-zero carbon targets. Traditional construction has a large environmental impact, and conventional hospital design is often not conducive to optimal energy efficiency. Net carbon zero should be considered from the outset in early hospital design and construction to ensure both the embodied and operational GHG emissions of new builds and refurbished hospitals are reduced. Moreover, new developments need to increase biodiversity by 10% as set out in the New Environment Bill 2021<sup>13</sup>, which will contribute to much needed biodiversity recovery.

#### Energy

GHG emissions from fossil fuels combined with the rising cost of energy and issues of uncertain supply means all NHS organisations need to ensure they are reducing energy demand and decarbonizing energy sources, while ensuring a sustainable supply.

Building energy is responsible for 14% of the total carbon footprint of the five NHS Trusts in SEL, 10% of the primary care carbon footprint, and 2% of CCG offices emissions. Although the actions needed to meet the NHS's carbon targets must be more wide-ranging, estates and facilities services are a key contributor to carbon emissions that are in the direct control of the NHS, and over which cost-effective actions can be taken.

#### Waste

It is important to reduce waste, because of the environmental damage it does, its associated GHG emissions, and the emissions released during the manufacturing of new items. NHS organisations have a legal duty to dispose of waste safely and appropriately as well as adhering to the principles of the waste hierarchy: reduce, reuse, recycle, energy recovery, disposal. Where reduce and reuse are not feasible, NHS organisations must ensure correct waste segregation. Ensuring correct waste segregation is also important for reducing not only carbon emissions but also costs because clinical waste streams are more expensive and more carbon intensive than recycling and domestic waste streams.



### Achievements to date

#### **Buildings**

- The ICS Estates programme is committed to supporting the improvement of sustainability and has drafted a set of principles for engagement and adoption at a system and organisational level. In addition, in early 2022/23 there will be a review of all primary care estates to identify opportunities for sustainability improvement.
- Many of the Trusts are incorporating sustainable design principles into new builds and refurbishments through standards like BREEAM (see Case-study 3).



Sustainable building design principles at Maudsley Hospital (SLaM)

At Maudsley Hospital, sustainability principles have been integrated into the design of the Douglas Bennett House (DBH) and Children and Young Persons building (CYP). The buildings have been devised to improve wellbeing and reduce stress through biophilic design while increasing energy efficiency. The CYP building will have three roof terraces with planters, green roofs, and a children's playground, and DBH will have lightwells to increase natural light in the building which would otherwise require artificial lighting. The aim is for the buildings to achieve a BREEAM 'Excellent' rating through energy efficiency systems and solar panels on the roof of DBH.

#### Energy

NHS Trusts have made considerable progress in reducing GHG emissions from their estate by increasing energy efficiency, such as:

- optimising Building Energy Management Systems (BEMS)
- heating-ventilation-air-conditioning (HVAC) improvements
- LED lighting, either switching to LEDs or replacing less efficient lighting with LEDs when required during routine maintenance activities. All Trusts have made considerable changes with respect to LED lighting, for example, Oxleas have rolled out LEDs to approximately 80% of their estate

KCH has successfully applied for £3.2 million funding to support low-carbon heating solutions and LED lighting in the Golden Jubilee building



Estates and Facilities

Three out of the five NHS Trusts have moved to 100% renewable electricity tariffs while the other Trusts plan to move when their current contract is scheduled for renewal. It is important to note that at the time of writing the cost of renewable energy guarantees of origin (REGOs) has increased considerably and, with the limitations on capital spend, the ability to install on-site renewable energy generators has become more challenging. The Trusts' renewable energy position is not guaranteed.

There is an ask for the NHS at a national level to support access to affordable renewable energy while this continues to be an area of focus at a local level. Oxleas has developed a heat decarbonisation plan supported by funding from the Low Carbon Skills Fund (see Case-study 4).

Plan



Estates and Facilities

# Case-study 4

Oxleas recognised that the greatest challenge they are likely to face in meeting their NHS carbon footprint targets is the decarbonisation of their heating systems. Oxleas obtained grant funding from the Low Carbon Skills Fund (LCSF) to develop Heat Decarbonisation Plans (HDP) for 5 key sites within their large estate portfolio which will be critical in understanding the technical and financial implications of replacing fossil fuels with low-carbon alternatives. It is anticipated the plans will

**Oxleas Heat Decarbonisation** 

#### Waste

• LGT achieved a 75% reduction in waste emissions in 2020/21 compared with 2019/20, largely due to a reduction in waste sent to landfill

be completed and approved by 31 March 2022.

- All Trusts and the CCG/ICB have committed to printing for meetings only when necessary
- Many of the Trusts have undertaken staff engagement to increase recycling rates. For example, SLaM has undertaken recycling roadshows and audits across its main sites in interactive recycling awareness sessions

### Commitment

• We will optimise our resource use and reduce emissions from our estate in line with the national target of 80% reduction by 2032

### Actions for Year 1

- 1. NHS organisations to share best practice on energy efficiency and decarbonisation
- 2. NHS organisations to continue to improve energy efficiency, including switching to LED lighting
- 3. NHS Trusts to develop a road map for decarbonisation of heating and hot-water systems for main buildings
- 4. NHS Trusts to procure electricity from 100% renewable sources\* (or when existing contract can be exited)
- 5. CCG/ICB to support NHS Trusts by lobbying on REGOs
- 6. Primary care to measure baseline energy use within practices
- 7. CCG/ICB to support primary care with actions to reduce estatesrelated emissions
- 8. ICS to make the assessment of sustainability part of the business case process and as a requirement to proceed with all estate and facility projects
- 9. ICS to implement sustainability criteria for refurbishments according to NHS guidance (expected during 2022)
- 10. NHS Trusts and CCG/ICB to reduce printing as much as possible for all meetings except for accessibility reasons
- 11. NHS Trusts and CCG/ICB to introduce recycling facilities in all buildings
- 12. NHS Trusts and CCG/ICB to undertake a campaign to increase recycling rates
- 13. NHS Trusts and CCG/ICB to identify potential mechanisms to increase the return of equipment, such as walking aids
- 14. NHS Trusts to ensure no clinical waste is sent to landfill
- 15. NHS Trusts to ensure that domestic waste is not inappropriately disposed of in clinical waste





Estates and Facilities

#### Aim 1: To reduce carbon emissions from energy use

## Actions for all NHS organisations (coordinated by the CCG/ICB)

- Share best practices on energy efficiency and decarbonisation (ongoing)
- Continue to improve energy efficiency, including switching to LED lighting (ongoing)

#### **Actions for NHS Trusts**

- Develop a road map for decarbonisation of heating and hot-water systems for main buildings by March 2023
- Procure electricity from 100% renewable energy sources by March 2023\* (or when existing contracts can be exited)
- Conduct a feasibility study for on-site electricity generation by March 2025

#### Actions for CCG/ICB

- Support primary care with actions to reduce estates-related emissions by March 2023
- Investigate opportunities for bulk purchasing of 100% renewable electricity for general practices by March 2024

#### Actions for primary care

- Primary care to measure baseline energy use within practices by March 2023
- Sustainability to be incorporated into PCN estates surveys and subsequent delivery and response by March 2025
- Explore the potential for electricity self-generation at individual practices by March 2025

## Aim 2: To improve the sustainability of new build and refurbishment

## Actions for NHS Trusts and CCG/ICB

- Construct all new build to net-zero carbon and aim for BREEAM excellent/outstanding (or equivalent) by March 2024 (Exceptions are agreed by estate and sustainability executives.)
- Integrate green and blue space and biophilic design principles into new builds and, where appropriate, refurbishments by March 2025

#### Actions for ICS

- Make the assessment of sustainability part of the business case process and as a requirement to proceed with all estates and facilities projects by March 2024
- Implement sustainability criteria for refurbishments according to NHS guidance (expected during 2022)

## Estates and Facilities

#### Aim 3: To reduce carbon emissions associated with waste

#### Actions for NHS Trusts and CCG/ICB

- Reduce printing as much as possible for all meetings except for accessibility reasons by April 2022
- Introduce recycling facilities in all buildings by March 2023
- Undertake a campaign to increase recycling rates by March 2023
- Identify potential mechanisms to increase the return of equipment, such as walking aids by March 2023
- Identify the main reasons why patients do not return equipment and create a plan to address these barriers and increase return by March 2024
- Send any domestic waste that cannot be reused or recycled to energy recovery by March 2025

#### **Actions for NHS Trusts**

- Ensure no clinical waste is sent to landfill by July 2022
- Ensure that domestic waste is not inappropriately disposed of in clinical waste by March 2023
- Explore opportunities for remanufacturing of single-use medical instruments by March 2025



# Sustainable Models of Care

## Context

Transforming our models of care is pivotal to reaching net zero. Although many Areas of Focus address the GHG emissions of healthcare's operations and infrastructure, almost all of these are influenced by clinical decisions about which services we offer and the way we deliver them. Sustainable clinical practice is underpinned by four principles<sup>14</sup> which maximise health outcomes while reducing both healthcare demand and the carbon intensity of health services.

#### 1. Disease prevention and health promotion.

Disease prevention is the best form of healthcare. Together with King's Health Partners we have identified five risk factors, the 'Vital 5', affecting both long-term conditions and premature deaths: smoking, alcohol, blood pressure, mental ill health, and obesity (see Figure 2). If we can prevent or address these risk factors early on, demand for secondary and tertiary care, which tend to cause more GHG emissions than primary care, will be reduced. For prevention to be effective, close collaboration across local authorities, public health, primary and secondary care, and across specialties is required.

#### 2. Self-care and patient empowerment.

To reduce disease progression and pre-empt complications, patients need to feel empowered to take on a greater role in the management of their own health and healthcare.

Patient education and empowerment are effective ways to increase compliance with treatment. For example, if a person with diabetes can control their blood sugar and blood pressure levels, this will delay the onset of diabetic retinopathy. Informed patients are also well placed to improve coordination between health professionals and reduce misunderstandings or duplications, resulting in fewer appointments. Developments in digital technology bring additional opportunities for patients to manage their condition better.



#### 3. Lean service delivery.

Reviewing clinical pathways will help to identify and reduce low-value activities, e.g., unnecessary blood or diagnostic tests.

Health professionals can support this by referring to the relevant patient pathway and providing clear, evidence-based guidance. Frameworks like Sustainability in Quality Improvement (SusQI) and programmes like Getting it right first time (GIRFT) and Choosing Wisely can support clinical pathway reviews. Even where clinical input is of high value, a greater use of digital technology, e.g., online records, email, telephone and teleclinics, can reduce travel emissions by moving information instead of patients, staff, and laboratory samples. Further efficiencies can follow from better planning of services, such as one-stop clinics.

#### 4. Lower carbon alternatives.

Preferential use of medical products and technologies with lower environmental impact.

Choosing clinically effective products and technologies with the best environmental profile will not only reduce healthcare's carbon footprint, but also encourage the future development of such products.

Following the four principles of sustainable clinical practice will provide patient-centred care, improve population health outcomes, and reduce health disparity, all of which represent the focus of ICSs.

In making changes to models of care, it will be important to take the time to test and learn, to work with clinical leads across the system to develop an approach that will enable both individual organisations and the system to evaluate and embed sustainability into existing models of care, and to pilot and share learning about new models of care.



Sustainable Models of Care

### Achievements to date

Most of the Trusts and primary care understand the importance of sustainable models of care. They recognise the pivotal role prevention, early intervention, self-management, reducing unnecessary treatments and interventions, overdiagnosis, integrated care pathways, and social prescribing can take in improving health outcomes while reducing environmental and financial impacts.

- SLaM's Recovery College is offering courses to service users or carers to become experts in their own recovery or the recovery of the person they look after. SLaM has also installed outdoor gym facilities for people with mental health problems at their Ladywell Unit (see Case-study 5).
- GSTT have been embedding 'Making Every Contact Count' (MECC) and King's Health Partners Vital 5 to improve population health and reduce health inequalities. Level 1 MECC training is currently offered to all staff and delivered as part of the preceptorship programme for all newly registered nurses. Next steps include embedding the Vital 5 further by aiming to screen all patients for alcohol consumption, smoking, blood pressure, mental health, and healthy weight.
- North Lewisham PCN in partnership with its local population has codesigned an innovative place-based approach combining clinical practice with community development. It aims to identify patients at increased risk of particular conditions, predict the timing and location for interventions, and allow residents the ability to design and tailor health services available within their community.

## Case-study 5

Outdoor gym facilities for people with mental illness at Ladywell Unit, Lewisham (SLaM)

An outdoor gym was installed at the unit in 2020 to encourage patients admitted to the hospital to participate in regular exercise, reduce levels of stress and frustration, increase opportunities for access to fresh air, and to provide a meaningful alternative to smoking.

During the first wave of the COVID-19 pandemic, many patients were locked down in the unit causing high levels of distress. The new outdoor gym facility was promoted, and patients were encouraged to exercise daily with the aim of improving wellbeing to aid recovery.

The outdoor gym has been positively received by patients and staff with 90.9% of patients who were surveyed saying they believe the gym had an overall positive effect on their health. Most patients said they were using the outdoor gym at least twice a week for 30 minutes at a time, and 89% of patients reported cutting down on smoking since they started using the gym.

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Sustainable Models of Care

## Commitment

• We will review our existing and develop new models of care to reduce their environmental impact and improve social value

### Actions for Year 1

- 1. CCG/ICB to identify and establish appropriate working group(s) for sustainable models of care
- 2. CCG/ICB in partnership with other NHS organisations to establish an approach to developing and evaluating the sustainability of models of care
- 3. CCG/ICB in partnership with other NHS organisations to identify first pilot(s) for sustainable models of care (clinical pathways identified)
- 4. CCG/ICB to support PCNs to explore innovative models of care that aim to tackle neighbourhood health inequalities and create health within communities
- 5. ICS to continue to develop and improve approaches that prevent ill health led by the Prevention programme
- 6. ICS to discuss sustainability issues systematically with patient groups/service users/local populations involved in the development of new models of care

#### Aim 1: To develop and evaluate sustainable models of care

## Actions for CCG/ICB and NHS organisations

- Establish an approach to developing and evaluating the sustainability of models of care by March 2023
- Identify first pilot(s) for sustainable models of care (clinical pathways identified) by March 2023
- Involve patient groups/service users/local populations in the codevelopment of new models of care by March 2025
- Involve the voluntary, community and social enterprise (VCSE) sector in the development of sustainable models of care by March 2025

#### Actions for CCG/ICB

 Identify and establish system working group(s) for sustainable models of care by March 2023

## Actions for CCG/ICB and primary care

ICS Green Plan 2022-2025

• Support PCNs to explore innovative models of care that aim to tackle neighbourhood health inequalities and create health within communities by March 2023

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Aim 2: To increase the emphasis on prevention, early intervention, and alternative prescribing

#### Actions for NHS organisations (coordinated by the CCG/ICB)

• Work with local authorities and the VCSE sector to expand social prescribing services according to health priorities by March 2025

#### Actions for primary care

 Practice teams to support patients to become more physically active, for instance, through training sessions to become a Clinical Champion for Physical Activity, by March 2025

#### Actions for the ICS

## Actions for NHS Trusts and primary care

- Consider embedding prevention at key points in patients' contact with healthcare where appropriate, for instance, by utilising Make Every Contact Count (MECC) by March 2025
- Consider using the King's Health Partners 'Vital 5' key metrics to support the prevention and early detection of a wide range of long-term conditions where appropriate by March 2025

Sustainable Models of Care

- Continue to develop and improve approaches that prevent ill health led by the Prevention programme (ongoing)
- Discuss sustainability issues systematically with patient groups/service users/local populations involved in the development of new models of care (ongoing)

## Aim 3: To include sustainability considerations in quality improvement

#### **Actions for NHS Trust**

- Offer staff training in SusQI by March 2024
- Embed sustainability considerations in quality improvement projects using the SusQI framework by March 2025

#### Actions for CCG/ICB

• Include sustainable elements in the premium specifications for primary care for 2023/24

# **Digital Transformation**

## Context

Digital transformation features strongly in the NHS Long Term Plan. Its implementation has been accelerated during the COVID-19 pandemic to guarantee continuity in healthcare provision. Using digital technology in healthcare delivery can:

- **1. Support clinical care:** Remote consultations offer opportunities to meet the rising demand for healthcare and offer patients flexibility.
- 2. Empower patients: Giving patients access to their own health records and the development of digital tools for patients to manage long-term conditions will strengthen patients' ability for self-care thereby reducing healthcare demand.
- **3. Support clinical efficiency:** Electronic patient records will improve coordination between primary, secondary, and tertiary care and improve communication between health professionals and support services, e.g., laboratory services, thereby reducing misunderstandings and duplication.
- **4. Support healthcare staff:** Online meetings facilitate flexible working and save time travelling to and from face-to-face meetings.
- **5. Improve population health:** Digital technology can support ICSs in better understanding their population's healthcare needs and how to meet them.

Digitally enabled primary and outpatient care can improve the sustainability of models of care by reducing GHG emissions related to travel, and other resource use associated with outpatient and GP appointments. Despite the potential environmental benefits, digital technology needs to be used with care and consideration to avoid compromising clinical outcomes and introducing or exacerbating inequalities in access to care.



### Achievements to date

Together with our key partners we have developed a Digital Strategy for 2021-2025 which recognises digital transformation as a key driver of change. It explains how digital transformation will become an integral part of our clinical, business and population health strategies at ICS system level and at Trust level.

Owing to the COVID-19 pandemic, healthcare providers have conducted many services remotely.

- Oxleas have evaluated their move to video appointments, helping them to decide which appointments should continue to be conducted virtually. Positive feedback concerning Greenwich's mainly online mental health Increasing Access to Psychological Therapies (IAPT) service has supported Oxleas' decision to continue with the service online.
- Ensuring access to digital care has been a priority for the South London Listens programme which has been led by SLaM. South London Listens Action Plan aims to prevent a mental health crisis arising from the effects of the COVID-19 pandemic. Priority 1 in the action plan is to address loneliness, social isolation, and digital exclusion<sup>15</sup>.
- In primary care, most general practices are offering online consultations. During December 2021, 49.1% of general practice appointments attended across South East London were face to face, 47.9% were telephone appointments, and 0.4% were home visits (2.6% were unknown).

LGT switched to e-payslips (in January 2022) making considerable savings in paper, printing and postage costs.



### The Mental Health Phone Advice & Guidance Project in Greenwich

The Mental Health Phone Advice & Guidance Project in Greenwich is a service in which health professionals can speak to mental health specialists from Oxleas NHS Foundation Trust via telephone in seconds.

1. This service has improved communication between primary and secondary care

2. It has also reduced unnecessary referrals (with reduced unnecessary staff and patient travel)

3. Each phone call takes 39 seconds on average and can be done with the patient in the consulting room

4. 48% of calls to the service have resulted in a referral being avoided.



Digital Transformation

## Commitment

• We will continue with digital transformation to improve the sustainability of healthcare without compromising the quality of our care and exacerbating inequalities in access to care

### Actions for Year 1

- 1. NHS Trusts to conduct outpatient appointments remotely where clinically appropriate and, taking account of patient preferences, aiming for 25% of hospital outpatient appointments to be delivered remotely overall\*
- 2. NHS organisations to evaluate different types of appointments to establish their clinical appropriateness and patient preferences for conducting them remotely
- 3. CCG/ICB and primary care to continue the digitisation of patient records in general practice across the ICS
- 4. Primary care to work with CCG/ICB to identify current baseline for digital transformation of primary care, good practice across SEL, and barriers to digitalisation
- 5. Primary care to work with CCG/ICB to review a digital support package for patients, which could include expansion of remote monitoring to people who would benefit most

## Aim 1: To consider the use of digital technology as part of sustainable models of care

## Actions for all NHS organisations (coordinated by the CCG/ICB)

- Evaluate different types of appointments to establish their clinical appropriateness and patient preferences for conducting them remotely by March 2023
- Explore and evaluate digital technology options for self-care by March 2024
- Offer digital self-care options to patients by March 2025
- Support options for general practice staff to work from home where appropriate by March 2025

Digital Transformation



#### **Actions for NHS Trusts**

 Conduct outpatient appointments remotely where clinically appropriate and, taking account of patient preferences, aiming for 25% of hospital outpatient appointments to be delivered remotely overall by March 2023\*

#### Actions for primary care

- Work with ICS Digital Team to identify current baseline for digital transformation of primary care, good practice across SEL, and barriers to digitalisation by March 2023
- Work with ICS Digital Team to review a digital support package for patients, which could include expansion of remote monitoring to people who would benefit most by March 2023
- Offer all patients a Digital First appointment by March 2024

## Aim 2: To ensure patients have access to digitally enabled healthcare

## Actions for all NHS organisations (coordinated by the CCG/ICB)

- Identify population groups at risk of digital exclusion by March 2024
- Jointly develop options to mitigate digital exclusion by March 2024

#### Aim 3: To digitalise patient records and communication

#### Actions for CCG/ICB

- Continue the digitisation of patient records in general practice across the ICS (ongoing)
- Develop a consistent and practical electronic health record which can be shared across primary and secondary care including urgent care by March 2025

#### Actions for NHS Trusts and primary care

• Move patient communication to digital channels where appropriate considering accessibility requirements by March 2025

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## Medicines Context

Medicines account for 25% of GHG emissions in the NHS. To address the GHG emissions associated with medicines, we need to decarbonise medicine production, reduce the carbon footprint of medicine use, optimise prescribing/use and stock-keeping in hospitals and at home, and improve medicine disposal.

Medicines are important and beneficial for many people by supporting them to stay well and lead a fulfilling life. Patient-centred prescribing will improve health outcomes, leading to a reduction in GHG emissions associated with poor care which can result in emergency admissions, complications, and inpatient stays.

Despite these obvious benefits of medicines, it has been estimated that 10% of medicines in primary care alone are overprescribed, which means that the medicine 'is not needed or wanted or where harm outweighs the benefits'.<sup>16</sup> As there are over 1.1 billion prescription items dispensed each year in primary care in England, the scale of waste could be substantial.

Within medicines, metered dose inhalers (MDIs) and anaesthetic gases are part of the small number of medicines that contribute a high proportion of GHG emissions. Owing to their propellant gases, MDIs are responsible for 3%, and anaesthetic gases for 2% of the NHS' GHG emissions.

Among anaesthetic gases, desflurane is the gas with the highest carbon footprint, the global warming potential of which is 2,540 times higher than that of carbon dioxide. Therefore, there is an urgent need to reduce desflurane use. Other anaesthetic gases need to be considered as well. Nitrous oxide has a global warming potential of 265 kgCO<sub>2</sub>e<sup>17</sup> and contributes 75% of NHS's total anaesthetic gas carbon footprint. KCH and GSTT are among the highest users of nitrous oxide in London. This might be partly due to nitrous oxide wastage which can be high due to system leakages, ineffective stock management, and clinical wastage.

In respect to MDIs, high-quality, low-carbon asthma care can be achieved by improving asthma control through treatment adherence, improving patients' inhaler techniques, reducing the use of high-volume inhalers, and considering the use of dry powder inhalers (DPIs) during joint decisionmaking with patients.

### Achievements to date

Case-study 7

- LGT and KCH have made big strides towards reducing their desflurane use. LGT has stopped using desflurane altogether, while at KCH since April 2021 desflurane comprises only around 4% of the volume of all volatile anaesthestic gases. GSTT has made considerable progress in lowering its use but at the time of writing cannot quantify the reduction.
- South East London ICS is working to address overprescribing with medicines optimisation embedded in all sectors of care. The ICS has established an Integrated Medicines Optimisation Committee (IMOC), which includes a Responsible Respiratory Prescribing Group (RRPG) as a subgroup. The RRPG provides a forum for healthcare professionals from across acute, community, and primary care to work together to develop consistent, sustainable, and cost-effective prescribing guidelines and strategies in respiratory disease for both adults and children. The ICS will be appointing a System Lead Pharmacist for overprescribing to work not only within the ICS but also externally to oversee strategy and change.

Medicines

Improving adherence to inhaled corticosteroid and reducing over-reliance on short-acting beta-2 agonists (SABA) (Lambeth)

Between 2016 and 2019, the locally commissioned Integrated Respiratory Team and specialists supported general practice focused on key respiratory processes to improve the quality of care for common respiratory diseases in a primary-care setting. It:

- reduced the percentage of people with asthma receiving 6 or more prescriptions for SABA annually from 29% to 23% of asthma patients (21% reduction)
- increased the percentage of asthma patients using inhaled corticosteroids regularly (11 or more prescriptions annually) from 48% to 60% (25% increase)
- increased the percentage of patients prescribed inhalers receiving an inhaler technique check from 27% to 72% (167% increase)
- increased the percentage of patients using spacers for pressurised MDIs (pMDIs) from 43% to 70% (63% increase)
- increased the percentage of adult asthma patients with a Personalised Asthma Action Plan from 56% to 93% (66% increase)
- reduced the percentage of patients needing high-dose inhaled corticosteroids
- reduced prescribing costs

Most of the impact was achieved through 'Virtual Clinics' and upskilling healthcare professionals in primary care settings

## Commitment

• We will reduce the environmental impact of our medicines through the optimisation of prescribing, the use of low-carbon alternatives, and appropriate disposal

### Actions for Year 1

- 1. NHS Trusts to measure and monitor anaesthetic gas usage annually (by type) to calculate baseline data across the ICS
- 2. NHS Trusts to reduce the proportion of desflurane to 5% of the volume of all volatile gases used in surgery\*
- 3. NHS Trusts to reduce the use of nitrous oxide, e.g., by reducing system leaks, improving stock management, and reducing clinical wastage
- 4. NHS organisations to collaborate on the development of a plan to tackle overprescribing and polypharmacy
- 5. ICS (IMOC) to analyse medicines data to help identify patients most at risk of overprescribing, polypharmacy, or over-ordering at PCN and practice level
- 6. NHS Trusts and primary care to implement quality improvement projects to improve asthma control
- 7. NHS Trusts and primary care to implement quality improvement projects to reduce the environmental impact of inhalers\*
- 8. Primary care in collaboration with the SEL RRPG to run educational events about sustainable respiratory care
- 9. ICS (RRPG) to set up a working group to review existing local formulary recommendations and associated guidelines for adult asthma and COPD
- 10. ICS (RRPG) to set up a working group to establish system-wide formulary recommendations and associated guidelines for asthma in children and young people
- 11. ICS (RRPG) to develop guidelines for inhaler prescribing which will include stronger references to the environmental impact of treatments to help guide healthcare professionals in joint decision-making with patients



## Aim 1: To reduce GHG emissions associated with anaesthetic gas use

#### Target

• Reducing the proportion of the volume of desflurane to 5% of the volume of all volatile gases used in surgery

#### **Actions for NHS Trusts**

- Measure and monitor anaesthetic gas usage annually (by type) to calculate baseline data across ICS by March 2023
- Reduce the proportion of the volume of desflurane to 5% of the volume of all volatile gases used in surgery by March 2023
- Reduce the use of nitrous oxide, e.g., by reducing system leaks, improving stock management, and reducing clinical wastage by March 2023

#### Aim 2: To reduce medicine waste

## Actions for NHS organisations (coordinated by the CCG/ICB)

 Collaborate on the development of a plan to tackle overprescribing and polypharmacy by March 2023

## Actions for ICS (Integrated Medicines Optimisation Committee)

- Analyse medicines data to help identify patients most at risk of overprescribing, polypharmacy, or over-ordering at PCN and practice level by March 2023
- Provide training and education in medicines optimisation by March 2025
- Work with pharmacies to expand Structured Medication Reviews by March 2024
- Support community pharmacists to increase discharge medicines service and new medicines service interventions by March 2025

Medicines

## Aim 3: To reduce the GHG emissions associated with inhaler use

## Actions for NHS Trusts and primary care

- Implement quality improvement projects to improve asthma control by March 2023 by:
  - reducing patients' over-reliance on short-acting beta-2 agonists through effective patient education and review of treatments
  - checking and supporting good inhaler technique through Structured Medication Reviews
  - promoting patient adherence to medicines
- Implement quality improvement projects to reduce the environmental impact of inhalers by March 2023\* by:
  - considering low-volume inhalers and DPIs in joint decision-making with patients
  - consolidating treatments into combination inhalers
  - use of spacer devices to increase effectiveness of aerosol inhalers where these are required for patient care

#### Actions for ICS (Responsible Respiratory Prescribing Group)

- Set up a working group to review existing local formulary recommendations and associated guidelines for adult asthma and COPD by March 2023
- Set up a working group to establish system-wide formulary recommendations and associated guidelines for asthma in children and young people by March 2023
- Develop guidelines for inhaler prescribing which will include stronger references to the environmental impact of treatments to help guide healthcare professionals in joint decision-making with patients by March 2023
- Support quality improvement programmes to improve the quality of asthma care while reducing its environmental impact by March 2023
- Work with pharmacies to expand Structured Medication Reviews for asthma management by March 2024

#### Actions for primary care

• Primary care in collaboration SEL RRPG to run educational events about sustainable respiratory care by March 2023

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Aim 4: To reduce the environmental impact of medicine and inhaler disposal

Actions for ICS (Integrated Medicines Optimisation Committee)

- Work with NHS Trusts and pharmacies to set up an inhaler recycling/disposal scheme in all boroughs and Trusts across the ICS by March 2025
- Develop an ICS-wide communication campaign to increase awareness of the need to return unused medications and empty inhalers to the pharmacy for disposal by March 2025





# Supply Chain and Procurement

## Context

Supply chain and procurement accounts for 78% of the SEL ICS NHS Trusts' carbon footprint and 96% of the CCG's carbon footprint (excluding commissioning). Reaching net zero will require more efficient use of supplies, low-carbon alternatives, and partnership with our suppliers to ensure they are decarbonising their own processes.

During 2019/20, the NHS bought 184 tonnes of plastic catering consumables<sup>18</sup> contributing to both GHG emissions and the plastics problem. Subsequently, the NHS Plastic Pledge was launched to cut the use of avoidable single-use plastic in catering by April 2021. As well as single-use plastic, over 1.4% of supply-chain emissions in the NHS are due to single-use devices<sup>19</sup>, some of which could be refurbished and reused.

As most of our supply chain emissions are out of the NHS' direct control, we also need to ensure our suppliers are decarbonising their own processes. In 2021, the NHS Net Zero Supplier Roadmap was approved which sets out requirements to help suppliers align with the NHS net-zero ambitions by 2030. In addition to the roadmap, the NHS has adopted the Government's Social Value Model from April 2022, in which all NHS tenders must include a minimum of 10% scoring criteria in all procurements to assess how suppliers will contribute to the NHS's net-zero targets and social value.

### Achievements to date

- Four of the NHS Trusts signed up to the NHS Plastic Pledge with KCH completing the pledge and eradicating single-use plastic stirrers, straws, cutlery, plates, cups, and food containers.
- SLaM and Oxleas have both switched to 100% recycled paper.
- SLaM have incorporated environmental considerations into their tendering processes with the aim of including a 20% weighting towards social value in all tenders by 2024.



Supply Chain and Procurement

### Commitment

• We will use our supplies more efficiently, consider low-carbon alternatives, and work in partnership with our suppliers to ensure they are decarbonising their own processes

### Actions for Year 1

- 1. ICS to develop and implement a joint sustainable procurement policy and guidance across ICS
- 2. NHS Trusts and CCG/ICB to introduce a minimum 10% weighting on criteria related to social value for all procurements
- 3. CCG/ICB to develop and implement a programme of work in collaboration with major ICS suppliers to ensure suppliers have clear carbon-neutral plans in place
- 4. NHS organisations, coordinated by CCG/ICB, to set up a system for sharing best practice on reducing single-use items across the ICS, and identifying opportunities for reuse
- 5. NHS organisations, coordinated by CCG/ICB, to work collaboratively across the system to understand the most carbon-intensive clinical instruments and develop interventions for reducing their use
- 6. NHS Trusts to remove all single-use plastic in catering

## Aim 1: Reduce supply-chain emissions and increase social value

## Actions for All NHS organisations (coordinated by the CCG/ICB)

 Procure 100% recycled paper and reduce paper usage by 50% by March 2024

## Action for NHS Trusts and CCG/ICB

 Introduce a minimum 10% weighting on criteria related to social value for all procurements by March 2023 Supply Chain and Procurement

#### Actions for CCG/ICB

- Develop and implement a joint sustainable procurement policy and guidance across ICS by March 2023
- Develop and implement a programme of work in collaboration with major SEL NHS organisations to ensure suppliers have clear carbon-neutral plans in place by March 2023

#### Aim 2: Reduce single-use items across SEL NHS

## Actions for all NHS organisations (coordinated by CCG/ICB)

- Set up a system for sharing best practice on reducing single-use items across NHS organisations and identifying opportunities for reuse by March 2023
- Work collaboratively across the system to understand the most carbon-intensive clinical instruments and develop interventions for reducing their use by March 2023
- Explore switching singleuse medical instruments to reusable where clinically appropriate by March 2025

## Actions for NHS Trusts and CCG/ICB

• Remove all single-use plastic in catering by March 2023

## Food and Nutrition Context

A sustainable and balanced diet has benefits for both people, in maintaining good health, and the planet. In 2019, the London Borough of Southwark estimated that 75,000 of their residents were food insecure.<sup>g</sup>

Food insecurity and a diet low in nutrition have population and public health impacts, increase health inequalities, and increase demand on health services.<sup>20</sup> Additionally, sourcing low-carbon local food reduces emissions related to transport, waste, and agriculture.

In the 2019 Hospital Food Review, there were eight recommendations for system-level change to ensure better hospital food, one of them being 'going green'. The review focused on where the biggest differences could be made:

- sustainable food procurement
- reducing food waste<sup>21</sup>

We recognise the need to ensure patient and service users in South East London have access to healthy, sustainable, affordable, local food while reducing the carbon emissions associated with food from our services through sustainable procurement and waste reduction.

<sup>g</sup> The definition of food insecure used in the survey means not having enough money to buy food, forced to skip meals, cut down on quantities or not being able to afford a balanced diet.



### Achievements to date

The majority of NHS Trusts currently measure their food waste, and all NHS Trusts have included actions on reducing food waste in their green plans.

Individual NHS Trusts have reduced the amount of food waste sent to landfill:

- SLaM, Oxleas, LGT, and GSTT send food waste from inpatient services to be used for biogas and/or fertiliser
- GSTT are undertaking a food waste pilot to measure food waste across the Trust and develop a baseline with the aim of redistributing edible surplus food to charities and food banks
- LGT have a programme to reduce patient food waste underway

Lambeth GP Food Co-op is a great example of a community-led collaboration, involving primary and secondary care, with the aims of increasing local food cultivation while improving patient health and wellbeing (see Case-study 8).

Case-study 8 Q

Lambeth GP Food Co-op

Lambeth GP Food Co-op is community-led, involving patients, doctors, and residents. The co-op works with GP surgeries and NHS Trusts (KCH and GSTT) to provide not only a space to build gardens, but also a reason for people to socialise, learn, and grow food together to improve their health and wellbeing.

The aim is 'Improving the lives of local people living with multiple long-term conditions and the sustainability of the health and social care system'. The food grown is distributed and sold to NHS staff as well as to NHS hospital caterers.

Furthermore, the London Borough of Lambeth have been running a 10-year early years development programme using a system-wide workforce approach to addressing childhood obesity.

This has included training to develop the capacity of front-line staff not only to promote healthy food, diet, nutrients, and the maintenance of a healthy weight for early years and their supporting families, but also to embed this approach in their daily work. From the evaluation, 80% of participants felt more confident in raising issues of diet, nutrition, and child weight with parents/carers.

Food and Nutrition

## Commitment

• We will ensure all our inpatients have access to sustainable healthy food, and for food waste to landfill to be eradicated.

### Action for Year 1

1. NHS Trusts to measure and monitor food waste and their associated carbon emissions annually, and use this data to identify priorities for action

## Aim 1: To reduce GHG emissions associated with food waste

#### **Actions for NHS Trusts**

- Measure and monitor food waste and the associated carbon emissions annually, and use this data to identify priorities for action from March 2023
- Where inedible food waste is inevitable, recycle the food waste, e.g., for farm feed, fertiliser, or energy, and reduce the amount sent to landfill to zero by March 2025
- Where considerable edible food waste is inevitable, redistribute all edible food waste to VCSE organisations addressing food poverty by March 2025

Aim 2: Increase the number of low-carbon, sustainable, healthy, and locally sourced food options across the ICS

#### **Actions for NHS Trusts**

- Include at least one plant-based or vegetarian option for all patient and staff meals and reduce red and/or processed meat by March 2025
- Collaborate on the procurement (where appropriate) of catering services assigning increased weighting to healthier, lower carbon, and locally sourced options that take the cultural needs of patients into account by March 2025



Food and Nutrition

## Adaptation Context

London's climate is changing. Summer temperatures in the city have increased by 1.9°C between 1961 and the early 21<sup>st</sup> century, while total rainfall from extremely wet days has increased by 17% from 2008 to 2017.<sup>22</sup> Over the next decade, it is anticipated that London will experience:

- hotter and drier summers
- more intense rainfall episodes
- more frequent extreme weather events

This changing climate poses a serious threat to health while placing pressure on critical infrastructure and NHS services. Health and care systems will need to introduce measures not only to prevent the impacts of climate change on buildings and health services, but also to enable different ways of delivering services in the event of climate shocks.

As ICSs not only cover a wide geographical area but also include several different organisations and support a large population, we can facilitate a collaborative approach to action on identifying the risks associated with climate change and how best to address them, as part of protecting and improving population health and wellbeing and reducing health inequalities.

In line with the third *Health and social care adaptation report*<sup>23</sup>, the ICS will adapt to climate change to manage relevant risks to service provision and delivery and ensure continuity of care for its population.



### Achievements to date

All NHS Trusts have highlighted ongoing adaptation initiatives in their green plans with three Trusts committed to developing climate change adaptation plans over the next few years.

- KCH has a climate change adaptation plan and risk assessment in place. It has highlighted the issue of sewage overflow during floods and is committed to taking action to mitigate this risk in the future
- Oxleas has undertaken a high-level review of their sites to understand flood risk
- Each Borough Resilience Forum has completed an analysis of climate risks

### Commitment

• We will build a system-wide approach to mitigating the risks of climate change and ensure climate change does not impact the ICS's ability to deliver core services and manage population health

## Actions for Year 1

- 1. NHS Trusts and CCG/ICB to develop a climate change adaptation plan
- 2. ICS to develop a Climate Change risk register, in collaboration with local authorities and primary and secondary care to identify the potential risks to service continuity and patient and population health across South East London
- 3. Primary care to review, within the PCN estates survey, the adaptation plans for heat and extreme weather events, with a focus on heat adaptation plans and the immediate improvements needed to healthcare premises in general practice



Aim 1: To understand and mitigate the risks of climate change to NHS organisations



• Develop a climate change adaptation plan by March 2023

#### Actions for ICS

- Following the recommendations in the third Health and care adaptation report, develop a Climate Change risk register, in collaboration with local authorities and primary and secondary care to identify the potential risks to service continuity and patient and population health across South East London by March 2023
- Develop an adaptation plan that covers the potential infrastructure investment required and the priorities for action across primary, secondary, and social care to reduce the climate-change risks identified by March 2024

#### Actions for primary care

• Review, within the PCN estates survey, the adaptation plans for heat and extreme weather events, with a focus on heat adaptation plans and the immediate improvements needed to healthcare premises in general practice by March 2023



Adaptation



# Green/Blue Space and Biodiversity

## Context

The loss of biodiversity is intrinsically linked to climate change<sup>24</sup>. To mitigate climate change and contribute to the recovery of biodiversity we need to address them both, not just for planetary but also for human health.

Urban green spaces, such as parks, can have a positive impact on mental and physical wellbeing by providing relaxation, stimulating social cohesion, encouraging physical activity, and mitigating air pollution, noise, and excessive heat.<sup>25</sup>

The benefits of green space can also be experienced by NHS staff on site. Research at three NHS sites found that NHS staff who spent time in their site's green space felt 'relaxed and calm, refreshed, and re-energized, and they also experienced a positive effect on their mental and physical wellbeing<sup>26</sup>. Urban blue spaces, like rivers and lakes, have similar mental and physical health benefits.<sup>27</sup>

South East London features a diverse range of green spaces – parks, woodlands, cemeteries, gardens and allotments. Bromley, for example, is London's greenest borough supporting a third of London's ancient woodlands<sup>28</sup>, 156 parks and 52 allotments covering 7000 acres of green space<sup>29</sup>. Five of the six boroughs border the Thames, offering residents the opportunity to use not only green but also blue spaces for physical exercise and relaxation.

We have an opportunity to contribute to the improvement and expansion of these green and blue spaces and help to facilitate access for our local communities. Green prescribing and onsite green space projects can increase biodiversity while improving health. New NHS developments will be increasing biodiversity by 10% as required by the Environment Act 2021.

#### Achievements to date

Nature conservation features strongly in South East London, with most of the boroughs having published a biodiversity action plan. All the Trusts recognise the importance of access to good-quality green and blue space for physical and mental wellbeing.

- GSTT has been part of the NHS Forest since 2013, planting trees on its site to enhance its green space. The Trust has also implemented green screens in the form of ivy pollution barriers, and an 'edible hedge' increasing biodiversity and colour across the western perimeter.
- SLaM has created woodland walks on its Bethlem site which are open to patients, staff, and the local community. The Trust is maintaining and enhancing onsite biodiversity by encouraging wildflower meadows, providing bird and bat boxes, and introducing beehives.
- LGT are collaborating with the Royal Horticultural Society to create a wellbeing garden on their University Hospital Lewisham site, transforming an important underutilised green space for the benefit of patients and staff.
- KCH are planning to build a highly innovative Outdoor Critical Care Unit for seriously ill patients to enable them to experience the benefits of green space (see Case-study 9).

### Case-study 9

## King's College Hospital's Outdoor Critical Care Unit

Going outside can have a positive impact on critical care patients' mental and physical wellbeing, providing a catalyst for recovery. Funded by King's hospital charity, an Outdoor Critical Care Unit has been designed as a rooftop garden using a sedum blanket system, which is lightweight, low maintenance and includes a selection of plants with different characteristics, e.g., sun loving, shade loving, and drought tolerant.

Once the design of the Outdoor Critical Care Unit has been approved, specially designed critical care beds, monitoring systems, and equipment will make the rooftop garden fully accessible for patients on life-support.



Green/Blue Space and Biodiversity

### Commitment

• We will work together to contribute to the improvement of and equal access to South East London's green and blue spaces

## Action for Year 1

1. Primary care to explore the nature-based prescribing opportunities in collaboration with the VCSE sector and other partners in the ICS

#### Aim 1: To improve the quality of and access to green/ blue spaces across ICS sites

Actions for NHS organisations (coordinated by the CCG/ICB)

- Complete projects to increase biodiversity and/or access to green and blue space across NHS organisations and the boroughs by March 2025
- Offer patients and staff the opportunity to access, maintain, and improve green space and biodiversity on site by March 2024

#### **Actions for ICS**

- Create a green/blue space and biodiversity plan for SEL by March 2024
- Identify opportunities across the ICS for collaboration on improving the quality of green/blue space and the level of biodiversity across the boroughs by March 2024

#### Actions for primary care

• To explore the nature-based prescribing opportunities in collaboration with the VCSE sector and secondary care by March 2023



Green/Blue Space and Biodiversity

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## Governance

Strong leadership and governance are needed to ensure that the sustainability commitments and actions identified in this green plan are delivered. Each organisation has their own internal governance (see individual green plans). In this section, we focus on oversight at an ICS level.

## Key governance forums and groups

- The Sustainability Oversight Board is the governance forum that includes the board-level leads from the CCG/ICB, and each of the Trusts, and the primary care leads. Up to the end of 2021/22, this board met monthly to oversee the development of this green plan; in future, it will meet every other month.
- The Sustainability Oversight Board is supported by a **Sustainability Operational Leads Group** which brings together the people responsible for delivery in each major organisation.
- Following an engagement event across health and social care, it was agreed to work collaboratively on **Air Quality** and therefore governance will be set up to oversee this Area of Focus.
- A **Primary Care Steering Group** is being established to ensure that primary care service providers are appropriately supported, and to understand progress on change in this setting.

# Leadership oversight and public transparency

In addition to there being senior (board level) oversight both in each organisation and collectively, the Sustainability Oversight Board will periodically report both to the ICS Executive (the most senior executive group with representatives from each part of the system) and the Integrated Care Board, which will be in public.

Progress on actions in the green plan will be reported during the bi-monthly meetings. There will be a full annual review of the green plan, which will offer an opportunity to update it, incorporate national priorities, and set SEL ICS priorities for the next year.

Progress reports on actions in the green plan will be included in the ICS Annual Report. The carbon footprints of the NHS Trusts and CCG will be reviewed and updated annually.

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## **Collaborative delivery**

It is important to ensure a balance between governance and enabling time and capacity for delivery. In South East London:

- Existing ICS governance will be used as much as possible, with transformation programmes supporting delivery of relevant actions, e.g., the estates programme is developing sustainability standards and embedding sustainability into ongoing work
- As there is no full-time sustainability resource at ICS level, as well as utilising the resource within the CCG/ICB, Trusts will take a leadership and coordination role in ICS-level workstreams to support progress and spread learning
- A team currently working across several Trusts will be connected into and work with all five major organisations, providing additional capacity, reducing duplication, and supporting connection between organisations

The current governance structure is shown in Figure 7.



Figure 7: governance structure for delivery of the actions in the SEL ICS green plan

If we achieve our vision and these aims and actions over the next three years then we will have laid the foundation for SEL ICS to become a leading ICS in sustainability and carbon reduction, as well as being a group of organisations and their staff committed to improving the health and wellbeing of, and reducing inequalities in, South East London's population for whom we are proud to deliver health and care services.



# **Abbreviations**

AQMA	Air quality management area
BEMS	Building Energy Management System
BREEAM	Building Research Establishment's Environmental Assessment Method
CO <sub>2</sub> e	Carbon dioxide equivalent
COPD	Chronic obstructive pulmonary disease
CQC	Care Quality Commission
DPI	Dry powder inhaler
GHG emissions	Greenhouse gas emissions
GPs	General practices
GSTT	Guy's and St Thomas's NHS Foundation Trust
HDP	Heat Decarbonisation Plan
HVAC	Heating-Ventilation-Air-Conditioning
КСН	King's College Hospital NHS Foundation Trust
LCSF	Low Carbon Skills Fund
LGT	Lewisham and Greenwich NHS Trust
MDI	Metered dose inhaler
MECC	Making Every Contact Count
NOx	Nitrogen oxides
Oxleas	Oxleas NHS Foundation Trust
PM <sub>2.5</sub>	Particulate matter
REGOs	Renewable Energy Guarantees of Origin
RRPG	Responsible Respiratory Prescribing Group
SABAs	Short-acting beta-agonists
SEL	South East London
SEL CCG	South East London Clinical Commissioning Group
SEL ICB	South East London Integrated Care Board
SEL ICS	South East London Integrated Care System
SLaM	South London and Maudsley NHS Foundation Trust
VCSE	Voluntary, Community and Social Enterprise


### Introduction

International agreements, UK legislation, and NHS policy all drive sustainable healthcare.

#### International drivers

#### United Nations Sustainable Development Goals (SDGs)

A call for action for all countries to promote prosperity while protecting the planet. Includes 17 goals to transform the world.

#### **UK legislative drivers**

#### Climate Change Act (2008)

A legally binding target for the UK to reduce its GHG emissions to net zero by 2050.

#### The Public Services (Social Value) Act 2012

Requires all public bodies in England and Wales to consider social, environmental, economic and community wellbeing benefits when procuring goods and services. Requires minimum 10% weighting for social value on contracts.

### Civil Contingencies Act (2004)

Requires all NHS organisations to prepare for incidents and emergencies that could affect health or patient care (e.g., extreme weather conditions).

### **NHS drivers**

Over the last 10 years, the NHS has taken notable steps to reducing its impact on climate change and in 2019 set a target to be net zero carbon by 2045. Below are the specific drivers for sustainable healthcare.

### Greener NHS Programme and Delivering a 'Net Zero' National Health Service 2020 Report

The 'For a Greener NHS' programme was launched in 2020 to support the sustainability commitments and lay out the direction for meeting the NHS net zero carbon target.

#### NHS Long Term Plan

Sets out the ambitions for the next 10 years and includes the NHS's commitment towards sustainability.

## NHS Standard Contract

Mandates a range of targets relating to sustainability including that all providers must have a board approved Green Plan.

## NHS Operational Planning and Contracting Guidance

Sets out priorities for the year and includes several targets for carbon reduction including online outpatient appointments.

## Additional drivers

Other reasons for driving sustainable healthcare in South East London include financial savings, building a more resilient healthcare system, and improving our patient and population health.

Regardless of legislative drivers, we will continue to push for ambitious change.

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# Appendix 2: Carbon Footprinting Methodology

For the carbon footprint of NHS Trusts, Trust data was taken from the new ICS carbon reporting tool. The tool compiled SEL ICS NHS Trust data from 2014/15 to 2020/21 for GHG scopes 1.2 and 3. For estimating the total carbon footprint in this report, 2020/21 data was used; where 2020/21 data was missing, this was estimated using 2019/20 data. The ICS will use this tool for future carbon reporting.

## CCG/ICB offices: energy, water, and waste

CCG/ICB offices included: Global House, Bexley, Greenwich, Lambeth, Lewisham, and Southwark.

2020/21 building energy (electricity and gas), water and waste data were collected for Global House and Woolwich Centre. As building data for the other CCG/ICB occupied buildings was not available, it was estimated based on data for Global House and Woolwich Centre.

The GHG emissions for energy, water, and waste consumption were calculated to estimate tonnes CO2e per desk for both buildings, these figures were then averaged to estimate the average tonnes CO2e per desk for energy, water, and waste. These figures were multiplied by the number of desks occupied by the CCG/ICB in each building to provide the total carbon footprint (tonnes CO2e) for each CCG/ICB office.

GHG emissions for energy, water, and waste were estimated using the 2020 BEIS conversion factors. Factors include Well-to-Tank (WTT) emissions, and in the case of electricity, also Transmissions and Distribution (T&D) emissions.

## CCG/ICB offices: staff commuting

Staff commuting data was collected via a survey sent out to all CCG/ICB office staff. There were 195 responses. Staff were asked for home postcode, work postcode, mode of travel used most often for commuting, and how often staff commuted into the office. Full postcodes were not obtained to comply with GDPR requirements, instead the first four characters of each postcode were collected. Full postcodes are required to calculate commuting distance; therefore, the remaining characters were selected based on a central location within each area, e.g., a station or a shopping mall. Commuting distance was then calculated using The Centre for Sustainable Healthcare's travel carbon footprint calculator. Once distance was calculated for each staff member, this was multiplied by the emissions factor for the travel mode used and then multiplied by the number of days a year commuting to work. The total annual GHG emissions for the 195 staff sample size was then extrapolated to the full complement of 560 staff.

GHG emissions were calculated using the 2021 BEIS conversion factors. All transport factors also include Well-to-Tank (WTT) emissions.

## CCG/ICB offices: procurement

Procurement data was collected using 2020/21 year-end accounts and includes CCG/ICB operating costs and commissioning costs from the independent sector, voluntary sector, and local authority.

To estimate the carbon footprint, an Environmentally Extended Input Output Analysis (EEIOA) was used. In EEIOA, financial spend in a sector is directly converted into CO<sub>2</sub>e. The annual spend of each procurement category was multiplied with its associated sector specific emissions factor. The emissions factors used were taken from the Greener NHS database (CCG factors) and the University of Leeds ODS database.

For the carbon footprinting methodology used to calculate the carbon footprint for general practice in SEL ICS, see Appendix 1 in the Primary Care Green Plan.



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