



# RPS Greener Pharmacy Guide

**FOR HOSPITAL PHARMACIES**

TO BE USED IN CONJUNCTION WITH THE ROYAL  
PHARMACEUTICAL SOCIETY'S GREENER PHARMACY TOOLKIT

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# Abbreviations

CPPE	Centre for Postgraduate Pharmacy Education
CQUIN	Commissioning for Quality and Innovation
CPD	Continuing professional development
CSH	Centre for Sustainable Healthcare
DMS	Discharge Medicines Service
ICB	Integrated Care Boards
ICS	Integrated Care Systems
ICT	Information and Communications Technology
MDT	Multidisciplinary Team
NHS	National Health Service
NHSE	National Health Service England
PPE	Personal protective equipment
RPS	Royal Pharmaceutical Society
SABA	Short-acting beta-agonists
SPS	Specialist Pharmacy Service
VOCs	Volatile Organic Compounds

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# Introduction

The Royal Pharmaceutical Society (RPS) Greener Pharmacy Guide has been developed to raise awareness and capability of pharmacy staff to reduce the environmental impacts of the pharmacy sector, saving money and delivering more efficient services for patients and communities. The [RPS Greener Pharmacy Guide Scoping Review](#) document underpins the development of this guide, where it uses an evidence-based approach to offer insights into the rationale, content and structure. The guide was developed using the [RPS Professional standards, guidance and frameworks Process development handbook](#). Its development was led by healthcare professionals with expertise in environmental sustainability with multi-stakeholder engagement and feedback.

An Equality Impact Assessment has been conducted in accordance with the [RPS EqIA Guidance](#) as the guidance is committed to promoting inclusive, person-centred care as well as addressing health inequalities. This guide supports the rollout of the [RPS Greener Pharmacy Toolkit](#), which hospital pharmacies can use to self-accredit their sustainability status. Hospital pharmacies in England can use the guide and toolkit to collect data contributing to their Trust's Green Plan set out in the 2021/22 NHS Standard Contract. Some of the suggested actions align with [NHS England's CQUIN](#) indicators and metrics.

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# Purpose

The guide outlines a range of actions to reduce NHS carbon emissions, save money and improve services that will help pharmacy staff to self-accredit the sustainability status of their pharmacy settings using the toolkit. The guide helps all pharmacy staff to:

- raise awareness and enhance understanding of the environmental impacts of healthcare, medicines and pharmacy practice;
- reduce the environmental impacts of healthcare, medicines (via waste reduction) and pharmacy practice to meet the NHS's commitment to net zero;
- explain the co-benefits of taking sustainable actions in pharmacy, including improving patient care, increasing efficiency, and unlocking cost savings;
- certify the sustainability credentials of pharmacy settings to demonstrate their efforts in reducing environmental impact;
- benchmark the current carbon hotspots of the pharmacy setting and estimate the potential carbon savings based on the outcomes of the implemented actions.

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# Scope

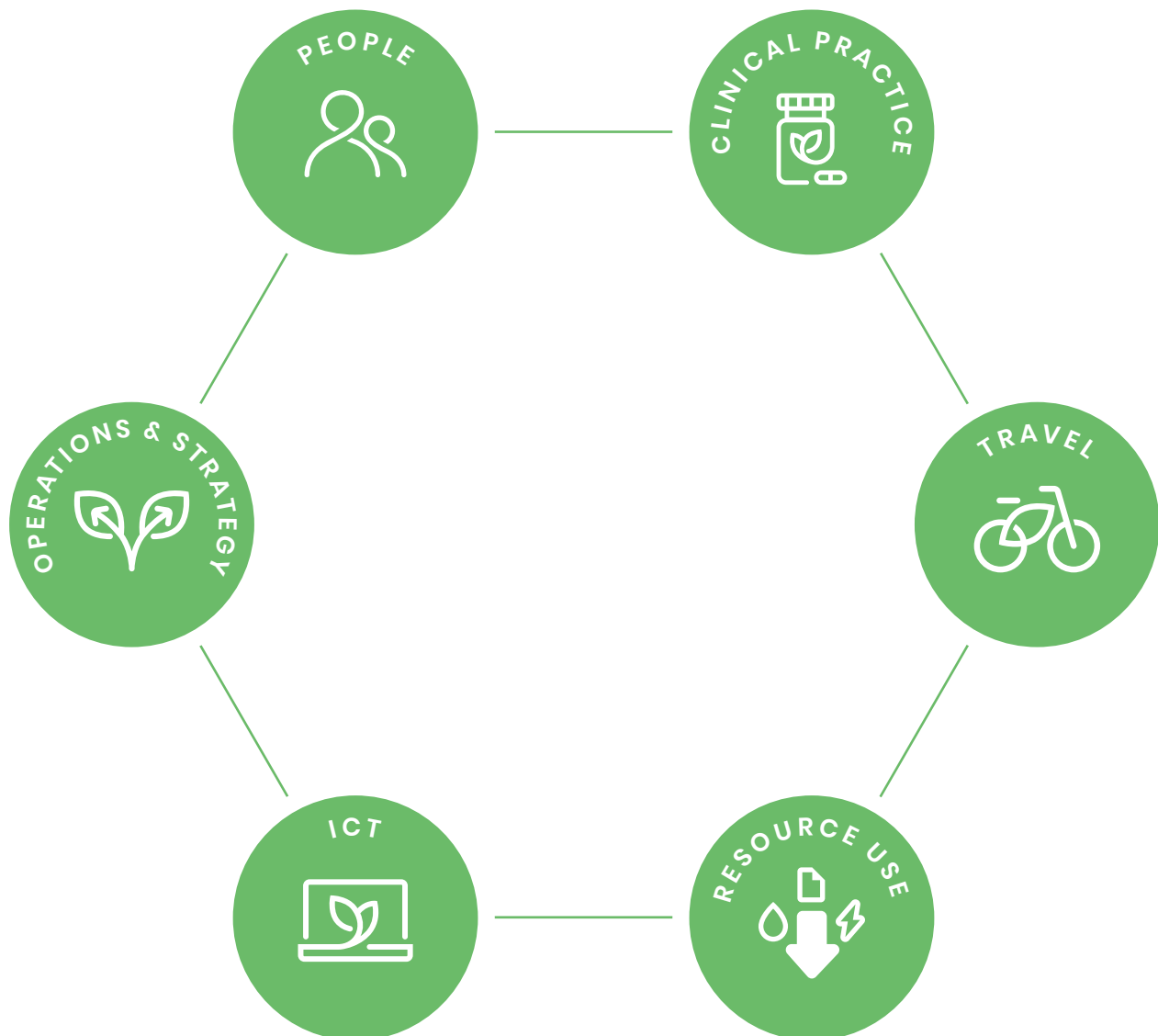
Since the project has been commissioned by NHS England, the guide predominantly focuses on hospital pharmacy services within England, encompassing both internally managed and outsourced services across pharmacies of varying sizes. However, the guide can easily be adapted for use by hospital pharmacies in different countries or private healthcare organisations. The [Greener Pharmacy community pharmacy guide](#) is available on the RPS website – outpatient pharmacies belonging to private organisations or high street pharmacy chains should use the community pharmacy guide for self-accreditation.

It would be beneficial to start this toolkit in collaboration with sustainability managers within the respective organisations. In England, where sustainability managers are present in Trusts and ICBs, they should be consulted to help with implementing some of the actions as part of the Trust and ICS green plans.

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# RPS Greener Pharmacy Guide

The guide contains six overarching domains:



Each action under the domains will list the environmental benefits and other co-benefits of completing the actions. This guide is less focused on clinical pharmacy practice (e.g. how to review polypharmacy to deprescribe medicines) and more about empowering pharmacy staff to take actions to decarbonise the pharmacy settings. Simplified checklists of this guide are available on the [RPS website](#).

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# How to use this guide

We encourage all pharmacies to explore the RPS Greener Pharmacy guide to discover how simple actions can contribute to a healthier planet, helping the profession to [play its part in climate action and sustainable healthcare](#).

Each domain has three levels with actions that pharmacy staff can choose to accomplish to progress towards the target accreditation. The guide can be used to complete [the online toolkit](#) and help hospital pharmacies work consistently towards reducing their carbon footprint in order to save money and improve services. Should they wish to hospital pharmacies can display their accreditation status using the assets designed to showcase their progress towards a sustainable pharmacy.

Actions outlined in the guide and toolkit are encouraged to be distributed among as many pharmacy staff as possible to achieve the highest level of accreditation.



Some actions may not be applicable to the hospital pharmacy setting due to its location and service provision. Actions that are not applicable to the pharmacy setting have been modified or will be excluded from the overall tally to ensure fair accreditation process. Actions requiring higher level personnel (e.g. estates and facilities team, digital team, executive boards) involvement should be escalated to achieve the desired outcomes.

Individuals and organisations are encouraged to submit examples of good practice via the toolkit. Feedback on the greener pharmacy guides and toolkit for future developments are welcomed: [greenerpharmacy@rpharms.com](mailto:greenerpharmacy@rpharms.com)

# Domain 1: People



All staff in the healthcare system play a crucial role in helping the NHS achieve its net zero ambitions. They directly influence emissions, help innovate technologies to address inefficient practices and deliver cost savings. Their collective efforts help mitigate the impacts of climate change and promote a healthier sustainable future for all.

## LEVEL 1 (BRONZE):

### PHARMACY STAFF

**1.1.1** Provide holistic advice and support to patients, guiding them towards evidence based non-pharmacological treatments where clinically appropriate and directing them to relevant health and social care providers or support groups when appropriate.

**Information:** Through shared decision making and person-centred care, staff should guide individuals towards evidence based non-pharmacological treatments where clinically appropriate. Staff should also be able to refer individuals to local services addressing wider social determinants of health, empowering individuals to take charge of their own health management.

The NHS Long Term Plan aims to offer [NHS-funded tobacco treatment](#) services to all hospital patients who smoke by 2023/24. As part of [NHSE CQUIN 2023/24](#), staff should promote flu vaccinations during winter months amongst healthcare colleagues including non-clinical staff who are in contact with patients. Making Every Contact Count (MECC) is an approach to behaviour change that uses the millions of day-to-day interactions that organisations and people have with other people to support them in making positive changes to their physical and mental health and wellbeing.

#### Resources

- [Make Every Contact Count \(MECC\) programme](#) is for anyone that has contact with people, including staff from all NHS services.
- [NHS Smoking Cessation Service - Referral from Secondary Care into Community Pharmacy](#)

#### Environmental benefits

Reduce overprescribing where appropriate and utilising prevention and health promotion programmes helps support a healthy population, reduces care needs and improves health outcomes – which moderates demand on healthcare services.

#### Co-benefits:

- 1 **Cost** – Tackling overprescribing will help reduce costs related to an overreliance on pharmaceuticals to where there is no clinical need.



- 2 Health inequalities** – Enhancing access to support groups helps bridge gaps in health literacy. Amplifying voices of marginalised groups affected by specific health issues can lead to more equitable healthcare services and outcomes.
- 3 Time** – Potentially reducing unnecessary visits to healthcare settings while maintaining high quality care will result in freeing up appointments and reducing NHS patient waiting times.
- 4 Productivity** – Improving health outcomes for patients and reducing sickness-absence associated with managing long term conditions.

#### Suggested evidence

Confirm at least 20% of patient-facing staff have completed [Session 1 - What Is MECC And Why It Is Important](#) of the Make Every Contact Count (MECC) programme. This can be organised as a lunch and learn session for respective staff to go through the module together.

## PHARMACY STAFF

### 1.1.2 Share information with patients about initiatives they can support to reduce waste and improve efficiency of services.

**Information:** Staff raising awareness with patients of initiatives that they can support to reduce waste and improve efficiency of services.

#### Resources

- [Meds Disposal Campaign](#)
- [Show me your meds](#)

#### Environmental benefits

Education and raising awareness can lead to behaviour change and can inspire more individuals to engage in projects that have environmental co-benefits.

#### Co-benefits:

- 1 Cost** – Reduce costs related to waste and inefficient services.
- 2 Satisfaction, Productivity** – The public are generally supportive of the benefits that sustainability initiatives can bring (e.g. improved air quality and health, homes that are more affordable to heat). Stronger public engagement is important to shape policy design to maximise effectiveness, and further strengthen public trust and support.

#### Suggested evidence

Outline how pharmacy has implemented campaigns that impact on environmental sustainability messaging in patient communication. E.g. talking to patients, display posters or leaflets, on drug labels, pharmacy bags, discharge letters or pharmacy website.

## LEVEL 2 (SILVER):

### PHARMACY STAFF

#### 1.2.1 Sustainable healthcare forms a part of staff's on-going development e.g. Continuous professional development (CPD) for registered pharmacists and pharmacy technicians.

**Information:** The climate-health sphere is ever changing considering new research and innovation. Pharmacy team should be informed and aware of the potential health impacts of climate change for their communities and equipped with knowledge and skills to implement sustainable changes. Pharmacy staff can undertake CPD (planned or unplanned), peer discussion or reflected practice relating to environmentally sustainable healthcare.

#### Resources

- [Greener NHS](#)
- [Greener NHS Knowledge Hub](#)
- [Centre for Sustainable Healthcare \(CSH\)](#)
- [NHS Hampshire Healthcare Library Service - Sustainability in Healthcare Bulletins](#)
- [The Pharmaceutical Journal Green Pharmacy](#)
- [UK Health Alliance for Climate Change](#)

Suggested Courses	Estimated time to complete
<a href="#">Greener NHS training hub</a>	Login to Future NHS Platform required
<a href="#">Greener NHS Carbon Literacy</a>	Step 1: e-learning (five 30-minute modules) Step 2: in-person or online workshop (half-day, with some optional homework tasks)
<a href="#">Building a Net Zero NHS</a>	30 minutes
<a href="#">All Our Health Programme</a>	Bite-sized introduction to wide range of topics
<a href="#">CPPE Environmental Sustainability Gateway</a>	Varies
<a href="#">Sustainability Leadership for Greener Health and Care Programme</a> by NHS Leadership Academy	21-week programme – Track 1: an online only programme OR Track 2: combines the online programme with face-to-face workshops
<a href="#">Centre for Sustainable Healthcare Courses</a> NB (England): Ask your ICB Sustainability Lead for any voucher codes available	4-week self-study period followed by a 4-hour workshop of your chosen course

<b>Environmental benefits</b>	Foster awareness, inspire actions, promote sustainable behaviours and policies.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Research &amp; Innovation</b> – It can inform funding, education and training or careers opportunities. Allows sharing of good practice to improve health outcomes.</li> <li><b>2 Workforce</b> – Supports training and development of staff. Allows sharing of good practice and shape leadership skills.</li> </ol>	
<b>Suggested evidence</b>	Confirm 20% of staff have completed sustainable healthcare related courses.

## PHARMACY STAFF

### 1.2.2 Aware of the RPS Sustainability Policies and make a commitment in the RPS Climate Change Charter.

**Information:** The RPS sustainability policies consists of four domains – improving prescribing and medicines use, tackling medicines waste, preventing ill health, and improving infrastructure and ways of working.

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">RPS Sustainability Policies</a></li> <li>• <a href="#">RPS Climate Change Charter</a></li> </ul>
<b>Environmental benefits</b>	Raises awareness about the urgency of climate change, its impacts, and the actions individuals and organisations can take to address it.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Workforce</b> – Supports training and development of staff. Allows sharing of good practice and shape leadership skills.</li> </ol>	
<b>Suggested evidence</b>	All senior management staff have openly committed to a sustainable action in the <a href="#">RPS Climate Change Charter</a> . Upload a copy of the completed charter. E.g. Use reusable cups and avoiding disposable single use.

## PHARMACY STAFF

### 1.2.3 Join a greener pharmacy network and/or their local sustainability network(s).

**Information:** Joining like-minded individuals who are passionate about the subject can foster a sense of community and support, allowing learning from one another, sharing of ideas and collaboration on initiatives. Some great examples of green MDT networks:

- [Green Champion's Hub](#)
- [Green Health Wales](#)

#### Resources

- [Pharmacy Declares](#)
- [CSH Pharmacy Sustainability Network](#)
- [Healthcare without Harm Pharmacists for Greener Healthcare](#)

#### Environmental benefits

Individuals in green networks are more likely to adopt sustainable behaviours, collectively influence decision-makers to implement sustainability measures, enhance community resilience to climate change and inspire broader societal change towards a more sustainable future.

#### Co-benefits:

- 1 Collaboration** – Groups forming outside areas of work foster workforce integration.
- 2 Workforce** – Improve staff morale, relationships, share good practice and develop leadership skills in this area.

#### Suggested evidence

List the green groups or networks some staff are a part of.

## PHARMACY STAFF

## HIGHER LEVEL PERSONNEL

### 1.2.4 Ensure all quality improvement (QI) projects consider the environmental impact.

**Information:** Sustainable quality improvement (QI) projects consider the health outcomes of a service measured against its environmental, social and economic costs.

All pharmacy QI projects should consider environmental sustainability. The project impacts and/or outcomes should be shared with other secondary care staff, local health boards or in sustainability networks.

#### Resources

- [Sustainable Quality Improvement \(susqi.org\)](#)
- [SusQI - elearning for healthcare](#) [30 minutes]
- [SusQI Case Study from Hampshire Hospitals NHSFT](#)

#### Environmental benefits

All projects delivered with environmental impact in mind should aim to achieve carbon reduction whilst delivering the best possible health outcomes.

### Co-benefits: (Project dependent)

- 1 Cost** – Projects delivered with environmental impact in mind should aim to achieve cost savings.
- 2 Time** – Projects delivered with environmental impact in mind should deliver efficiencies that improve services.
- 3 Research and innovation** – Provides opportunities to share best practice through publications or conferences.
- 4 Workforce** – Supports development of staff in leadership and management skills.
- 5 Collaboration** – Allows staff to integrate with teams outside usual working areas and share good practice to improve health outcomes.

### Suggested evidence

Outline the sustainable QI project undertaken, the overall outcomes or impacts, and whether it is sustainable long-term.

## LEVEL 3 (GOLD):

### PHARMACY STAFF

#### 1.3.1 Demonstrated innovative sustainable practice.

**Information:** Staff can apply for or collaborate with organisations or local sustainability leads to secure funding for environmental sustainability research projects or pilot studies. This is often a larger scale project compared to simple QI projects. E.g. Use of technologies to improve patient's understanding and compliance of their medicines (e.g. translation services, medicines reminder apps) to reduce medicines waste.

### Resources

- [Small Business Research Initiative Healthcare Funding](#)
- [UK Research and Innovation \(UKRI\) funding](#)
- [Climate, health and sustainability – NIHR](#)
- [Funding Opportunities – Greener NHS Knowledge Hub, FutureNHS Collaboration Platform](#)

### Environmental benefits

Continued research and innovation allow better understanding of global environmental sustainability challenges and seek to develop the solutions to address them.

**Co-benefits: (Project dependent)**

- 1 Cost** – The project should serve to inform stakeholders of health benefits, as well as carbon and cost savings based on evaluation.
- 2 Time** – Most projects aim to save patient and staff time.
- 3 Research and innovation** – Provides opportunities to share best practice through publications or conferences.
- 4 Productivity** – Most projects achieve more efficient care pathways that can alleviate burden on healthcare services.
- 5 Workforce** – Supports development of staff in leadership and management skills.
- 6 Collaboration** – Allows staff to integrate with teams outside usual working areas and share good practice to improve health outcomes.

**Suggested evidence**

Outline what innovative sustainable practice the pharmacy has implemented.

**PHARMACY STAFF****1.3.2 Aware of their roles in promoting sustainable healthcare and involved in achieving their hospital and local health board's sustainability strategies.**

**Information:** Sustainability should be considered by local/regional Medicines Optimisation Committees and medicines formulary discussions. **England only:** Staff should be aware of their ICS and Trust Green Plan on how to incorporate environmental sustainability into pharmacy specific values and practices.

**Resources**

- [Greener NHS Delivering a 'Net Zero' National Health Service](#)
- [NHS Wales Decarbonisation Strategic Delivery Plan](#)
- [NHS Scotland climate emergency and sustainability strategy: 2022-2026](#)
- [West Yorkshire Health and Care Partnership Pharmacy and Medicines Optimisation Green Plan](#)

**Environmental benefits**

Using evidence to support organisations to prioritise sustainability for the benefit of health and financial savings. Staff feedback and insights can help higher levels refine strategies to ensure feasibility to address the impacts of climate change on health.

**Co-benefits:**

- 1 Governance** – Staff efforts and contributions are essential to translate strategic visions into tangible outcomes.

**Suggested evidence**

Outline what involvement or how does the staff influence their local health board or national sustainability strategies.

### 1.3.3 Principles of sustainable healthcare have been embedded into existing pharmacy departmental training programmes.

**Information:** Integrate the four principles of sustainable healthcare (i.e. disease prevention and health promotion; patient education and empowerment; efficient service delivery; preferential use of treatment options and medical technologies with lower environmental impact where appropriate) into internal pharmacy training programs. e.g. dispenser, pharmacy technician, foundation trainee pharmacists and postgraduate pharmacists undergoing formal accreditations.

#### Resources

- [The sustainable physician](#)
- [Sustainability in Pharmacy Education](#)

#### Environmental benefits

Giving teams the tools and resources they need to feel empowered to implement solutions and measure impact is key to supporting the health of their patients and save money through addressing their environmental impact.

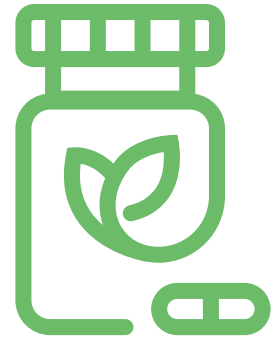
#### Co-benefits:

- 1 Workforce** – Supports training and development of staff to realise how sustainability is linked to existing job (reduce overprescribing and deprescribing).

#### Suggested evidence

Outline how the existing pharmacy training program(s) have been revised to include principles of sustainable healthcare.

## Domain 2: Clinical Practice



Based on the Greener NHS [Delivering a 'Net Zero' NHS report](#), medicines account for 25% of the NHS's carbon footprint in England (2% from anaesthetic gases, 3% from inhalers, 20% from all other medicines). Staff should aim to reduce emissions and pollution by reducing waste, ensuring that the right medicines are available for patients and enabling shared informed decision making.

### LEVEL 1 (BRONZE):

#### PHARMACY STAFF

#### 2.1.1 Clearly and promptly communicate any changes of patient's medications upon discharge to primary care staff.

**Information:** Utilise the [Discharge Medicines Service \(DMS\) referral](#) to optimise use of medicines while facilitating shared decision making, reduce harm from medicines at transfers of care, improve patients' understanding of their medicines and how to take them following discharge, and reduce hospital readmissions. [NICE NG5](#) recommends that medicines-related communication systems should be in place when patients move from one care setting to another, and the act of reconciling medicines should happen within one week of the patient being discharged.

#### Resources

- [RPS guide on getting the medicines right](#)
- [RPS Counselling people on the use of medicines](#)
- [CPPE – Transfer of Care](#)

#### Environmental benefits

Reduce carbon emissions from healthcare activities and medicines wastes.



**Co-benefits:**

- 1 Cost** – Reduce overprescribing and cost dispensing medicines not required or where doses have been altered.
- 2 Time, Productivity, Satisfaction** – Alleviate the burden on healthcare services to perform medicines reconciliation. Reduce time spent by patients, carers and pharmacy staff requesting the most up to date information post discharge.
- 3 Collaboration** – Promotes workforce integration and collaboration between secondary and primary care settings.
- 4 Governance** – This is part of [NHSE CQUIN 2023/24](#).

**Suggested evidence**

Outline how information relating to patient's discharge medications is promptly communicated to primary care by the pharmacy team.

**PHARMACY STAFF****2.1.2 Routinely ask patients or representatives collecting prescription to check their medication bags before leaving to prevent return of incorrect or unwanted items.**

**Information:** Current regulatory rules prevent medicines reuse once they have left the pharmacy setting. Where applicable, checking with patients or carers upon medicines collection whether all items are correct before they leave the pharmacy will reduce any unnecessary return of medicines waste.

**Environmental impacts**

Reduce medicines waste.

**Co-benefits:**

- 1 Productivity** – Alleviate the burden on healthcare services from any issues with medication dispensed and dealt with promptly.
- 2 Costs** – Reduce overprescribing and dispensing costs for medicines not needed or required by the patient.
- 3 Improving health outcomes** – Ensuring patients are taking medicines appropriately.

**Suggested evidence**

Confirmation of action by all staff.

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
2.1.3 Encourage patients to bring their medications from home into hospitals and hospital policy allows the use of patient’s medications from home during inpatient stay.			
<p><b>Information:</b> Work with colleagues in ambulance services and Accident &amp; Emergency department to increase use of ‘green bag’ schemes to encourage patients’ own drugs to be brought into hospital. This prevents staff from reordering all medications, particularly for short-stay patients, which are almost always subject to changes due to acute illness.</p> <p>Instead of routinely issuing new supplies of all medications from the inpatient pharmacy for newly admitted patients, hospital staff should check medication locker at patients’ bedsides and utilise patient’s own drugs where possible. Staff should ensure that patients’ medications from home are transferred to the base wards with them. Staff should ensure medicines reconciliation is done in a timely manner when patients are admitted, communicate with prescribers and respective ward teams to prevent ordering and dispensing of prescriptions that have been reconciled incorrectly to minimise drug waste.</p>			
Resources		<ul style="list-style-type: none"><li>• <a href="#">RPS guides on medicines adherence</a></li><li>• <a href="#">RPS medicines reconciliation and medication history</a></li><li>• <a href="#">RPS medicines review</a></li><li>• <a href="#">CPPE medicines reconciliation</a></li><li>• <a href="#">CPPE medication review</a></li></ul>	
Environmental benefits		Reduce medicines waste.	
<p><b>Co-benefits:</b></p> <p><b>1 Cost, Time, Productivity</b> – Potential to reduce overprescribing and cost or time spent by staff in unnecessary dispensing.</p>			
Suggested evidence		Confirmation hospital encourages patient to bring medicines from home into hospital for inpatient use.	

PHARMACY STAFF	
<b>2.1.4 Advises patients and public to return any unwanted medicines including inhalers to their local pharmacies for appropriate disposal.</b>	
<p><b>Information:</b> Staff should raise awareness among other healthcare staff and patients of the best way to dispose of unused, unwanted or expired medication. Medication wastes including inhalers, topical products, eye, ear or nose drops, sprays, patches and injections should be discarded in the appropriate clinical waste bins. Any returned medicines or medical devices due to adverse effects or incidents should be reported via the usual <a href="#">Yellow Card</a> site.</p>	

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">Medication Waste in West Yorkshire: Campaign Research</a></li> <li>• <a href="#">Reducing the climate change impact of inhalers: environmentally safe</a></li> </ul>
<b>Environmental benefits</b>	Reduce the presence of pharmaceuticals in the environment which can pose various ecological impacts including antimicrobials in wastewater that risks the development of antimicrobial resistance (AMR).
<b>Co-benefits:</b>  <b>1 Governance</b> – Prevents potential redistribution, accidental ingestion, misuse, or abuse of medications.	
<b>Suggested evidence</b>	Confirmation of action by all staff.

## HIGHER LEVEL PERSONNEL

### 2.1.5 No longer use desflurane except in specific clinical exceptions as outlined by NACCS.

**Information:** Following NHS England's [announcement](#) to decommission desflurane in routine practice, NHS England published guidance on desflurane decommissioning and clinical use in March 2024, providing clarity to clinicians and systems in the NHS in England regarding the limited, permitted use of desflurane from 1 April 2024 onwards. This guidance outlines that the use of desflurane is exceptionally permitted in a small number of selected circumstances identified and [published by Neuro Anaesthesia and Critical Care Society \(NACCS\)](#), and that anaesthetists should continue to decide on a case-by-case basis the best anaesthesia approach for these specified procedures. In England, the use of volatile anaesthetic gases in each hospital is viewable on the [Greener NHS Dashboard](#).

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">NHS England Guidance: Desflurane decommissioning and clinical use</a></li> <li>• <a href="#">NACCS   NACCS Statement about the use of Desflurane</a></li> <li>• <a href="#">Desflurane for maintenance of anaesthesia- NICE</a></li> <li>• <a href="#">Joint statement on NHSE's plan to decommission desflurane by early 2024   Association of Anaesthetists</a></li> <li>• <a href="#">NHS England » Putting anaesthetic emissions to bed: commitment on desflurane</a></li> <li>• <a href="#">Why it matters (facts &amp; figures) – Association of Anaesthetists</a></li> <li>• <a href="#">The Desflurane Reduction Project –Centre for Sustainable Healthcare</a></li> </ul>
<b>Environmental benefits</b>	Desflurane has a global warming potential over 100-year period of 2540 compared to sevoflurane of 130. Desflurane also has an atmospheric lifetime of 14 years compared to sevoflurane of 1.1 years.

**Co-benefits:**

- 1 Research and innovation** – Provides opportunities to share best practice through publications or conferences.

**Suggested evidence**

- Confirmation of action by hospital.
- Please outline any indications for retaining desflurane use in hospital if any.

**PHARMACY STAFF****2.1.6 Promote timely intravenous (IV) to oral medication switch as clinically appropriate.**

**Information:** Pharmacists should promptly review all IV prescriptions and initiate discussions with the MDT on the wards regarding the possibility of switching to oral medications where clinically appropriate. This early review of IV to oral switch is already encouraged in antimicrobial stewardship programmes and potentially allows for earlier hospital discharge.

**Resources**

- [Oral, in place of intravenous, paracetamol as the new normal for elective cases](#)
- [Sustainable practice: Prescribing oral over intravenous medications](#)

**Environmental benefits**

Although the life cycle analyses of most medications are not widely available, the carbon footprint of IV medications is estimated to be higher than oral medications due to primary packaging materials, plastic waste, equipment for administration and their disposal.

**Co-benefits:**

- 1 Satisfaction** – IV administration is related to increased risk of line related infections, permanent disability, or disfigurement if extravasation and/or cannula site infection occur, reduced ability to mobilise independently, delayed hospital discharge, and discomfort from cannulation.
- 2 Productivity, Time** – Reduces nursing time spent reconstituting, administering and disposing IV medications.
- 3 Cost** – Reduces use of medical resources associated with IV medicines.
- 4 Collaboration** – Encourage conversations with wider MDT to determine clinically appropriate IV to oral switch.
- 5 Governance** – This is part of [NHSE CQUIN 2023/24](#).

**Suggested evidence**

Confirm pharmacists review IV medications prescribed for patients as soon as patients meet switch criteria. CQUIN 2023/24 target achieved or other ways to achieve this action can be outlined here.

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
2.1.7 Ensure that Pharmacy teams are represented on Medical Gas Committee to initiate nitrous oxide (N <sub>2</sub> O) waste mitigation project.			
<p><b>Information:</b> Nitrous oxide is a commonly used medical gas and is responsible for the largest overall volume of emissions from anaesthetic and medical gases, constituting at least 80% of total anaesthetic and medical gas emissions in 2019/20. Reducing nitrous oxide waste will help deliver significant cost and carbon savings. In England, the use of volatile anaesthetic gases in each hospital is viewable on the <a href="#">Greener NHS Dashboard</a>.</p>			
Resources		<ul style="list-style-type: none"><li>• <a href="#">Nitrous Oxide Waste Reduction Toolkit on Future NHS platform</a></li><li>• <a href="#">Driving down embedded emissions from medical nitrous oxide</a></li></ul>	
Environmental benefits		Nitrous oxide is a commonly used medical gas and is responsible for the largest overall volume of emissions from anaesthetic and medical gases, constituting at least 80% of total anaesthetic and medical gas emissions in 2019/20.	
<p><b>Co-benefits:</b></p> <p><b>1 Cost</b> – Reduce costs associated with nitrous oxide waste and procurement.</p> <p><b>2 Research and Innovation</b> – Provides opportunities to share best practice through publications or conferences.</p>			
Suggested evidence		Confirmation of pharmacy participation or plans commenced to reduce nitrous oxide waste.	

## LEVEL 2 (SILVER):

### PHARMACY STAFF

#### 2.2.1 Optimise respiratory care to reduce carbon footprint related to inhalers and improve respiratory disease outcomes.

**Information:** Staff recognises SABA overuse via repeated prescribing (>3 SABAs per year) or emergency requests and refer patients to their respiratory clinicians for review. Where possible, staff should offer appropriate inhaler technique check to patients prescribed inhalers. Patients should be offered the opportunity to switch to lower carbon inhalers according to the local respiratory formularies with appropriate counselling.

##### Resources

- [Greener Practice High Quality and Low Carbon Asthma Care toolkit](#)
- [Asthma + Lung UK](#)
- [NHS Wales inhaler carbon footprint reports](#)
- [NICE Asthma Patient Decision Aid](#)
- [CPPE – Respiratory](#)
- [Inhaler technique for health professionals: getting it right – CPPE](#)
- [Bulletin 295: Inhaler carbon footprint – PrescQIPP C.I.C](#)
- [The environmental impact of inhalers for asthma: A green challenge and a golden opportunity](#)
- [Greenhouse gas emissions associated with suboptimal asthma care in the UK: the SABINA healthCARE-Based enviroNmental cost of treatment \(CARBON\) study](#)

##### Environmental benefits

Optimising respiratory care will promote better respiratory health and improve patient outcomes, meaning patients will stay in better health and need fewer inhalers overall, which will have a positive environmental impact.

##### Co-benefits:

- 1 Health** – Better patient satisfaction from improved health outcomes.
- 2 Time** – Potentially reduce unnecessary visits to healthcare settings while maintaining high quality care, freeing up appointments and reducing NHS patient waiting times.
- 3 Cost** – Reduce overprescribing and costs relating to need of medicines or healthcare contacts to manage acute/chronic conditions.
- 4 Productivity** – Reduce sickness-absence associated with managing long term conditions.

##### Suggested evidence

Case study of intervention(s) which resulted in reducing excessive SABA use or switching to lower carbon inhalers. This can be linked to sustainable QI project or medicines audit of auditing prescribing patterns of inhalers over time.

## PHARMACY STAFF

### 2.2.2 Provide information where relevant to support patients to adopt a balanced and healthy diet, which prevents and treats chronic diseases.

**Information:** The [NHS Eatwell Guide](#) suggests most of the population are not eating at least 5 portions of a variety of fruit and vegetables a day to achieve a healthy, balanced diet.

Eating a balanced and healthy diet can help regulate blood sugar, cholesterol and blood pressure levels, reducing the risk of diabetes, cardiovascular diseases and hypertension. Encouraging proper nutrition can reduce the incidence and severity of chronic diseases, lowering the burden on healthcare systems and complement medical treatments to better overall health outcomes and patient satisfaction.

<b>Resources</b>	<ul style="list-style-type: none"><li>• <a href="#">Nutrition counselling tips for pharmacists</a></li></ul>
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<b>Environmental benefits</b>	Supporting patients to adopt a healthy diet will improve health outcomes and support chronic disease prevention, which in turn will reduce the environmental impacts of healthcare.
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#### Co-benefits:

- 1 Productivity** – Alleviate the burden on healthcare services from risk of developing chronic illness due to poor diet.
- 2 Satisfaction** – Improve patient health outcomes.
- 3 Workforce** – Supports training and development of staff on providing nutritional advice and ability to link it to chronic diseases.
- 4 Cost, Time** – Reduce overall costs and resources in managing chronic illness.

<b>Suggested evidence</b>	Outline how staff have adopted or are supporting patients in adopting a balanced and healthy diet. E.g. Catered events hosted by staff taken this into consideration.
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## PHARMACY STAFF

### 2.2.3 Teach patients how to swallow solid oral drug formulations.

**Information:** Children with a normal swallow can be successfully taught to swallow solid oral drugs from the age of 4. Liquid medicines can be unpalatable, contain sugar and preservatives to improve their taste or texture and shelf life but these additives increase the risk of dental caries and erosion. Kidzmed is a programme developed for members of the multidisciplinary team to teach children and young people how to swallow pills, which can be extended to help adult patients.

Solid oral drugs formulations can sometimes be administered by dispersing or crushing tablets or by opening capsules. The use of medicines in this way may be outside the product licence and is thus "off-label". The use of licensed medicines is always the preferred option for most patients. Staff should also consult evidence-based resources (e.g. SPS website, NEWT guidelines) when considering off-label or unlicensed medication alternatives.

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">Why learning how to swallow pills is good for patients, parents, and the planet</a></li> <li>• <a href="#">Kapsule Kids Case study</a></li> </ul>
<b>Environmental benefits</b>	Solid drug formulations have longer shelf lives (reducing medication waste), usually do not require refrigeration (larger carbon footprint associated with cold-chain medicines), easier to transport and are more readily stocked at pharmacies.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Workforce</b> – Upskill staff on educating patients on swallowing solid drug formulations.</li> <li><b>2 Cost</b> – For prescribers, less prone to errors when writing prescriptions for solid oral drugs compared to liquid and can prescribe larger quantities which saves money.</li> <li><b>3 Time</b> – Reduce staff time to reconstitute and procure liquid medicines. Measuring out liquid medicines accurately also takes up patient's time for administration.</li> </ol>	
<b>Suggested evidence</b>	At least 20% members of patient facing staff have completed the <a href="#">KidzMed programme</a> [15 minutes to complete].

<div>PHARMACY STAFF</div> <div>HIGHER LEVEL PERSONNEL</div>	
<b>2.2.4</b> Hospital policy allows the reuse of medicines from clinical areas that have been suitably assessed by staff.	
<b>Information:</b> Medicines that have not left the hospital and risk assessed by staff to have been stored correctly, in date, and kept in their original packaging may be returned to the hospital pharmacy for reuse.	
<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">Scheme to reuse medicines in hospital cuts carbon emissions and saves money</a></li> <li>• <a href="#">90% reduction of medication waste by reusing returned medication from medical wards</a></li> </ul>
<b>Environmental benefits</b>	Reduces medicines waste.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Productivity</b> – Reduce overprescribing and medicines waste.</li> <li><b>2 Cost</b> – Reduce costs.</li> </ol>	
<b>Suggested evidence</b>	Confirmation of policy and action at hospital.



## LEVEL 3 (GOLD):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
2.3.1 Achieved reduction of waste from nitrous oxide and nitrous oxide/oxygen mixture gases, while maintaining clinical access and quality of care.			
<b>Information:</b> Many hospital sites have achieved this by reviewing manifold designs and logbooks, overall anaesthetic usage and identifying any areas of waste. Some hospitals have achieved decommissioning of nitrous oxide manifolds and switching to portable gas cylinders. Any hospitals with nitrous oxide mobile destruction units can also report any carbon savings, taking into account the carbon emissions associated with running the units.			
Resources		<ul style="list-style-type: none"><li>• <a href="#">NHS England – North West Case study: Nitrous Oxide: The Great Escape</a></li><li>• <a href="#">Main nitrous oxide manifold decommissioned at University Hospital of Wales – Cardiff and Vale University Health Board</a></li></ul>	
Environmental benefits		Reduce carbon emissions from nitrous oxide waste while maintaining patient choice and use.	
<b>Co-benefits:</b>			
<b>1 Research &amp; Innovation</b> – Share good practice to improve health outcomes, drive innovative practice.			
<b>2 Cost</b> – Reduce costs from nitrous oxide waste and manifolds maintenance.			
Suggested evidence		Outline what has been done and how much savings (carbon & costs) the hospital has achieved. This action can be linked to sustainable QI project.	

PHARMACY STAFF	
<b>2.3.2</b> Regularly review patient's need for multi-compartment compliance aids (MCAs) and explore other reasonable adjustments to improve medication compliance.	
<b>Information:</b> MCAs also known as pill organisers, pill containers, dosette boxes, nomad trays, pill cases or pillboxes. The need for compliance aids should be reviewed regularly by staff, taking into account professional guidance and whether the use of MCAs is the appropriate reasonable adjustment for the patient. The use of medication reminder charts or digital reminders for drug administration at home could be promoted to improve adherence. If necessary, patients should be encouraged to utilise refillable MCAs to minimise plastic use and potential wastage if the patient's medicine regimen changes.	
<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">RPS guide on MCAs</a></li> <li>• <a href="#">Multi-compartment compliance aids (MCAs) in adult social care – Care Quality Commission</a></li> <li>• <a href="#">Medicines adherence: involving patients in decisions about prescribed medicines and supporting adherence – NICE</a></li> </ul>

<b>Environmental benefits</b>	Medicines dispensed in MCAs can be difficult to identify when clinicians withheld or stop certain medications, leading to unintended waste. Weekly single-use plastic MCAs adds to existing pollution issues globally.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Cost</b> – Reduce overprescribing and NHS costs.</li> <li><b>2 Time</b> – Reduce staff time spent dispensing and checking MCAs, which sometimes delay the patient discharge process.</li> <li><b>3 Satisfaction</b> – Different tablets in MCAs are often not easily identifiable. If medication regimens require changes to the MCA, the MCA must be returned to the pharmacy for adjustments before administration, which can result in unintended waste. This can be particularly challenging outside of regular pharmacy opening hours.</li> </ol>	
<b>Suggested evidence</b>	Outline pharmacy's efforts or policy in reviewing and reducing MCA use. E.g. use of biodegradable packaging for unit dose dispensing by third party organisation.

## PHARMACY STAFF

### 2.3.3 Conduct any audits/re-audits that improve pharmacy practice and provide carbon savings.

**Information:** Several other actions outlined in this guide offer opportunities for accomplishing this action. Some other suggestions of audits/reaudits are listed below:

- Conduct an audit on medicines waste which not only alleviate issues with drug shortages and better stock management, but they also highlight any patient safety risks e.g. expired medicines are inadvertently dispensed or reused.
- Conduct an audit to assess the quantity of medications dispensed to patients upon discharge from hospital and ascertain their compliance with local policies. E.g. maximum 2-weeks supply of medicines made to care homes.

<b>Resources</b>	<ul style="list-style-type: none"> <li><a href="#">Waste medicines audit toolkit – RPS</a></li> </ul>
<b>Environmental benefits</b>	Audit dependent, almost always related to environmental impacts of medicines and transportation.
<b>Co-benefits: (project dependent)</b> <ol style="list-style-type: none"> <li><b>1 Research &amp; Innovation</b> – Can drive innovative practice, provides opportunities for publication in journals, poster competitions or abstract for conferences.</li> <li><b>2 Cost, Time</b> – Reduce overall NHS costs and time spent performing unnecessary dispensing or waste disposal</li> </ol>	
<b>Suggested evidence</b>	Outline the main findings of the audit and recommendations or change implemented and sustained as a result.

## PHARMACY STAFF

### 2.3.4 Know how to signpost patients to health and wellbeing coaches, social prescribers or link workers through their GP practices for a range of local, non-clinical services.

**Information:** Health and wellbeing coaches and social prescribers often focus on preventative care and lifestyle interventions to address underlying health issues and promote overall wellbeing. This holistic approach also engages communities with their local environment. E.g., volunteering in charities, arts activities, group learning, gardening, cookery, or walking provided by voluntary or community organisations.

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| <b>Resources</b> | <ul style="list-style-type: none"> <li>• <a href="#">Social Prescribing</a></li> <li>• <a href="#">Green social prescribing</a></li> </ul> |
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<b>Environmental benefits</b>	Reduces incidence of chronic diseases that require extensive medical and pharmaceutical interventions that contribute to healthcare carbon emissions.
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#### Co-benefits:

- 1 Productivity** – Improves patient health outcomes and reduce sickness-absence associated with managing long term conditions.
- 2 Time** – Potentially reduce unnecessary visits to healthcare settings while maintaining high quality care, freeing up appointments and reducing NHS patient waiting times.
- 3 Collaboration** – Promotes understanding of other professionals' roles and other non-medical treatments which can positively impact on patients' health.
- 4 Satisfaction** – Reduce social isolation with community engagement.
- 5 Cost** – Reduce overprescribing and NHS costs relating to need of pharmaceuticals to manage acute/chronic conditions.

<b>Suggested evidence</b>	All patient facing staff are aware of social prescribing and knows how to signpost to a link worker at GP where applicable.
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## PHARMACY STAFF

## HIGHER LEVEL PERSONNEL

### 2.3.5 Signpost, set up or enrol in available schemes that support circular economy.

**Information:** Successful implementation of these schemes is highly dependent on broader recognition of their accessibility and should therefore be actively promoted locally.

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| <b>Resources</b> | <ul style="list-style-type: none"> <li>• <a href="#">Inhaler return and recycling – South East London ICS</a></li> <li>• <a href="#">Re-Hale project at East Kent Hospitals</a></li> <li>• <a href="#">Northumbria Healthcare advances mask recycling</a></li> </ul> |
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<b>Environmental benefits</b>	Reduce risks of environmental pollution from medicines or medical devices, reduces reliance on virgin materials and preserves natural resources for future generations.
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<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Productivity</b> – Creates new business opportunities, stimulates innovation, and promotes job creation in sectors such as recycling, repair, and sustainable manufacturing.</li> <li><b>2 Reputation</b> – Support business commitments to sustainable and ethical practices.</li> </ol>	
<b>Suggested evidence</b>	Outline what schemes has the pharmacy promoted, been involved in, or regularly signpost to. E.g. Reusable face masks, medication recycling schemes, blister pack recycling.

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
2.3.6 Environmental sustainability criteria included in medicines procurement.			
<b>Information:</b> In England, all suppliers intending to tender for a contract or framework administered by NHSE Medicines Value and Access will require, at the point of submission, a valid Evergreen sustainable supplier assessment as well as a compliant carbon reduction plan. Any NHSE procurement or service contracts should refer to guidance from the <a href="#">Net zero supplier roadmap</a> .			
Resources	<ul style="list-style-type: none"><li>• <a href="#">Net Zero and Social Value requirements in NHSE medicines tenders – Specialist Pharmacy Service (SPS)</a></li><li>• <a href="#">Environmental criteria in medicine procurement</a></li></ul>		
Environmental benefits	Influence suppliers to reduce their carbon emissions relating to pharmaceuticals and medical devices production.		
<b>Co-benefits:</b>			
<b>1 Collaboration</b> – Promotes workforce integration and collaboration.			
<b>2 Research &amp; Innovation</b> – Share good practice and drive innovative practice.			
Suggested evidence	<ul style="list-style-type: none"><li>• Outline how hospital pharmacy has worked with regional procurement specialists to achieve this.</li><li>• Upload any templates of how local pharmacy achieved this action.</li></ul>		

# Domain 3: Operations and strategy



Pharmacies should incorporate environmental sustainability into pharmacy staff's workplan, strategic initiatives, operating plans and budgets to reflect its commitment to net zero aligned to national sustainability strategies. It supports the UK's transition to a greener economy by creating green jobs and upskilling staff in quality improvement work.

## LEVEL 1 (BRONZE):

PHARMACY STAFF	
3.1.1 Nominated a sustainability lead(s) and recognises green champion(s).	
<p><b>Information:</b> Recognition of leadership in this area and allow staff time to undertake formal/informal training. E.g. allowed time at work to perform activities relating to sustainability. They can be responsible for completing the greener pharmacy toolkit and track pharmacy's progress towards Level 3 (Gold) sustainability accreditation. They can be the person that feeds into wider sustainability teams locally (e.g. waste team) including the health boards to steer any strategies relating to sustainable pharmacy practices and medicines use.</p>	
<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">NHS staff called on to be green champions as Trust makes sustainability challenge – North Tees and Hartlepool NHSFT</a></li> <li>• <a href="#">Green Champion's Hub – NHS Find Your Place</a></li> </ul>
<b>Environmental benefits</b>	Resource (financial and time) is often cited as the main barrier for staff taking sustainable actions – formally acknowledging staff in this role may result in lower carbon initiatives.
<p><b>Co-benefits:</b></p> <p><b>1 Workforce</b> – Staff can demonstrate leadership by utilising specialised knowledge and skills related to their roles and functions within their organisation.</p>	
<b>Suggested evidence</b>	State the name of the sustainability lead(s) or champion(s) and how they are recognised in the workplace.

### 3.1.2 There is a business continuity plan in place for the hospital pharmacy's operation including climate change impacts, and pharmacy teams have feed into or reviewed trust wide emergency preparedness, resilience and response plans to ensure pharmacy operations are considered.

**Information:** Pharmacies identified at risk should put in place climate change adaptation plans to ensure their service, patients and staff are protected from unnecessary harm due to increase adverse weather events (e.g. flooding, power cut due to storms, wildfires, ICT failure due to heatwaves). Pharmacies identified at risk should be adequately insured against extreme weather events and signed up to [Weather-Health Alerts](#) in the UK.

#### Resources

- [Managing temperature excursions – SPS – Specialist Pharmacy Service](#)
- [The London Climate Resilience Review – July 2024](#)

#### Environmental benefits

Climate adaptation plans aim to build resilience in communities, economies, and ecosystems to reduce to withstand and recover from climate-related disruptions.

#### Co-benefits:

- 1 Governance** – Enhances governance frameworks to facilitate informed decision-making and adaptive management. Ensure pharmacy service delivery and patients' health are not compromised.
- 2 Workforce** – Considers staff wellbeing at work and promotes ability to risk manage.
- 3 Productivity** – Forward planning can alleviate the burden on healthcare services.
- 4 Health inequalities** – Vulnerable and marginalised groups are often most impacted by business disruptions and impacts of climate change. Those living in poverty have limited resources to adapt and access essential services like healthcare in climate-related events such as floods or storms. Appropriate risk management and investments will ensure equity to reduce any inequalities.

#### Suggested evidence

Outline the section of the pharmacy's business continuity plan related to climate change.

**England:** It is worth checking with local ICB sustainability leads that this has been covered in respective green plans and [Emergency Preparedness, Resilience and Response \(EPRR\)](#).

## LEVEL 2 (SILVER):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
3.2.1 Displayed messaging visible to patients and wider staff members to raise awareness of how the pharmacy is involved in NHS or other initiatives to reduce waste and improve health.			
Information:			
a. Display achievements of greener pharmacy accreditation in the pharmacy.			
b. Displays in pharmacy setting can be utilised to communicate any relevant messaging to both staff and public including information on the health impacts of climate change i.e. extreme heat and air pollution.			
Resources		<ul style="list-style-type: none"><li>• <a href="#">Medicines waste – NHS Dorset</a></li><li>• <a href="#">Campaigns – North East and North Cumbria ICB</a></li></ul>	
Environmental benefits		Campaign or messaging dependent, it can reduce pharmaceutical waste or energy consumption.	
Co-benefits:			
1 Research & Innovation – Share good practice to improve health outcomes. The campaign can form part of a sustainable quality improvement project.			
Suggested evidence		Upload photos of how environmental sustainability messaging by the pharmacy are made visible to the public.	

HIGHER LEVEL PERSONNEL	
3.2.2 Environmental sustainability is factored into the formation of new policies or the revision of existing ones within pharmacy aligned to hospital, local health board and national sustainability strategies where appropriate.	
<b>Information:</b> Sustainability should be discussed in local pharmacy team meetings when appropriate. Staff can encourage their board of directors to set carbon reduction targets and join <a href="#">Healthcare without Harm Europe's Global Green and Healthy Hospitals network</a> .	
Resources	<ul style="list-style-type: none"><li>• <a href="#">RPS Sustainability Policies</a></li><li>• <a href="#">FIP Statement of policy – Environmental sustainability within pharmacy</a></li></ul>
Environmental benefits	Creates a framework for accountability and provides clear guidance and direction on environmental sustainability goals, strategies, and expectations.
Suggested evidence	Outline the policies the pharmacy has revised or implemented to include environmental sustainability. E.g. medicines management.

## LEVEL 3 (GOLD):

### HIGHER LEVEL PERSONNEL

#### 3.3.1 Showcase commitment to environmental sustainability during the hiring process.

**Information:** Showcase existing sustainability culture, initiatives and achievements during the hiring process, such as including in job advertisements. According to a Greener NHS YouGov survey 2023, 6 in 10 staff state that they are more likely to stay in an organisation or profession that is taking decisive climate action, rising to 7 in 10 in younger staff. This demonstrates that climate action aligns with workforce values and has the potential to support the wider recruitment and retention agenda.

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">Lead Pharmacy Technician - Sustainability</a></li> </ul>
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<b>Environmental benefits</b>	Promotes awareness of potential candidates of the organisation's commitment to net zero leading to increased sustainability activity within the workplace.
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**Co-benefits:**

- 1 Reputation** – Improve organisation's image and reputation.
- 2 Workforce, Satisfaction** – Attracts staff who are environmentally conscious and equally, make staff feel proud to be a part of an eco-conscious organisation.

<b>Suggested evidence</b>	Upload template job description or advert which references environmental sustainability or outline how this has been incorporated in interviews.
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### HIGHER LEVEL PERSONNEL

#### 3.3.2 Have contributed to the development of the Trust's Green Plan in line with new guidance from NHS England.

**Information:** All trusts and ICSs are required to have a green plan in place. In 2021, NHS England guidance on [how to produce a Green Plan](#) asked healthcare systems and trusts to develop Green Plans spanning three years (2022/23 to 2024/25). In late 2024, an updated guidance was issued to support systems and trusts to refresh their Green Plans for the subsequent three year cycle (2025/26 to 2028/29).

<b>Resources</b>	<ul style="list-style-type: none"> <li>• <a href="#">Green Plan Guidance (2025)</a></li> </ul>
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<b>Environmental benefits</b>	Green plans ensure every NHS organisation is supporting the NHS-wide ambition to reach net zero carbon emissions.
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**Co-benefits:**

- 1 Cost** – Green plans support trusts and systems to implement measure that will reduce costs and improve efficiencies while reducing emissions.
- 2 Health** – Reduces harmful emissions generated by NHS operations that can impact on health.

<b>Suggested evidence</b>	<ul style="list-style-type: none"> <li>• Confirm pharmacy has actioned this.</li> <li>• Otherwise, outline attempts made to achieve this</li> </ul>
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# Domain 4:

## Resource Use



### ENERGY AND WATER

Energy production and consumption are the largest sources of global greenhouse gas emissions. Combustion of fossil fuels also emits air pollutants exacerbating the issues of global air pollution which is harmful to health. Resources to create this domain include [RCGP Net Zero Hub](#), [TUC Go Green at Work](#), and [UK Business Climate Hub](#).

### PROCUREMENT AND SUPPLY CHAIN

With a global focus on sustainability, suppliers that do not have net zero ambitions or carbon reduction plans may face reputational risks and market disadvantages. For England, please see [Greener NHS Net Zero supplier roadmap](#) to ensure the pharmacy contribute to the NHS Net Zero and Social Value goals and encourage suppliers to submit an [Evergreen Sustainable Supplier Assessment](#). Pharmacy in other nations should equally check the sustainability credentials of their suppliers.

### WASTE AND RECYCLING

To address the environmental issues associated with healthcare waste, it is crucial to implement proper waste segregation, collection, treatment, and disposal practices in healthcare facilities. Appropriate waste segregation has been a legal requirement since 2005 and, therefore, enforceable by the Environment Agency. For further information, please see [HTM 07-01](#) and [NHS clinical waste strategy](#).

## LEVEL 1 (BRONZE):

### PHARMACY STAFF

#### 4.1.1 Aware how to report leaks or water waste promptly.

**Information:** Regularly inspect and repair leaks in plumbing systems, taps and toilets in pharmacy setting. Small leaks can waste significant amounts of water over time.

##### Environmental benefits

Purifying, storing, heating, and supplying of water followed by sewage processing is energy-intensive.

##### Co-benefits:

- 1 Cost** – Reduce hospital running costs. Prompt reporting and repair minimises the risk of property damage and reducing repair costs.

##### Suggested evidence

Outline how staff report leaks or water waste and how it has been dealt with in the past.

### PHARMACY STAFF

#### 4.1.2 Apply cooling, heating, and electrical devices to match operating hours where practicable.

**Information:** Where practicable, set all electronic devices to automatic standby, eco-friendly or low-power modes, and to power down after several minutes of inactivity. If the settings are programmed to match pharmacy operating hours, adjust the timer for BST clock changes and bank holidays. Considerations should be made for medicine storage areas that must adhere to the manufacturer's recommended room storage conditions. It is understandable that some cooling, heating and electrical appliances or devices such as security systems or lighting, fridges and other cooling systems in pharmacies have to be left on overnight.

##### Environmental benefits

Reduce energy consumption. Well maintained devices operate more efficiently leading to lower energy consumption and extension of the lifespan negating the need for product replacement.

##### Co-benefits:

- 1 Cost** – Reduce hospital running costs.

##### Suggested evidence

Confirmation staff perform end of day checks to ensure all cooling, heating or electrical devices in pharmacy setting are switched off. E.g., lights, monitors, desktops, laptops, printers, scanners, photocopiers, automated dispensing machines, prescription endorsement machine.

## PHARMACY STAFF

### 4.1.3 Keep radiators free from obstruction and turn off air conditioning if window(s) or door(s) are open.

**Information:** Obstructed radiators reduce heat distribution and lead to uneven heating in a room. The heating system may need to run longer or at a higher temperature to maintain the desired room temperature as a result using more energy. If the room is overheated, turn down the thermostat instead of opening the doors or windows to cool the room down.

Hot outdoor air can flow into the cooled indoor spaces causing the air conditioner to use more energy to maintain the desired temperature. If the room is overcooled, turn up the thermostat instead of opening the doors or windows to heat the room up.

#### Environmental benefits

Reduce energy consumption. Well maintained devices operate more efficiently leading to lower energy consumption and extension of the lifespan negating the need for product replacement.

#### Co-benefits:

- 1 Cost** – Reduce hospital running costs.

#### Suggested evidence

Confirmation that staff regularly action this.

## PHARMACY STAFF

### 4.1.4 Reduce paper usage where possible and use recycled paper where practicable.

**Information:** Avoid unnecessary printing and set printer to print double-sided where possible. Recycled paper trademarked Forest Stewardship Council ([FSC](#)) and Programme for the Endorsement of Forest Certification ([PEFC](#)) certifications ensure that the paper comes from forests managed in an environmentally responsible and sustainable manner. Any paper waste should be placed appropriately in paper recycling or confidential waste bins.

#### Environmental benefits

Reduce consumption of resources.

#### Co-benefits:

- 1 Cost** – Reduce departmental running cost.
- 2 Governance** – Printing patient lists or medication lists pose information governance risks if they are not appropriately discarded or stored.

#### Suggested evidence

Confirmation of action by all staff.

## PHARMACY STAFF

### 4.1.5 Aware of their hospital policy on when to wear PPE.

**Information:** A project at Great Ormond Street Hospital reduced glove use by around 36,608 pairs each week, compared to before the campaign began, equivalent to saving around £1,000 with plastic use reduction of 21 tonnes. The covid-19 pandemic has exacerbated plastic pollution through [high use of PPE](#) in the form of single use items such as surgical masks, gloves, non-reusable gowns and aprons.

#### Resources

- [Gloves Off Campaign](#)
- [How to reduce glove use](#)
- [Infection Prevention Society Sustainability Special Interest Group](#)

#### Environmental benefits

Reduce consumption of resources and wider pollution.

#### Co-benefits:

- 1 Cost** – Reduce procurement and disposal of PPE.
- 2 Productivity** – Reduce time spent for staff procuring, wearing and disposing.

#### Suggested evidence

Confirm staff are informed, and pharmacy's SOP has been revised to discourage inappropriate PPE use.

## LEVEL 2 (SILVER):

## PHARMACY STAFF

### 4.2.1 Optimise medical fridge or freezer spaces without overloading them and reduce the number of unnecessary fridges or freezers running in the department.

**Information:** When refrigerators and freezers are overloaded, air circulation within the appliance can be restricted reducing its cooling efficiency. Staff should avoid overstocking of cold chain medicines. This should be included in the hospital's cold chain medicines policy if applicable.

#### Resources

- [SPS guidance](#) on using, monitoring, maintaining fridges and freezers.

#### Environmental benefits

Overloaded appliances need to work harder to maintain optimum temperatures leading to increased energy consumption. Overloading can strain the compressor and other components of the appliance, potentially shortening its lifespan needing frequent repairs and replacements contributing to potential medicines waste.

**Co-benefits:**

- 1 Cost** – Cost savings from power generation, delay costs of replacement if needed.
- 2 Productivity** – Easier for staff to locate cold chain items for dispensing.

**Suggested evidence**

Confirm date when fridge and/or freezer was optimised.

**HIGHER LEVEL PERSONNEL****4.2.2 Switch all lighting in pharmacy setting to light-emitting diode (LED) bulbs.**

**Information:** LED bulbs use less energy, last much longer and reduce maintenance costs compared with regular bulbs. It is understandable that a switch to LED bulbs may not be possible within an automatic dispensing system or as part of an inbuilt system so these can be excluded.

**Environmental benefits**

Less energy consumption, increased product lifespan reducing the need for replacements.

**Co-benefits:**

- 1 Cost** – Upgrading from conventional lighting to LED bulbs could deliver cost savings of up to 80% for a business.

**Suggested evidence**

- Confirm pharmacy has actioned this.
- Otherwise, outline attempts made to achieve this e.g. raised with Estates or Chief Pharmacist.

**HIGHER LEVEL PERSONNEL****4.2.3 Ensure all windows in pharmacy setting are inspected and maintained, and doors are draught proofed to reduce heat loss. Maintain and optimise heating, ventilation and air conditioning systems in pharmacy setting (e.g. using programmable thermostats) to regulate the temperature based on occupancy.**

**Information:** Where applicable, all doors and windows should be able to open and close properly. Closing curtains and blinds overnight can help insulate the pharmacy setting from unwanted heat gains or losses. Install double-glazed or triple-glazed windows to reduce heat escaping, external noise and condensation buildup inside windows adhering to the [NHS Net Zero Building Standard](#).

Turning down the thermostat by just 1°C can save 10% on heating costs and carbon footprint, but pharmacy setting must take into account the optimum medicines storage conditions. The Chartered Institution of Building of Services Engineers recommends the temperature settings of 18°C for hospital wards and 20°C for offices.

**Environmental benefits**

Reduce energy consumption.

**Co-benefits:**

- 1 Cost** – Reduce hospital running cost.
- 2 Workforce, Productivity, Satisfaction** – Create a favourable working environment that could impact on staff health, productivity, job satisfaction, and support people who might be sensitive to temperature changes (e.g. hypothyroidism, menopause). More comfortable environment for patients.

**Suggested evidence**

Outline measures taken to optimise temperatures in pharmacy to ensure favourable working environment.

**HIGHER LEVEL PERSONNEL****4.2.4 Install motion sensor or timer-controlled lights in low-use areas.**

**Information:** Low use areas E.g., toilets, changing rooms, offices, education rooms.

**Environmental benefits**

Reduce energy consumption. Prolong the lifespan of light fixtures and bulbs and reduces need for frequent replacements or maintenance.

**Co-benefits:**

- 1 Cost** – Reduce hospital running costs.
- 2 Workforce** – Enhance workplace safety and security by automatically illuminating areas when motion is detected.

**Suggested evidence**

- Confirm pharmacy has actioned this.
- Otherwise, outline attempts made to achieve this e.g. raised with Estates or Chief Pharmacist.

**HIGHER LEVEL PERSONNEL****4.2.5 Reduce water consumption.**

**Information:** Lower water consumption reduces the volume of wastewater generated, which in turn decreases the burden on wastewater treatment facilities. Installing a flow restrictor can save water dependent on the specific flow restrictor and staff's habits of water usage.

**Environmental benefits**

Conserve energy associated with water extraction, treatment, and distribution.

**Co-benefits:**

- 1 Cost** – Reduce hospital running cost.

**Suggested evidence**

Outline measures that have been taken at the pharmacy to reduce water consumption. Action can be linked to raising awareness of reporting water leaks or water conservation.

## HIGHER LEVEL PERSONNEL

### 4.2.6 Ensure effective segregation of all waste.

**Information:** Staff should avoid contaminating recycling bins as it may render the whole bin unrecyclable or reduce the quality of recycled materials. Use clear visual signage with images that reflect the waste streams to help staff segregate waste for disposal – landfill, clinical waste, sharps, cytotoxic, recycling, confidential waste, or compost.

**Resources**

- [Workplace recycling – Welsh Government](#)

**Environmental benefits**

Can lead to higher recycling rates and decreases carbon emissions associated with landfilling and incineration.

#### Co-benefits:

- 1 Cost** – Potential cost savings from reduce waste management.
- 2 Workforce** – Encourage employees to recycle more efficiently. Reduces risk of exposure to harmful substances and promotes workplace safety.
- 3 Governance** – Ensure compliance with waste disposal regulations and environmental standards.

**Suggested evidence**

Confirmation of action by pharmacy.

## PHARMACY STAFF

## HIGHER LEVEL PERSONNEL

### 4.2.7 Eliminate avoidable single use items.

**Information:** Ensure pharmacy teams follow the waste hierarchy – eliminate, reduce, reuse, recycle or recover and dispose. Check with patients or carers whether they have oral syringes, measuring spoons or cups at home to accurately measure the correct dosage of liquid medications instead of dispensing the single use plastics automatically.

**Resources**

- [Tackling pharmacy's reliance on single-use plastic](#)
- [Single Use Plastic Product Bill \(Wales\)](#)
- [Reducing disposable bag use within the pharmacy department at Gloucestershire hospitals NHSFT](#)

**Environmental benefits**

Reduce use of products which all have a life cycle from production to use and disposal, which is associated with greenhouse gas emissions.

**Co-benefits: (Dependent on items)**

- 1 Cost** – Use electronics with rechargeable batteries which will save the cost of replacing batteries long-term whilst also reducing e-waste.

**Suggested evidence**

Outline how pharmacy has reduced avoidable single use items. E.g., cups, plates, cutlery, bottled drinks, bags, or envelopes with plastic windows.

**PHARMACY STAFF****HIGHER LEVEL PERSONNEL****4.2.8 Recycle or refill printer cartridges.**

**Information:** Manufacturing new printer cartridges involves processes that release VOCs into the air and water. Refilling cartridges eliminates the need for packaging materials associated with new cartridges.

**Resources**

- [Recycle4Charity](#)
- [How to recycle printers and printer cartridges - What to do with old printers](#)
- [Printer cartridge recycling for you. The Recycling Factory](#)

**Environmental benefits**

Recycling reduces the amount of waste and its associated environmental impact.

**Co-benefits:**

- 1 Cost** – Refilling printer cartridges save cost buying new ones.

**Suggested evidence**

- Confirmation of action by pharmacy.
- Otherwise, outline attempts made to achieve this e.g. raised with hospital estates/ ICT team or Chief Pharmacist.



## LEVEL 3 (GOLD):

### HIGHER LEVEL PERSONNEL

#### 4.3.1 Carry out an audit of energy usage.

**Information:** Benchmarking energy usage and setting targets to reduce the carbon footprint overtime helps identify resource and cost saving opportunities for pharmacy settings. It also allows comparison with other pharmacy settings of similar sizes for best practice recommendations. Where possible, install a smart meter for better monitoring of energy usage.

**Resources**

- [Smart Energy GB](#)

**Environmental benefits**

Reduce energy consumption.

#### Co-benefits:

- 1 Cost** – Reduce hospital running cost.
- 2 Workforce** – Raise awareness about energy conservation and fosters a culture of responsible environmental stewardship.

**Suggested evidence**

Calculate the carbon footprint of annual energy usage using the greener pharmacy online toolkit. Set a target reduction of energy use.

Hospital pharmacies without a smart meter should consult Estates and Facilities team for this action.

### HIGHER LEVEL PERSONNEL

#### 4.3.2 Switch gas boilers to heat pumps, electric (and infrared) heaters, solar thermals, or district heating systems, if practicable.

**Information:** Hospitals are eligible for funding via the [Public Sector Decarbonisation Scheme \(PSDS\)](#) for heat decarbonisation and energy efficiency measures. Boiler replacement through the [Boiler Upgrade Scheme](#) should be explored in England and Wales where a grant can be secured to cover part of the cost of replacing fossil fuel heating systems with a heat pump or biomass boiler. [Grant funding](#) for energy efficiency improvements in Scotland is also available. Any upgrades to existing facilities should adhere to the [NHS Net Zero Building Standard](#).

**Environmental benefits**

Reduced carbon emissions compared to gas boilers, and lower energy consumption due to more efficient technologies.

**Co-benefits:**

- 1 Cost** – Reduce hospital running cost.
- 2 Workforce, Health benefit** – Reduce health risks associated with indoor pollutants produced by gas boilers, eliminate risks associated with gas leaks or carbon monoxide poisoning.
- 3 Research and innovation** – Drives innovation in renewable energy technologies and heating solutions which can lead to further improvements in efficiency and performance.

**Suggested evidence**

- Confirm pharmacy has actioned this.
- Otherwise, outline attempts made to achieve this e.g. raised with Estates or Chief Pharmacist.

**PHARMACY STAFF****HIGHER LEVEL PERSONNEL****4.3.3 Conduct a waste audit to quantify the amount and types of waste from pharmacy setting and subsequently set a target for reduction of carbon hotspots.**

**Information:** Work with waste management team who often conducts waste audits in hospital. This is particularly important for smaller pharmacy settings with inadequate waste storage spaces to minimise unnecessary waste generation.

**Resources**

- [Hospital Waste Guide 2024 – Waste Managed](#)

**Environmental benefits**

Help identify materials that can be diverted from landfill and recycled.

**Co-benefits:**

- 1 Cost** – Reduce waste-related costs.
- 2 Workforce** – Identify potential work hazards from inappropriate clinical waste disposals.
- 3 Governance** – Waste audits ensure compliance with waste regulations.

**Suggested evidence**

Outline findings from waste audits and recommendations implemented by pharmacy. Suggests contacting hospital waste management team who often conducts waste audits to help with this action.

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
4.3.4 Implement quality-assured systems to reuse sharps and cytotoxic bins.			
<b>Information:</b> The reusable bins need to have secure, tamper-proof locking mechanisms to prevent unauthorised access, reducing the risk of needlestick injuries and potential infections or hazardous exposure.			
<b>Environmental benefits</b>		Reduces carbon footprint related to single-use disposable containers and its incineration. E.g. One <a href="#">reusable waste container</a> can replace over 800 disposable plastic containers and 800 plastic bags being sent to landfill.	
<b>Co-benefits:</b>			
<b>1 Cost</b> – Reduce NHS costs in procuring containers and plastic bags.			
<b>Suggested evidence</b>		<ul style="list-style-type: none"><li>• Confirmation of action by pharmacy.</li><li>• Otherwise, outline attempts made to achieve this e.g. raised with waste management team or Chief Pharmacist.</li></ul>	

# Domain 5: Information and Communications Technology



10 – 15% of emissions across the healthcare sector coming from technology use. Technological advancement also leads to generation of e-waste which can lead to environmental contamination and health risks. See [Technology Code of Practice](#) on how to [make technology sustainable](#) and [Greening government: ICT and digital services strategy 2020 to 2025](#).

## LEVEL 1 (BRONZE):

PHARMACY STAFF	
<b>5.1.1</b> Keep equipment free from obstructions and clean filters and fans to prevent overheating and possible failure, especially during heatwaves.	
<b>Information:</b> Many ICT devices such as computers, servers and networking equipment generate heat during operation. Proper airflow is essential to dissipate this heat and prevent overheating. Obstructed equipment can impede airflow, leading to higher operating temperatures and a greater risk of hardware failures. It can reduce the lifespan and reliability of ICT equipment leading to unexpected system crashes and downtime.	
<b>Environmental benefits</b>	Reduce computer's internal components to work harder to maintain optimal temperatures resulting in lower energy consumption.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>Cost</b> – Reduce risk of breakdowns and failures thus delay business cost to replace equipment.</li> <li><b>Productivity</b> – Improve work efficiency.</li> <li><b>Workforce</b> – Reduce indoor pollution.</li> </ol>	
<b>Suggested evidence</b>	Confirm action by all staff.

## LEVEL 2 (SILVER):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
5.2.1 Optimise digital record storage by deleting unnecessary computer files, including those stored in the cloud.			
<b>Information:</b> Pharmacy staff should recognise the retention requirements recommended in pharmacy practice for compliance with legal requirements in the NHS Terms of Service. Set files to auto-delete at the end of retention period that aligns with <a href="#">NHS England's Records Management Code of Practice</a> .			
Resources		<ul style="list-style-type: none"><li>• <a href="#">Retaining and storing pharmacy records in England – SPS</a></li></ul>	
Environmental benefits		The storage and maintenance of digital data including online files and documents rely on data centres that require a substantial amount of electricity to power servers and cooling systems. Reducing the volume of unnecessary data can help lower energy consumption in data centres, decreasing the carbon footprint associated with data storage. Cloud migration can also greatly reduce carbon footprint and incorporate search engines that support environmental sustainability initiatives, such as tree planting programs with each search.	
<b>Co-benefits:</b>			
<b>1 Productivity, Satisfaction</b> – Streamlines data storage and reduces data replication leading to improved performance and responsiveness of devices and cloud storage. May reduce patient waiting times at the pharmacy.			
<b>2 Governance</b> – Reduces the risk of unauthorised access to sensitive information. Promotes data security and privacy.			
Suggested evidence		Confirm action by relevant administrative or ICT staff.	

PHARMACY STAFF	
5.2.2 Utilise digital apps or software to generate and maintain departmental staff schedules, eliminating the need for paper copies.	
<b>Information:</b> Unexpected events frequently necessitate multiple revisions to the staff rota in order to maintain uninterrupted service provision. This often leads to the printing of numerous copies of paper rotas for display on notice boards.	
Environmental benefits	Reduce resource consumption.

**Co-benefits:**

- 1 Cost** – Reduce costs procuring paper and printer cartridges.
- 2 Productivity** – Enhance accessibility and flexibility in staff management, particularly across multiple hospital sites. Reduce misunderstandings or errors that can arise from outdated paper rotas.
- 3 Governance** – Easy identification of staff covering various sites when audited which can help with internal incidents analysis.

**Suggested evidence**

Confirm action by pharmacy.

**PHARMACY STAFF****5.2.3 Deploy circular design practices and invest in ICT infrastructure.**

**Information:** In the context of digital devices, circularity aims at achieving the best use of devices by maximising their lifetime. When the ICT infrastructure in pharmacy setting approaches the end of its operational lifespan, upgrade any outdated hardware, software, and network servers. Ensuring that devices are put in sleep mode when they are not in use can reduce battery consumption and avoid premature obsolescence.

Having a policy for a single device per user (where possible) can reduce the costs associated with technology, in addition to providing carbon savings. This can be done through device management, with clear expectations of devices being returned for refurbishment or repair when they are no longer in use, or through more innovative measures such as using phones as computers.

**Resources**

- [Digital Net Zero – FutureNHS Collaboration Platform](#)

**Environmental benefits**

Most carbon emissions associated with a device is in its manufacture e.g. for a laptop this is between 75 – 85% of its overall carbon footprint, with transportation of the device representing a further 6 – 12%. Extending the lifetime of devices while they are in use in the pharmacy setting can lower ICT carbon footprint. Investing in all-in-one equipment enables the replacement of multiple outdated devices, thereby reducing energy consumption (e.g. multifunction printers can replace scanners, photocopiers, and fax machines).

**Co-benefits:**

- 1 Cost** – Purchasing remanufactured or refurbished devices can reduce spend on technology.
- 2 Productivity** – Upgrading hardware and software can minimise staff time dealing with inefficient devices and enhance overall pharmacy productivity.
- 3 Time, Satisfaction** – May reduce patient time spent waiting for medications or receiving service from pharmacy.

**Suggested evidence**

Outline how pharmacy achieved this action.

## LEVEL 3 (GOLD):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
5.3.1 Aim to meet the NHS’s ambition to eliminate paper at the point of care and support its digital evolution.			
<p><b>Information:</b> Switch to digital records where possible to minimise paper audit trails. E.g., private prescription records, controlled drug registers, e-prescribing, e-commerce for purchasing invoices and statements. As technology continues to evolve rapidly, the NHS aim to equip the health and social care workforce with the skills to confidently, effectively, and enthusiastically use digital tools in the workplace.</p> <p>Staff should encourage patients to order their repeat medicines through the NHS App or other digital repeat prescription ordering systems. Where appropriate and desired patients who are not digitally literate should be offered assistance from pharmacy staff to effectively use technology. Patients who are digital literate should be given the option to scan QR codes or provided website links to access necessary information online. Text messaging or app services can be utilised to inform patients when their prescriptions are ready to collect with the opening hours to reduce unnecessary journeys to the pharmacy.</p>			
Resources	<ul style="list-style-type: none"><li>• Business Case Carbon Impact Tooling V3.2 is available on <a href="#">Digital Net Zero Future NHS platform</a> to compare the carbon impact of paper vs whole digital system.</li><li>• <a href="#">Improving the digital literacy of the workforce   Digital Transformation (hee.nhs.uk)</a></li></ul>		
Environmental benefits	Reduce paper use and unnecessary travel carbon footprint.		
<p><b>Co-benefits:</b></p> <p><b>1 Cost</b> – Potential cost savings in long term.</p> <p><b>2 Satisfaction</b> – Keeps patients informed when their prescriptions are ready for collection or if they have been ordered and signed off by prescribers.</p> <p><b>3 Workforce</b> – Minimising effort to file paper copies and retrieve for audit trails. Reduce unnecessary miscommunications and travel when ordering prescriptions between hospital and the patient.</p>			
Suggested evidence	Case study outlining how pharmacy achieved this action.		

### 5.3.2 Utilise digital technologies, (e.g. automated dispensing machines) to track and manage drug inventory levels, ensure optimal stock rotation and reduce the likelihood of medicine waste.

**Information:** Automated dispensing machines can optimise inventory management by tracking stock levels in real time to prevent overstocking and out of stock incidences. It can also easily highlight stocks nearing expiry dates without the need of manual checks on traditional shelves.

Stocking smaller packaged medicines in clinical settings (e.g., vials or prefilled syringes) that reflect clinical usage patterns can reduce pharmaceutical waste. An [American surgical suite](#) eliminated 50 and 100 mL bottles of propofol from the formulary, replacing them with 20 mL bottles, and reduced propofol waste from 29.2 mL/day/bin to 2.8 mL/day/bin.

#### Resources

- [Reducing drug waste in hospitals | The BMJ](#)

#### Environmental benefits

Reduce the likelihood of medicine waste and carbon footprint associated with its disposal.

#### Co-benefits: (Technology dependent)

- 1 Productivity, Satisfaction** – Improved work efficiency dispensing medications and redirect staff time for service provision to improve patient access.
- 2 Workforce, Time** – Using automated dispensing machine can minimise dispensing errors, optimise space within pharmacy, reduce patient wait times.
- 3 Research & Innovation** – Drives innovative practice.

#### Suggested evidence

Outline how pharmacy currently tracks and manages drug inventory levels to reduce likelihood of medicine waste.



## Domain 6: Travel



Road travel from patients, visitors, staff and NHS suppliers account for 14% of the healthcare system's total emissions in England. Choosing active travel also reduces air pollution which disproportionately affects those with pre-existing health conditions, older people and children. The NHSE [Net Zero travel and transport strategy](#) outlines various approaches and methods to decarbonise healthcare related travels.

### LEVEL 1 (BRONZE):

PHARMACY STAFF	
6.1.1 Promote active travel.	
<p><b>Information:</b> Encourage staff to walk, cycle, park and ride or take public transport to the pharmacy setting where possible. Staff could provide information to patients about the health benefits of active travel on physical and mental health. Staff should explore their eligibility for discounted travel passes for public transport and car sharing options with colleagues. Consider conducting a travel audit whereby the results can be utilised in future policy and decision making with the hospital or local health board to improve public infrastructure to promote greener travel to the hospital sites.</p>	
<b>Environmental benefits</b>	Reduce air pollution and carbon emissions.
<p><b>Co-benefits:</b></p> <ol style="list-style-type: none"> <li><b>1 Workforce, Satisfaction</b> – Active travel improve overall health and wellbeing for patients and staff.</li> <li><b>2 Health</b> – Reduce the pharmacy's contribution to air pollution.</li> <li><b>3 Cost, Time</b> – Potentially reduce unnecessary travel costs, delays, or disruptions due to road closures or traffic jams.</li> </ol>	
<b>Suggested evidence</b>	Outline how staff promote active travel at the pharmacy and if any personalised travel plans for staff are created. Upload results of any travel audits conducted.

## LEVEL 2 (SILVER):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
6.2.1 Support patients navigate health and social care systems and overcome barriers to accessing services. Share patient information for their direct care according to data protection legislations and display a privacy notice.			
<b>Information:</b> Pharmacy should communicate their opening hours to all staff in the hospital to avoid patients being sent to the hospital pharmacies out of hours with a hospital-only prescription. These patients may be out of area and not able to return to the hospital to collect their prescription resulting in further navigation of different healthcare services and pharmacies downstream. Staff should also ensure they have accessed and checked all electronic health records linked to the patient’s enquiry with consent to view data before sending them away from the pharmacy unnecessarily.			
Environmental benefits		Reduce carbon footprint of travel and resources required in different healthcare facilities unnecessarily.	
<b>Co-benefits:</b>  <b>1 Cost, time</b> – Ensuring patients receive appropriate care and timely interventions can reduce overall costs of emergency care and hospitalisation.  <b>2 Satisfaction</b> – Facilitates better communication and trust between patients and healthcare providers when they are not subjected to a frustrating cycle of seeking care across multiple locations.			
Suggested evidence		Confirm pharmacy profile and opening times are updated in all relevant public facing materials.	

HIGHER LEVEL PERSONNEL	
6.2.2 Infrastructure available to promote active travel and green transport, as practicable.	
<p><b>Information:</b> Pharmacies can support greener travel by offering enhanced cycling infrastructure, including fit-for-purpose bike racks, safe and secure bicycle storage. <b>England:</b> ICBs and ICSs are partnering with local authorities and local transport authorities to support delivery of travel infrastructure and services necessary to increase sustainable travel.</p> <p>Hospitals expenses team may opt to provide increased mileage reimbursements for work-related travel when staff choose greener modes of transportation. Some organisations offer <a href="#">cycle to work scheme</a> where NHS staff can purchase bicycles or cycling equipment through salary sacrifice arrangements, resulting in savings on income tax.</p>	
Resources	<ul style="list-style-type: none"><li><a href="#">Smarter travel - Imperial College Healthcare NHS Trust</a></li><li><a href="#">Greener NHS - Boosting healthy and sustainable travel in Manchester</a></li></ul>
Environmental benefits	Reduce air pollution and carbon emissions.

**Co-benefits:**

- 1 Cost** – Active travel options are often more cost-effective for individuals compared to owning and maintaining a car, leading to potential savings on transportation expenses.
- 2 Workforce, Satisfaction** – Encourage active travel that improves overall health and wellbeing. Public and new staff are better informed of their travel options to the pharmacy. Active travel improves health and wellbeing and reduces sickness absences in workforce.

**Suggested evidence**

Outline what information is provided or what infrastructure is in place at pharmacy to promote lower carbon travel.

**PHARMACY STAFF****HIGHER LEVEL PERSONNEL****6.2.3 Offer care closer to home through remote consultations where appropriate.**

**Information:** Where clinically appropriate, optimise access to virtual wards or outpatient parenteral antimicrobial treatment (OPAT) services to support low carbon care pathways and care closer to home for patients with infections and other complex care needs. The rollout of virtual wards delivering care to patients in their own homes has been shown to reduce accident and emergency presentations and hospital admissions.

**Resources**

- [Virtual appointments—embracing the opportunity to reduce carbon emissions mustn't widen health inequalities | The BMJ](#)
- [Moving healthcare closer to home - GOV.UK \(www.gov.uk\)](#)

**Environmental benefits**

Reduce carbon footprints from secondary care service delivery and travel for patients.

**Co-benefits:**

- 1 Satisfaction** – Allows patients to be cared in their own home environment. This will particularly benefit patients living in remote and rural areas.
- 2 Time, Cost** – Reduce occupancy of hospital beds and thus NHS waiting lists. Reduce stress and travel costs or time off work/education for families/friends to travel to hospital at specified visiting times to see patients.

**Suggested evidence**

Outline whether pharmacy team is involved in virtual wards, OPAT services or any other care services to support low carbon pathways.

## LEVEL 3 (GOLD):

PHARMACY STAFF		HIGHER LEVEL PERSONNEL	
6.3.1 Review existing pharmacy business travel routes using the carbon footprint calculator and aim to consolidate external deliveries to enhance efficiency and minimise travel footprint			
<p><b>Information:</b> Pharmacy procurement teams should assess the necessity and frequency of deliveries from external suppliers, wholesalers, and between hospital sites. Urgent medications should be prioritised for more frequent transport, while regular supplies can be delivered on optimised routes and schedules. Medication deliveries to patient homes and home visits should be localised and optimised for efficiency using route planning tools to minimise travel and reduce the environmental footprint. This aligns with NHS Net Zero travel and transport strategy to maximise the operational cost savings and the health and societal benefits.</p>			
Resources		<ul style="list-style-type: none"><li>E-cargo bikes could help staff get to patients faster – <a href="#">Guy's and St Thomas' NHS Foundation Trust</a></li></ul>	
Environmental benefits		Reduce overall carbon footprints related to use of motor vehicles.	
<p><b>Co-benefits:</b></p> <p><b>1 Cost</b> – Reduce costs for running motor vehicles.</p> <p><b>2 Satisfaction, Time</b> – Reduce traffic congestion, unexpected delays, risk of accidents and smoother traffic flow in urban areas.</p>			
Suggested evidence		<ul style="list-style-type: none"><li>Calculate pharmacy business travel carbon footprint using the greener pharmacy online toolkit.</li><li>Outline how pharmacy has attempted to reduce its travel footprints.</li></ul>	

HIGHER LEVEL PERSONNEL	
<b>6.3.2 Switch to greener business fleet.</b>	
<p><b>Information:</b> According to the <a href="#">Health Foundation report 2021</a>, 63% of UK adults interviewed supported the NHS fleet of vehicles to be powered by electric or hydrogen. This action is in line with the NHS <a href="#">Net Zero travel and transport strategy</a> to fully decarbonise its fleet by 2035. Consider cargo bikes, smaller, hybrid or electric vehicles to deliver medications or conduct home visits for any clinical services offered by pharmacy.</p> <p>Staff can explore the possibility of switching to greener transportation options via the salary sacrifice vehicle purchase scheme.</p>	

<b>Environmental benefits</b>	Reduce use of fossil fuels which is the main driver of climate change.
<b>Co-benefits:</b> <ol style="list-style-type: none"> <li><b>1 Health</b> – Reduce respiratory illnesses and overall healthcare costs.</li> <li><b>2 Cost</b> – While the initial investment in greener vehicles or technologies might be higher, the operational costs can be lower. E.g. Electric vehicles have lower fuel and maintenance costs over their lifespan.</li> <li><b>3 Governance</b> – Compliant with local environmental regulations (e.g. ULEZ, congestion charge zones)</li> </ol>	
<b>Suggested evidence</b>	<ul style="list-style-type: none"> <li>• Confirm pharmacy has actioned this.</li> <li>• Pharmacy that does not own any vehicles scores a point for reduced contribution of carbon emissions.</li> <li>• Pharmacy that utilises a third-party organisation for transportation should outline carbon reduction plans or net zero commitments by the organisation.</li> </ul>

