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## Climate Smart Strategies in Nursing & Midwifery Practice - a guidance document



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## Introduction

Climate change has been identified as the single biggest threat to global health, adversely affecting the health of our population and increasing health inequalities across the globe. [Wales became the first nation to declare a national climate emergency in 2019](#) in a bid to generate greater collective focus on the challenges posed by climate change. NHS Wales is one of the leading public sector carbon emitters and requires urgent collective action to reduce its carbon footprint and support better public health outcomes. The [NHS Wales Decarbonisation Strategic Delivery Plan \(2021\)](#) sets out a number of initiatives to reduce emissions, with initial efforts focused on decarbonising its buildings, travel and procurement. Whilst this has produced positive results, more can be achieved through greener clinical practice and healthcare delivery.

In 2023, the Office of the Chief Nursing Officer for Wales undertook a Nursing Sustainability project alongside the HSS Climate Emergency Program to explore and maximise the contribution of nurses and midwives towards achieving the ambition for a net-zero public sector. This work yielded positive results for the nursing and midwifery workforce and subsequently identified the need for collective action from the range of services delivering health and care in Wales. As a result, the Heads of Professions in Welsh Government published a [collective position statement](#), identifying environmental sustainability as a priority for health and care service delivery in Wales.

The Nursing & Midwifery Sustainability project made six recommendations to stimulate sustainable activity within the family of [Nursing & Midwifery professions](#). This Guidance Framework is in line with recommendation four, which aims to embed sustainable healthcare principles into existing processes within NHS Wales to achieve maximum reach without adding additional burden to an already stretched system. This document offers practical examples of how environmental sustainability can be an integral component of healthcare delivery.

The purpose of this document is to provide a small number of examples that can act as enablers for clinical areas to incorporate sustainable healthcare principles into their existing operations. This document is designed to build confidence and encourage initial efforts for nursing and midwifery services in adopting environmental sustainability as a core construct of nursing practice and to build confidence in this area of practice. The examples listed within this document are not exhaustive nor prescriptive. Organisations and clinical services are encouraged to adapt the examples within this document to suit their needs, as directed by local climate intelligence, process mapping and evidence-based practice. The expertise of organisational decarbonisation leads and sustainability champions should be harnessed to ensure these actions are adopted in a way that supports the organisational decarbonisation strategy and to ensure all contributions are recognised.

Whilst this document is geared towards the nursing and midwifery professions, its principles are transferrable across the health and care system. It is recommended that this document is considered in conjunction with other complimentary guiding frameworks that can assist in the delivery of green measures, such as the [Greener Primary Care Framework](#), [Resources for Sustainable Health toolkit](#), the Wales AHP

sustainability toolkit and the [Toolkit for Public Bodies](#). Input has been sought from key stakeholders across health boards, trusts and supporting organisations to inform the suggested measures in this document.

This document has been structured into three overarching sections:

1. **Who we are** – this section focuses on supporting nurses and midwives on an individual level to enable sustainable action;
2. **What we do** – this section focuses on the clinical procedures and processes that are undertaken within nursing and midwifery services that can support sustainable healthcare;
3. **How we do it** – this section focuses on the way in which we operate, including the physical resources we use, and how we manage those resources.

## Who we are

The nursing and midwifery profession has a history of supporting health and wellbeing through responding to the needs of our population. In the face of the climate emergency emerging as the biggest threat to human health, nurses and midwives must similarly meet this challenge through greener healthcare practices.

As the largest ([Welsh Parliament, 2023](#)), most influential ([Ipsos, 2022](#)) profession in NHS Wales, nurses and midwives can play a key role in embedding sustainable healthcare principles into clinical practice, and should be encouraged to do so at every opportunity. Nurses and midwives who are delivering care are best placed to identify areas of practice that can be improved to meet the principles of sustainable healthcare:

1. Ill-health prevention;
2. Patient self-care;
3. Lean and streamlined clinical pathways;
4. Low carbon alternatives.

([Centre of Sustainable Healthcare, 2023](#))

This section provides some examples of how organisations and managers can enable their nurses and midwives to become green practitioners in all that they do, through raising awareness, education, and individual sustainable behaviours. In addition to these examples, organisations are urged to consider how individuals can be supported to identify and address areas of practice that can be more environmentally friendly.



## Nurse induction

Induction programmes are a way of welcoming newly recruited staff and providing a fundamental awareness of the organisation's strategy, culture, and operational policies. All nurses that commence a clinical role as a new employee within an NHS

Wales organisation undertake a corporate induction. This may then be supplemented by a local, departmental induction programme that provides a welcome that is more tailored to the clinical area in which the nurse will be working.

Nurse inductions provide an opportune moment to highlight the detrimental impact that healthcare provision has on environmental sustainability and the organisation's commitment to improving its climate impact.

Methods of how the induction process can be used to encourage sustainable healthcare are as follows:

- ✓ Allowing time for attendees to complete the *Achieving Net Zero in Wales* e-learning package;
- ✓ A presentation from a local sustainability champion that provides a fundamental knowledge and insight into local work being done in this area;
- ✓ Outlining the organisational strategy towards sustainable healthcare and how employees can support this in their daily practice;
- ✓ Empower attendees to seek ways to provide healthcare that is beneficial to the environment;
- ✓ Managers to ask new staff to consider how their working environment could be more environmentally friendly;
- ✓ Signpost employees to resources that can support local climate action e.g. a local green group, [Green Health Wales](#), [Centre for Sustainable Healthcare](#) etc.

It is recommended that environmental sustainability is incorporated into induction programmes as an opportunity to raise awareness of this important topic area and provide fundamental knowledge of what action can be taken to address this in the near future. Induction leads should seek to incorporate sustainable healthcare principles into induction processes wherever possible and practical to do so.

## Annual appraisal

Each NHS Wales organisation provides each employee with an annual appraisal as a structured method of reflection on the previous year's tenure and planning for the forthcoming year's tenure. The structure and content of an annual appraisal varies between organisations, but they provide potential to discuss the employee's role in championing sustainable healthcare delivery within their clinical setting in a subject area that interests them. The appraisal process provides a regular opportunity for clinical leaders to empower their employees and enable them to act in a sustainable manner, whilst maintaining regular discussion around greener healthcare.

Examples of how the appraisal process can support sustainable practice are as follows:

- ✓ Reflecting on the previous year's environmental achievements and the employee's role in these;
- ✓ Exploration of areas in which the employee feels can be targeted to reduce carbon impact further;



- ✓ Identifying the learning/development needs and confidence levels of the employee in supporting sustainable healthcare;
- ✓ Setting objectives that contribute towards the organisation's sustainability strategy.

More frequent conversations around sustainable healthcare increase the confidence of nurses to act sustainably. It is recommended that managers incorporate this into their appraisal approach and for organisations to consider implementing a dedicated sustainability section of the appraisal process to strengthen the focus on sustainable principles.

## Clinical training delivery

NMC's [The Code](#) and the Code of Conduct for Healthcare Support Workers in Wales place a professional responsibility on nursing staff across NHS Wales to maintain their own clinical competence through continuous professional development (CPD). To support this, the delivery of clinical training throughout NHS Wales is common practice, with staff attending training packages on a regular basis. The content of training delivery varies between clinical specialties and between organisations.

Ensuring that the environmental impact of the taught clinical intervention is included in the training delivery raises awareness and provides education to staff that they can relate to practice. The widespread awareness of the environmental impact of clinical interventions is crucial to reversing the carbon footprint of healthcare services.

It is strongly recommended that sustainable healthcare principles are adopted and promoted within clinical training delivery so that staff are educated and regularly reminded of the climate impact of healthcare. All practitioners who develop and deliver educational materials to nursing staff are implored to include an environmental thread into each training session they deliver. This will equip nursing staff with the ability to include environmental considerations during health promotion exercises and empowering patients to manage their own health, supporting principle 2 of sustainable healthcare.

Examples of this could include:

- ✓ Training content that encourages staff to only do what is clinically required. This reduces clinical waste and improves the patient experience. Examples of this are:
  - undertaking clinical investigations only when there is a clinical indication to do so;
  - cannulating patients on attendance to ED only when there is a clinical indication to do so;
  - minimising "just in case" clinical interventions.
- ✓ Training content that encourages staff to empower patients to self-care, where clinically suitable for this to occur. This has a beneficial environmental impact

by reducing the need for patients to attend healthcare appointments. Examples of this are:

- teaching patients to manage their chronic condition;
  - supporting patients to manage their own medication administration, where suitable to do so.
- ✓ Training content that highlights areas that have a detrimental environmental impact and provides strategies to avoid this. Examples of this could be:
- highlighting the environmental impact of disposable continence products & encouraging the use of washable continence products where clinically suitable;
  - promoting the prudent use of clinical procedure packs to maximise use of its contents and reduce waste;
  - emphasising the environmental impact of PPE and providing practical advice as to how staff can reduce unnecessary PPE use.

## NMC revalidation

Professional regulation for nurses and midwives from the NMC stipulates that registrants need to go through the revalidation process every three years. The NMC have recently announced their intention to consider including environmental sustainability prompts as part of the reflective practice requirements of the revalidation process, as part of their [Environmental Sustainability Plan](#).

It is recommended that registrants demonstrate their commitment to sustainable healthcare delivery through their reflections as part of their NMC revalidation process. The revalidation process offers a unique opportunity to reflect on the previous three years' events and for registrants to explore their experiences relating to environmental sustainability with their confirmer.

Examples of this could include:

- ✓ A reflective statement on sustainable initiatives that the registrant has carried out;
- ✓ Inclusion of environmental considerations to experiences that the registrant is reflecting on – for example, the amount of waste produced by a certain clinical procedure, the way in which services could be improved to reduce travel etc.;
- ✓ A reflective statement of how the registrant has incorporated the four principles of sustainable healthcare into their daily care delivery.



## What we do

Nurses and midwives play a key role in the wider delivery of healthcare within NHS Wales. The [Royal College of Nursing](#) describe four pillars of nursing practice - clinical practice, education, research and leadership – that are essential to support the wide-ranging, critical role that the nursing professions undertake in the health system.

To support the crucial work of nurses and midwives across Wales, there are a variety of processes that underpin the quality and safety of nursing practice, forming part of a clinical governance framework. This framework of processes has a unique ability to foster sustainable healthcare practices by embedding sustainability into their core function.

This section will provide some examples of how organisations can embed sustainable healthcare principles into these processes. However, organisations and services are encouraged to consider how the wider clinical governance agenda can support, and celebrate, sustainable care delivery.

### Clinical accreditation schemes

Clinical accreditation schemes are used in most Health Boards and Trusts throughout Wales as a method of recognising good practice being undertaken in a clinical setting. These schemes usually offer a variety of preset metrics that clinical areas need to meet in order to achieve accreditation. These metrics vary between organisation but primarily focus on clinical aspects including patient reported outcome measures (PROMS), patient reported experience measures (PREMS), documentation audits, clinical audit results etc.

These schemes present an opportunity for clinical areas to evidence their efforts to reduce their environmental impact using the **reduce, reuse, recycle** mnemonic.

Such examples could include:

- ✓ Waste reduction strategies that show a measurable reduction in the waste generated by the clinical area, including better use of clinical stock;
- ✓ Initiatives that reduce travel for staff or for patients;
- ✓ Evidence of reducing single use plastics within the clinical area;
- ✓ Schemes that seek to repurpose and reuse clinical equipment, where clinically appropriate and safe to do so;
- ✓ The recycling of waste that would usually be disposed of using traditional means.

It is recommended that to achieve the higher levels of accreditation, clinical areas must be able to demonstrate their commitment to sustainable healthcare and evidence an improvement in their environmental impact.

## QI methodology

Quality improvement is a method of improving the services provided within NHS Wales and is undertaken on a frequent basis. There are a number of QI frameworks in use across the NHS, most of which utilising an incarnation of the PDSA cycle (Plan, Do, Study, Act) to drive iterative improvements. Many QI initiatives support principle 1 (preventing ill-health), principle 2 (patient self care) and principle 3 (lean care pathways) of sustainable healthcare, but this is often overlooked as part of the PDSA cycle.

Including environmental sustainability as a core element of QI processes ensures that sustainability is not overlooked and provides an opportunity to highlight and celebrate progress in this area. This also serves to ensure that changes in practice are supportive of NHS Wales' net-zero ambition.

Including sustainability as an integral part of quality improvement provides a structured, recognisable framework by which staff can introduce green behaviours into clinical practice. By being a core consideration, this will also raise awareness of the environmental impact of the services we provide and the need to take action in small, measurable steps.

We can ensure that quality improvement initiatives make a positive contribution towards environmental sustainability by:

- ✓ Recognising and valuing environmental sustainability as a domain of quality;
- ✓ Improving capability through including sustainability as a principle in all levels of QI training;
- ✓ Including environmental sustainability measures as a specific metric in the planning and evaluation stages of all proposed QI initiatives;
- ✓ Adopting the principles of existing sustainable healthcare quality improvement toolkits (such as the [SusQI framework](#)) into organisational processes;
- ✓ Communicate the impact through embedding into QI communication methods.

## Environmental impact assessments

Clinical policies help steer, guide and monitor the standards of care delivery within NHS Wales. As such they present a unique opportunity to consider the impact of care delivery and encourage strategies to reduce the carbon footprint of services.

It is recommended that sustainability is considered as a core part of clinical policy through the use of environmental impact assessments. Using environmental impact assessments gives the author the ability to outline how the clinical policy will affect the sustainability strategy of the organisation and how this can be mitigated. The inclusion of an environmental impact assessment allows organisations to be well-informed about the climate effects of clinical areas and support decision making, particularly around mitigation strategies.

Examples of areas that can be highlighted as part of an environmental impact assessment are as follows:

- ✓ Identifying policies that require or negate the need for staff or patient travel;
- ✓ Highlighting areas that produce a significant amount of clinical waste, or conversely can reduce clinical waste;
- ✓ Policies that positively or negatively affect the use of resources, especially single use plastics or materials that cannot be reused or recycled.

## How we do it

The delivery of healthcare services requires a significant amount of physical resources to do so. These resources range from the wide variety of clinical supplies that we use to deliver care (such as personal protective equipment, syringes, aseptic packs etc) to the complex logistics involved in supplying these goods to clinical services.

There are a variety of considerations that need to be accounted for to ensure sustainable care delivery, specifically the environmental impact of:

1. The supply chain of acquiring the equipment and supplies that we use;
2. Disposal of waste;
3. The energy that our buildings/estates use;
4. Patient or staff travel for care services.

Ensuring that services are cognisant of the above considerations in the planning and delivery of clinical care will ensure the application of sustainable healthcare principles to the [biggest carbon contributors within NHS Wales](#).

This section will provide examples of how nurses and midwives can support action in this area. Your organisation will have existing plans to address these areas, but nursing and midwifery services can make a valuable contribution through adopting some of the guidance in this section, and going further by considering the wider impact of how we deliver our services.



## Procurement of clinical supplies

The procurement of goods into NHS Wales and its associated supply chain is the biggest contributor to its [carbon footprint](#). Therefore, it is important the carbon impact of procuring items for use in NHS Wales is understood by all staff within NHS Wales so there can be a collective effort in reducing this impact. Procurement within NHS Wales is delivered in partnership with NHS Wales Shared Services Partnership, who support this activity within NHS Wales organisations. As part of this partnership arrangement, NHS Wales organisations have the support of a network of procurement nurses who advise and support procurement activity within health boards.

It is suggested that clinical staff from NHS Wales can support the reduction of procurement associated emissions by:

- ✓ Only procuring supplies that are required, at a quantity that can be utilised before the expiration of the product;
- ✓ Ensuring that sustainable measures are included in a procurement specification document that industry bid against;
- ✓ Ensuring that carbon impact is considered in the selection of providers for a specific product;
- ✓ Working alongside NWSSP procurement nurses to support with green procurement.

## Sustainable stock management

The effective management of clinical stock is essential to waste reduction in NHS Wales. The supplies that we purchase for use across NHS Wales are a valuable resource, and we must plan the use of these products to minimise the risk of them being wasted before their expiry date and to reduce the risk of overstocking.

Best practice starts before an order for equipment is placed, where existing resources should be sought and utilised before bringing in new supplies. Organisations should explore ways in which this can be made easy for staff so that the most environmentally friendly methods of obtaining stock are the most convenient.

Good stock management systems are required to ensure that clinical areas are supported to manage their supplies well. This includes tidy, accessible storage spaces where stock is rotated to ensure the supplies that are due to expire are used first.

Consideration must be given to creating robust mechanisms that support clinical areas to easily redistribute stock in the event of surplus supplies that are due to expire. The sharing of resources between clinical areas should be encouraged as best practice.

In addition to positive environmental effects, good stock management will also provide a financial saving to organisations.

It is recommended that:

- ✓ Stock storage and stock rotation are an integral part to the normal routine in your clinical area.
- ✓ Stock that may not be used before its use by date is offered to areas who will use it.
- ✓ Stock management processes are reviewed and unified across organisations to provide consistency of approach;
- ✓ Stock management processes include mechanisms to effectively rotate stock and offer solutions to minimise wastage through approved solutions such as [Warp It](#);

- ✓ Staff seek resources from within the organisation before buying new clinical supplies;
- ✓ Any surplus clinical supplies are utilised within the organisation before being disposed of.

## Virtual working

The use of digital technology has the potential to reduce carbon emissions, particularly when technology reduces the need for staff or patient travel. The COVID-19 pandemic necessitated a rapid cultural shift towards the use of remote consultation which has helped clinical services adopt technology as part of their care delivery.

Whilst not all clinical consultations are suitable to be undertaken remotely, technology still plays a part in supporting a significant proportion of consultations that would otherwise require a physical journey. This reduction in travel can present an opportunity to reduce healthcare associated carbon emissions, with travel identified as a significant contributor to [NHS Wales emissions](#).

Additionally, virtual meetings are increasingly common in healthcare environments and, where suitable, should be a first consideration over a physical meeting where attendees may need to travel. This reduction in the need to travel to a venue will contribute to an accumulation of travel avoidance, which will provide a valuable contribution to reducing the carbon footprint of NHS Wales.

In order to maximise the effectiveness of virtual working, it is recommended that:

- ✓ Clinical areas that are able to undertake remote consultations are digitally enabled to allow them to do so;
- ✓ The feasibility of delivering remote consultations is considered and tested in clinically suitable services;
- ✓ The impact of remote consultations is measured and captured as part of the organisational sustainability strategy;
- ✓ For non-clinical meetings, a “virtual first” approach is taken wherever suitable to do so.

## Summary

These climate smart strategies have been designed with you in mind, to aid you and your leaders in supporting your contribution to reducing the harmful effects of climate change through your daily work'. This is the start of our journey as a climate smart profession and gives some initial ways you can contribute.

We can be contacted at [QualityAndNursing@gov.wales](mailto:QualityAndNursing@gov.wales) if require further support or wish to discuss any of the strategies outlined or you have any contributions for future iterations of this document. We will aim to maintain this as a dynamic working document and will be reviewing and refreshing in line with the NHS Wales Decarbonisation Strategic Delivery Plan (2021 - 2030).