

## Information and guidance



### Call for case studies in healthcare sustainability

#### What is the Lancet Commission on Sustainable Healthcare?

The Lancet Commission on Sustainable Healthcare (LCSH) launched in 2023 with the goal of defining the key elements of a rapid, effective, efficient, and just transition to low-polluting, sustainable, resilient health systems across high- middle- and low-income settings.

#### Why is there a call for case studies?

One workstream of the LCSH focuses on how prepared health systems are for climate and pollution related changes, disruptions, and shocks.

We are interested in how adaptation and mitigation strategies can work together in different settings across the world. Currently we lack data about what is going on in real healthcare settings.

#### What sort of case studies are you looking for?

The LCSH is currently welcoming case studies to help supplement our understanding of how health systems around the world are taking action on sustainability, including approaches that centre adaptation, risk management, and resilience-building in the face of climate change and ecosystem disruption.

#### How will my submission be used?

We value your contribution. All the cases submitted will be used to help the LCSH make recommendations on how to set the research and policy agenda for the field of sustainable healthcare for the next decade, toward the structures and actions necessary for sustainable healthcare transformation. Case studies will be uploaded to the Centre for Sustainable Healthcare (CSH) resource library and accessible from there, unless otherwise specified.

# Instructions: submitting a case report

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## Where can I submit my case report?

We ask you to provide information about your project in a standardized format. This allows us to summarise cases most helpfully.

Please fill in the case study submission form. [Online](#) or [PDF](#) versions are available.

You can submit the form here

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Or email a completed form to [chloe.saunders@clin.au.dk](mailto:chloe.saunders@clin.au.dk).

## What language can I submit the form in?

Although the forms are only available in English, you are welcome to write your answers in any language. We might contact you if further information is required during the translation process.

## Is any support available to complete the form?

This document gives guidance about how to answer each field, and explains any specialist language. If you require further support with the process, or have questions, please contact [chloe.saunders@clin.au.dk](mailto:chloe.saunders@clin.au.dk)

## What is the deadline?

Please submit cases **before** 30.04.2024.

## General Tips for a good case report

- In general, keep to one project per case study.
- Provide a comprehensive yet concise summary.
- Include details that might be helpful for the reader to plan a similar project. Where appropriate, guide the reader to additional resources or references.
- Supplementary material/images/data etc. can be uploaded or emailed to [chloe.saunders@clin.au.dk](mailto:chloe.saunders@clin.au.dk).  
If you include supplementary material, please indicate this in relevant boxes when you complete the form, and include the project name in your email/file names.
- Case studies are not 'technical reports'. They should be a 'good read' – including photos and quotes may help with this.

## Specific guidance to filling in the case study submission form

### 1. Name of project

We suggest you choose a short, memorable name, that describes the project or case accurately.

### 2. Topic Area

- Identify the topic area(s) that are applicable to your project.
- You can select as many as apply.
- You can also input your own topic area, under 'Other'.

**Greenhouse gases, linkages, emissions** For example projects involving the switch towards renewable energy sources, or reduction in use of volatile anaesthetic gases. Also includes initiatives improving information or data around use or emissions.

**Public Health, health equity and prevention.** Programs, practices, or care models that create sustainable health through addressing health inequities, or otherwise reducing current and future healthcare need and usage.

**Estates and facilities** Relate to tangible changes to buildings, properties, grounds and their management. For example, may include changes to energy generation and use, for

instance: LED lighting, efficient infrastructure, and retrofit and installation of solar panels or waste and recycling facilities.

**Food, catering and nutrition.** For example, projects switching to local food suppliers, reducing food waste, improving plant based options or, reducing single-use plastics in canteens and food packaging.

**Funding and financial mechanisms** For example specific or targeted funds, loans, or incentives, organisational divestment from fossil fuels or changes to decision-making processes, such as introducing a sustainability impact assessment for new investments or financial decisions.

**Medicines** Any projects related to pharmaceutical procurement, prescribing practices or patient education. For example switching from meter dose inhalers to dry powder inhalers, reducing use of liquid medications, deprescribing projects, or projects addressing ecological medicine disposal.

**Research and innovation.** Innovations in or research into the delivery of a specific service or treatment, an aspect of its delivery or an aspect of its sustainability. In this category, there is likely overlap with other topics. For example, innovations in reusable equipment, application of technology to support care pathways, or research into improving the energy efficiency of buildings.

**Community/public engagement** For example campaigns, sharing resources, and use of digital tools or virtual events to support greater understanding, acceptability and uptake of sustainable models of care.

**Supply chain and procurement.** Projects related to embedding sustainability and carbon in decision-making for example conducting life cycle assessments and evaluations of high volume products pooling purchasing power to enable sustainable procurement of goods and services.

**Sustainable models of care** For example projects that streamline care, interventions that aim earlier and less intensive treatment or reduce unnecessary treatments and interventions or projects to ensure that all activity in the system represents best clinical practice. For example, combining several treatments or diagnostic services in a single patient visit to save time and reduce the number of visits.

**Travel and transport.** For example projects related to reducing the need for healthcare related travel, increasing active travel or reducing the emissions from vehicles.

**Leadership and governance** Strategy and policy interventions to support the spread and uptake of research and innovation, and encourage more sustainable healthcare. This might include embedding consideration of sustainability principles in decision-making, updating procurement mechanisms to stimulate innovation in sustainable healthcare or support structures to spread innovation and learning for innovators and policymakers.

or influencing staff towards sustainable clinical practices, or initiatives incentivising sustainable behaviours.

**Green/blue space and biodiversity.** Projects that increase the availability or accessibility of natural spaces for therapeutic purposes or projects focussed on the ecological management of healthcare estates.

**Digital transformation** Innovation or implementation of digital technologies that can support low carbon transformation. For example providing services virtually where possible, app-based health sensing or prevention tools. Alternatively projects might centre on creating low impact ICT systems, for example reducing video or medical scan resolution to lower energy requirements.

**Education and workforce** Training that empowers the current and future healthcare workforce to understand the challenges faced due to climate change, and how they can make a difference, or nurture resilience. May include initiatives enabling skills to be built in the workforce (e.g. sustainability managers).

**Disaster risk reduction and management.** Cases related to mitigation or adaptation to the impact of (climate change related) disasters. For example flood control systems, or projects related to reducing the human or health cost of climate related migration. Can include examples of how a healthcare system responded to a specific or ongoing event or situation.

### *3.Approach*

- Specify whether the project is primarily focussed on **Mitigation** or **Adaptation** (defined below).
- Some projects might fall into both categories.

**Mitigation** Where the focus is on reducing future climate change. For example reducing greenhouse gas emissions, reducing patient travel, or education around appropriate disposal of medication.

**Adaptation** Where the focus is on adapting to climate change (either already happened or anticipated). For example, interventions to reduce the temperature in healthcare facilities or to prevent floor damage.

### *4.Key message / aim*

- Briefly describe what were you trying to achieve.

**An example:** Medicines contribute more than 25% of the carbon footprint (in England). We aimed to improve patient care while reducing the carbon footprint through moving to low or no carbon medicines.

**We suggest maximum 100 words.**

### 5. *What was the problem?*

- Briefly describe the problem.  
Refer to literature / other sources if relevant.
- Why is it important?  
Describe your reasons or strategy for choosing this project.
- What is the context?  
Describe the nature of the place/population, and how/why your team/organisation was placed to respond to the challenge.

**We suggest maximum 200 words**

### 6. *What was the solution?*

Describe what you did in a step-by-step manner

Ideally include:

- who was involved
- what resources were required.
- an overview of timeframe and staffing requirements
- costs and funding

**We suggest maximum 200 words**

### 7. *What were the challenges?*

- Describe the main obstacles/difficulties you encountered.
- Highlight any unexpected challenges
- Describe how you met or overcame the challenges
- You may want to mention steps that were taken to engage staff/patients/carers or the public with the project.

**Examples might include:** health and safety considerations, staff training needs, attitudes to the project, logistical barriers

**We suggest maximum 200 words**

### 8. *What were the results/Impact?*

- Try to comment on all 5 aspects of sustainable value
- Include any unintended negative impacts and strategies to avoid or minimise them.
- Where possible include information on measures used and how data was collected.
- You may want to include graphs/quotes or images to illustrate your results.

#### Patient outcomes

Does the initiative improve or change the standard of the care that patients receive in any way? For example, does it make their care more patient-centred, effective, or safer? How does it impact patient experience, for example, reducing waiting times?

#### Population outcomes

How are changes likely to impact on population health or health inequalities? – e.g., disease prevention, early detection or improved access to care for vulnerable groups.

#### Environmental impact

The carbon footprint (expressed in Carbon Dioxide Equivalents, or CO<sub>2</sub> e) is a common measurement used to show environmental impact, though there are other environmental categories of concern that can be measures. The data required to calculate a footprint will depend on your project.

You can download the Measuring Environmental Impact document from the Centre for sustainable healthcare quality improvement webpage for more information on carbon foot printing as well as commonly used emissions factors:

<https://www.susqi.org/measuring-impact>

Please include any workings and detail any emissions factors used, together with the source you obtained them from, in order for others to understand, replicate or compare with your results. State what you have included or excluded from your calculations, and any assumptions that you have made.

It may be appropriate to describe the environmental impact in a more direct ways e.g., the benefits of a reduction in patient travel can be expressed in CO<sub>2</sub>e savings, but might be more easily appreciated if also expressed in terms of the reduction in miles travelled.

Additional examples include the saving in waste tonnage, the number of used medical items reduced, or the amount of activity reduced (e.g. appointments).

If you have made a reduction in item or activity use, you may also want to show this saving as a percentage (e.g. unnecessary cannulation was reduced by 66%).

Project your environmental (CO2e) savings across a year if possible.

### Social impact

Health services can influence the social circumstances of patients, carers, dependants, staff, local and distant communities (e.g., people working in the supply chain).

It is important to consider the positive and negative impacts that may arise as a result of your project.

Comment on impacts on the social circumstances of groups affected. e.g. time lost from education or work, impact on income or employment, relationships, participation in society, health and wellbeing

Many green initiatives offer wider health benefits. For example, initiatives to promote active travel help to tackle obesity whilst also reducing traffic (and therefore accidents and pollution-related illnesses).

You may want to include qualitative data, e.g. patient surveys or quotes from those involved/impacted by the project. If available, you could also include quantitative data, e.g. rate of staff sickness.

### Financial impact

Were there any investment costs? These can be further categorised as **implementation costs** (occurring only once) or ongoing **maintenance costs** (which will accrue year on year).

Have any potential financial savings been identified? What type of savings are these (see categories below).

- Cost reduction**: providing a service at the same or better quality for a lower unit cost, through new ways of working that eliminate excess costs. A simple example is the use of a device or medication offering the same or improved clinical quality for a lower unit cost.

- Cost avoidance** is a type of cost reduction but refers specifically to eliminating or preventing future costs arising. Cost avoidance measures may involve some expenditure but at a lower level than the expected future costs to be avoided. Examples include investing in LED lighting.

- Income generation** This applies to novel sources of funds that arise directly from project activities. Examples include charging for a service.

- Service productivity improvements** aim to improve patient care by changing the way services are delivered so that productivity is increased.

Please document where your financial data was obtained from. Often financial information can often be sourced via your organisation's procurement and estates teams. If this is not possible, then consider options to extrapolate from national



data, e.g. National Formularies for pharmaceuticals, or [PSSRU Unit Costs](#) of Health and Social Care for units of healthcare activity / staff time.

Project your financial data across a year if possible.

### **9. *What were the learning points?***

- Comment on the usefulness of the work
- Comment on any limitations or new problems that arose.
- What were the key elements that contributed to successes/learning in this project?
- What recommendations and advice would you give others planning a similar project?

**We suggest maximum 200 words**

### **10. *Next steps***

- What steps have been taken to ensure lasting change for beneficial aspects of the project?
- Are there plans to build on/expand/revise the initiative?  
If so, how and what does this depend on?
- In which other contexts could this project be relevant?
- How it could be spread to other contexts?

**We suggest maximum 200 words**

### **11. *What the team and/ or patients and carers had to say***

- If available, include relevant images and quotes from people affected, whether patients, staff, stakeholders, partners, etc.
- You can include any data or results on the impact of your engagement activities.

### **12. *Resources and references***

- Include references for any research and resources used in your project report.
- Consider adding appendices of tools, resources or supplementary material that may be helpful to others interested in replicating your project.

### 13. *Contacts*

- Please provide a contact details who is willing to be contacted for further information about the project.
- Provide contact information for more than one professional, when possible, to best enable others interested in your project to successfully contact and learn from your work.

Many thanks for your valued submission

If you require further support with the process, or have questions, please contact [chloe.saunders@clin.au.dk](mailto:chloe.saunders@clin.au.dk)