**Sustainability Scholars Programme**

***for***

**Clinical Commissioning Groups (CCGs)**

“For many years debate has focused on whether our climate is changing. Today the question is no longer whether the climate is changing, but what can be done” **[[1]](#footnote-1)** (*Health Protection Agency*)

**Introduction**

Healthcare is facing a challenging future. The quality of healthcare must be maintained when finances are constrained, resources finite and staff increasingly overstretched and demoralized. How to respond to these challenges in the face of increasing demand for healthcare and the rising threat that climate change poses to health?

The Centre for Sustainable Healthcare (CSH) offers a CCG Sustainability Scholars Programme, in partnership with CCGs. This provides an opportunity for CCGs to improve the sustainability of their commissioning and models of care, whilst individuals from any specialty or health profession gain experience in driving change to improve quality within the healthcare system that deals with not only financial but also environmental and social concerns meanwhile cultivating team working and leadership skills.

**Problem and opportunity**

According to a 2016 report[[2]](#footnote-2) from the National Audit Office, NHS bodies’ financial performance worsened significantly in 2015-16. It also states “there are indications that financial stress is having an impact on access to services and quality of care”(pg 9). These economic concerns are compounded by social and environmental constraints, climate change being classed as the “biggest global health threat of the 21st century”[[3]](#footnote-3) and the NHS being committed to reducing its greenhouse gas emissions by 80% of 1990 levels by 2050[[4]](#footnote-4). These factors are going to increasingly pressurise a health care system that is already stretched to breaking point and struggling to meet the demands of the community it serves.

Sustainability offers an opportunity to tackle these challenges in a new and positive way, engaging health professionals in improving the quality of their services while making best possible use of resources.

To help guide practical change, the Centre for Sustainable Healthcare has identified four principles of sustainable clinical practice[[5]](#footnote-5):

1. Prevention - promoting health by tackling the causes of illnesses and inequalities
2. Patient self-care - empowering patients to take a greater role in managing their health
3. Lean service delivery - streamlining care systems to minimise wasteful activities
4. Low carbon alternatives – prioritising treatments with a lower environmental impact.

Creating healthy communities and prioritising preventative and adaptive strategies to improve health can enable the health system to continue to provide quality care for future generations. Balancing the economic, environmental, and social constraints and demands within healthcare settings is vital to this approach.

Sustainable value in healthcare [[6]](#footnote-6) = outcomes for patients & populations

environmental + social + financial impacts   
(the “triple bottom line”)

**The CCG Sustainability Scholars Programme**

The CCG Sustainability Scholars Programme is designed to equip health professionals for sustainable healthcare. The Scholarships will be part-time and open to doctors in training, nurses and allied health professionals each year. Seconded to the role, the Scholars will undertake applied projects (see Appendix 1).

Key elements of the programme are:

1. Development and sharing of projects and resources in sustainable commissioning and sustainable healthcare tailored to the identified need of the CCG.
2. Contribution to a specialty-wide discourse on sustainability aligned with the scholar’s CCG work, through internal and external presentations, publications, events and online networking .
3. Development of a motivated and talented healthcare worker as a future leader in sustainability. CSH scholarship programmes typically attract highly able candidates and provide a unique opportunity to learn about healthcare systems from a different perspective, while developing skills in service improvement, commissioning, policy development, leadership, and public speaking.

CSH will provide formal training (3 face-to-face training days), individual mentoring and project support. The Scholar will take part in a well-established training programme with resources and learning templates. He/she will also have the opportunity to participate in CSH’s sustainability networks and engage with a wider group of professionals from across different specialties and backgrounds.

Ideally, additionally funded time of one day per week would be created for the scholar to pursue their scholarships. However, CSH recognises the need to fit in with existing programmes and resource constraints.

Examples of previous work undertaken by scholars include:

* Developing sustainable quality improvement in practice leading to projects, e.g. on streamlining pre-op care pathways, staff and patient empowerment in dementia care, health promotion on a psychiatric inpatient ward
* Developing a sustainability service review framework for mental health services
* Developing an e-learning resource on sustainable dentistry
* Teaching about sustainability and publishing articles in specialty journals
* Introducing video consultations for patients placed in remote mental health facilities
* Developing an online evidence-based toolkit for sustainable action in general practice (Green Impact for Health)
* Conducting a study of patients’ attitudes towards inhalers used in the treatment of COPD and asthma

**Benefits**

*The CCG* will benefit from the scholar’s project which will lead to improvement in commissioning and service provision. In many cases improvement in sustainability leads to a reduction in costs through a more sustainable resource use.

*Patients and society* will benefit from service changes designed to increase value from resources and from greater focus on prevention and engaging them to improve their healthcare.

*Healthcare* will benefit from the development of a health professional with skills in innovation and leadership, who will act as an ambassador for sustainable, high value healthcare. Staff engagement in innovation and resource stewardship will foster a greater understanding of the environmental, social and financial burdens of providing care.

*Scholars* will gain the opportunity to learn about an important and evolving dimension of healthcare, develop skills in leadership and service improvement, and contribute to local and strategic initiatives to promote sustainable resource use.

**Partners**

*The Centre for Sustainable Healthcare (CSH)*

An independent charity, CSH has been leading efforts to incorporate the values of environmental sustainability into the health sector since its establishment in 2008. It has a particular focus on engaging those in the front-line of patient care and promoting the concept of “sustainable clinical practice” and has developed a “SusQI” framework for integrating sustainability into Quality Improvement methodology.

CSH is respected nationally for a specialty-led approach combining research with support for local change, underpinned by wider engagement with patients, and relevant industry and clinical bodies. As part of this programme, CSH has partnered with HEE regional bodies and specialty organisations to create Sustainability Scholar roles, and currently manages scholars in psychiatry, dentistry and general practice.

"The Centre for Sustainable Healthcare supports clinicians to take a leading role in galvanising co-ordinated, systematic and evidence based action for sustainable healthcare.

Their sustainable specialties programmes and their work in medical education are excellent examples of what clinicians need to help them take exemplary action for tomorrow whilst continuing to deliver high quality care for today."

*Dr David Pencheon, Director, NHS Sustainable Development Unit*

CSH will be responsible for programme management, including recruitment of the Scholar, administration of their study budget and liaison with the CCG. CSH will provide introductory training in sustainable healthcare and will provide on-going educational supervision to the scholars. This will include: assistance in selection and design of appropriate projects; regular progress reviews; advice and assistance in writing up and disseminating outputs of the Scholarship.

*Clinical Commissioning Group*

The CCG will be responsible for identifying strategic priorities to guide the implementation of sustainability within their organisation, and for assisting in the selection of appropriate projects to be undertaken by the Scholar in support of these. The organisation will provide a named contact and will co-operate as necessary for the successful delivery of the projects, for example by providing access to relevant data.

## Timescale

Most likely the scholar recruited either in Spring or Summer for a one-year appointment will start in September to fit in with their training.

**Costs**

Costs will depend on the appointed scholar’s specialty. Costs include:

* Direct scholar cost for salary/secondment (0.5-1 day/week)
* CSH programme management and supervision (£5-6,000 per scholar, depending on scholar time allocation)
* Expenses – some programmes have allocated a specific study budget

For further information, please contact Dr. Emily Farrow at the Centre for Sustainable Healthcare: [emily.farrow@sustainablehealthcare.org.uk](mailto:emily.farrow@sustainablehealthcare.org.uk)

APPENDIX 1: Proposed Scholar Projects

Projects may be proposed by the CCG or the scholar, which we would usually expect to fit one of the three project types in Section A, below. We also provide a number of recommendations for specific projects that have been developed through prior work in mental health, general practice, respiratory medicine, renal medicine and occupational therapy (Section B).

**SECTION A. GENERIC PROJECTS**

1. **Sustainable commissioning projects**

Clinical area: any

Project goal: to support the application of sustainability principles in the review/commissioning of a clinical service

Background: the commissioning process offers the opportunity to build in sustainability principles in the redesign or ongoing delivery of a clinical service. Sustainable commissioning guidance is available, but commissioning teams often lack the capacity and capability to seek it out and apply it in practice. Scholars from a relevant clinical discipline can be embedded within a commissioning team for a specified service and provide a dedicated resource to review the sustainability of current and proposed service models, highlighting opportunities for improvement. Commissioners report that previous Scholars have provided a valuable clinical as well as sustainability perspective within the team.

Activities: research into relevant sustainability guidance and examples of good practice; sustainability review of current and proposed service models; identification and further research of opportunity areas; facilitation of dialogue between commissioners and providers on sustainability; recommendation of outcome measures; development of sustainable commissioning case study.

1. **Sustainable quality improvement projects**

Clinical area: any

Project goal: to improve the quality and sustainability of patient care in a local service

Background: CSH has developed a “SusQI” framework for integrating sustainability into Quality Improvement methodology, based on CSH’s four principles: prevention, empowerment, lean system and low carbon alternatives. This provides a practical way of addressing environmental, resource and social concerns while improving patient outcomes. The framework was included in the Academy of Medical Royal Colleges’ report, “Quality Improvement – training for better outcomes” in 2016, and is currently being adopted in a number of undergraduate and postgraduate settings.

Activities: scoping, design and leadership of a quality improvement project; stakeholder engagement; process mapping; identification of QI interventions, indicators and outcome measures; implementation of PDSA cycles; report writing and submission for publication.

1. **Projects to promote clinical engagement in sustainability initiatives within NHS Trusts**

Clinical area: any

Project goal: Engaging clinicians in NHS Trusts’ efforts to improve the sustainability of their organisation

Background: Most of the environmental impact of a CCG is due to its commissioning activity and therefore the sustainability of its providers. To become more sustainable the CCG needs to engage with and support its providers in improving the organisations’ sustainability. Many NHS Trusts are following national requirements to develop and implement Sustainable Development Management Plans, supported by an internal Sustainability Committee. However, there is often limited engagement from clinical staff – severely restricting the potential for change. CSH has successfully engaged frontline staff in various trusts to work collaboratively to make efficiencies in the carbon and financial cost of care, while maintaining or improving quality.

Activities: working with the Trust’s sustainability committee/lead to feed into and support their policies and activities; engaging with front-line staff to promote Trust’s existing programmes on sustainability and link these to initiatives on quality and clinical governance; running a Green Ward Competition alongside, and feeding into, existing initiatives; promote the Trust’s work on sustainability through networks, publications and conference submissions.

**SECTION B. SPECIFIC PROJECT RECOMMENDATIONS**

1. **Project: Commissioning of remote clinic consultations**

Clinical area: kidney care (but relevant to many others)

Project goal: to develop a strategy for facilitating the commissioning of non-face-to-face clinic consultations in kidney care.

Background: many renal units operate over wide geographical areas, providing specialist services for populations far beyond their own hospital’s immediate catchment area. For such a laboratory results-driven specialty, remote consultations – either by phone or video-link – offer the potential to deliver care close to home without the associated carbon impact of staff travel. However, the tariffs for non-face-to-face consultations are proving a significant barrier to renal units wishing to set up remote clinics, with remuneration falling far short of the national tariff for on-site clinic visits. This project will explore the practicalities of commissioning for new models of care.

Activities: conducting a systematic review of existing remote care models and their commissioning arrangements; conducting focus groups with patients, clinicians, managers and commissioners; and development of a project proposal for subsequent work to facilitate remote clinic consultations in kidney care.

1. **Project: Green Renal Unit Guide**

Clinical area: kidney care

Project goal: to develop a sustainability guide for the commissioning of new renal facilities, particularly satellite dialysis units.

Background: this project has been chosen in response to requests for guidance from renal services wishing to incorporate sustainable features into new facilities. There is scope to reduce the environmental impact of many of the processes occurring within renal services. Many such opportunities have been explored by CSH’s national Green Nephrology Programme and are available as case studies or ‘how to’ guides. However, existing infrastructure can be a limiting factor to their implementation. For example, the use of water salvage techniques may be hindered by the absence of a space for a storage tank. Whilst it may be possible to alter the infrastructure to allow the adoption of individual greener practices, it would be preferable to design the capability into the facility at the time of the build.

Activities: coordinating working group(s), research of topic areas, compiling resources, writing, obtaining feedback from renal services, overseeing design and layout of the Guide, presenting to meetings and conferences, authoring and submitting articles for publication. Where feasible, the scholar will gain hands-on experience through participation in actual commissioning of new facilities. The project will also explore the opportunity to work with the Dialysis Clinical Reference Group for NHS England to incorporate this guidance into Health Building Note 07-01 (Satellite Dialysis Unit).

1. **Project: Green Impact for Health**

Clinical area: primary care

Project goal: to facilitate the engagement of GP practices with the Green Impact for Health programme.

Background: The National Union of Students’ Green Impact for Health (GIFH) was co-developed with the Severn Deanery GP Sustainability Scholars in 2014-15, and is now being rolled out nationally, supported by the RCGP and CSH. Practice teams register online for access to an evidence-based toolkit containing actions designed to help GP surgeries improve their sustainability and environmental impact. Teams then complete the actions to be considered for a GIFH national award.

Activities: Collaborating with colleagues in a primary care setting to use the GIFH tool, completing actions to improve sustainability in areas of practice; facilitating engagement of other GP practices with GIFH through local/national networks, GP training schemes, relevant events and publications; contributing to ongoing development of the GIFH toolkit.

1. **Project: improving inhaler technique education and training**

Clinical area: primary care/ respiratory medicine

Project goal: to improve inhaler technique education and training for patients and staff

Background: respiratory inhalers are one of the single greatest contributors to NHS greenhouse gas emissions, making up 3.5% of the total emissions for NHS England, and are also the largest NHS pharmaceutical spend category. At the same time, studies show that between 50% and 90% of patients cannot use an inhaler correctly, while >90% of the staff who meant to demonstrate correct technique are unable to do this themselves – resulting in poor disease control and increased healthcare demand.

Activities: identifying training needs and reviewing existing training provision for patients and staff in primary and secondary care; researching best practice and available training resources; developing new training resources (e.g. videos) if necessary; designing and implementing a strategy for roll-out of improved training to all relevant groups in a local area; evaluating success/impact; developing a business case for further investment if needed.

1. **Project: reducing use of unnecessary inhalers**

Clinical area: primary care/ respiratory medicine

Project goal: to reduce use of unnecessary inhalers, particularly over-prescription of inhaled corticosteroids in COPD

Background: respiratory inhalers are both environmentally and financially costly to the NHS, as outlined above. Despite being recommended only at Step 4 of asthma treatment, and with limited evidence for effectiveness in COPD, high dose corticosteroid inhalers are some of the highest volume items prescribed, suggesting a widespread [over-use](http://www.practiceupdate.com/content/overtreatment-of-copd-with-inhaled-corticosteroids-implications-for-safety-and-costs-cross-sectional-observational-study/5534?trendmd-shared=1) – at significant risk to patients.

Activities: identifying baseline prescribing practices in different parts of a local care pathway; reviewing best practice in inhaler prescribing nationally (including [key recommendations](https://www.networks.nhs.uk/nhs-networks/london-lungs/responsible-respiratory-prescribing-rrp) from the London Respiratory Clinical Leadership Group); conducting focus groups with local clinicians to understand how they could best be supported to improve prescribing; identifying available resources (e.g. Medication Use Reviews); designing and implementing a strategy for supporting improved local inhaler prescribing; evaluating success/impact; developing a business case for further investment if needed.

1. **Project: promoting inhaler recycling**

Clinical area: primary care/ respiratory medicine

Project goal: to increase availability and uptake of inhaler recycling

Background: respiratory inhalers are both environmentally and financially costly to the NHS, as outlined above. Furthermore, inhalers are often disposed of before being completely used up. Inhalers disposed of by the usual routes end up in landfill, where the propellant gases escape and contribute to global warming. GlaxoSmithKline (GSK) has an inhaler recycling scheme which will collect inhalers (of any brand) from participating pharmacies and recycle them, thereby avoiding the release of propellant gases. However, most pharmacies, patients and health professionals are currently unaware of the scheme.

Activities: liaising with local pharmacies (e.g. via the Local Pharmaceutical Committee) to inform them about inhaler recycling and encourage them to participate in the scheme; developing communications materials for healthcare staff and patients; distributing the materials and engaging directly with patients and staff to promote inhaler recycling; liaising with GSK to collect data on number of inhalers recycled and estimate carbon savings; writing up a report/case study to facilitate replication elsewhere.

1. **Project: reducing environmental impact from the use of anaesthetic gases**

Clinical area: anaesthetics

Project goal: to monitor and reduce the environmental impact from use of anaesthetic gases

Background: a number of anaesthetic agents are potent greenhouse gases and contribute 5% of the carbon footprint of acute healthcare organisations ([SDU, 2013](http://www.sduhealth.org.uk/areas-of-focus/carbon-hotspots/anaesthetic-gases.aspx)). Options for improving the environmental impact of anaesthetic gas use include: switching to agents with lower global warming potential (avoiding desflurane); avoiding the use of excessively high gas flow rates (which cannot be absorbed by the patient); preferential use of local and regional anaesthesia, where clinically appropriate.

Activities: in a local anaesthetic department, to establish baseline use of different anaesthetic gases; to introduce measures to reduce environmental impact of anaesthetic gas use while maintaining or enhancing patient care and evaluate their impact; develop a case study and how-to guide.

1. **Project: promoting best practice in therapeutic use of greenspace in occupational therapy**

Clinical area: occupational therapy

Project goal: to develop a case library of good practice in the therapeutic use of greenspace in occupational therapy

Background: there is an established evidence base on the value of natural environments to promoting wellbeing and enhancing recovery in a range of physical and mental health conditions. Occupational therapists are well-placed to capitalise on this, both through conducting generic client interactions (e.g. assessments and review meetings) in natural settings, and through specific use of nature-based occupational interventions (e.g. horticultural therapy). Currently these practices take place on a largely ad-hoc basis and there is scope to increase this through highlighting existing best practice. The Scholar will draw on CSH’s Occupational Therapy Sustainable Practice Network (OT-Susnet – 700 members) and the charity’s greenspace team for examples and support.

Activities: surveying occupational therapy departments to identify examples of good practice; categorising these into different types of intervention (as outlined above); liaising with departments to develop case studies (including where possible evaluating the impacts on patient experience and outcomes), writing up for publication in relevant journals / presenting to conferences; disseminating learning via OT Susnet and via the [NHS Forest](http://www.nhsforest.org/) network.

1. Health Protection Agency. Health Effects of Climate Change in the UK 2012. London: HPA, 2012 [↑](#footnote-ref-1)
2. National Audit Office. Financial Sustainability of the NHS [Internet]. London: NAO; 2016. Available from: <https://www.nao.org.uk/wp-content/uploads/2016/11/Financial-Sustainability-of-the-NHS.pdf> [↑](#footnote-ref-2)
3. Lancet and University College London Institute for Global Health Commission. Managing The Health Effects Of Climate Change. London: The Lancet, 2009. Print. The Lancet Commissions [↑](#footnote-ref-3)
4. UK Parliament. Climate Change Act. London: UK Government; 2008 [↑](#footnote-ref-4)
5. Mortimer, F. The Sustainable Physician. Clinical Medicine (2010), Vol 10, No 2: 110-11 [↑](#footnote-ref-5)
6. Mortimer, Isherwood, Vaux et al. Sustainability in Quality Improvement: Redefining Value. (in press) [↑](#footnote-ref-6)