



An Anaesthetics Sustainability Scholars Programme

"Through encouraging the efficient use of resources, anaesthesia is in the ideal position to minimise the carbon footprint of patient care pathways and thus maximise the use of available resources" UK Health Alliance on Climate Change | The Royal College of Anaesthetists (1)

"Our actions have an impact on the environment around us and ..this, in turn, affects people's health and wellbeing - now and in the future. For this reason, promoting environmental sustainability is a ..priority" The Association of Anaesthetists of Great Britain and Ireland (2)

Introduction

The new generation of anaesthetists are facing a challenging future. The quality of healthcare must be maintained when finances are constrained and resources finite. How to respond to these challenges in the face of Increasing demand for healthcare and the rising threat that climate change poses to health will need future anaesthetists to be equipped to innovate and continually improve quality while limiting the potentially negative impact of healthcare on the environment. In order to develop anaesthetists who can navigate this changing landscape the Centre for Sustainable Healthcare (CSH) proposes an Anaesthetics Scholars Programme. This provides an opportunity for anaesthetics trainees to 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.

Anaesthetics Scholars are part-time and are mentored by CSH to undertake a project promoting sustainable change. Projects will be guided by CSH's 4 principles of sustainable practice:

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.

Examples of a previous work undertaken by scholars in other specialties are:

- 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 conferencing for care of inpatients 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

Potential future projects:

- Working on projects that support the aims of the AAGBI Environmental Task Group
- Working on specific sustainability projects e.g. measuring the flow of gases used by anaesthetists in a department; evaluating how full gas cylinders are when they're returned as empty
- Focus on a specific clinical pathway as part of a sustainable quality improvement project
- Write up a case study of green anaesthetic practice/develop a set of case-studies to promote sustainable practice
- Develop sustainable anaesthetic e-learning sessions
- Run a Green Ward Competition or Green Conference Prize
- Post articles/events/resources/new research on the CSH Sustainable Operating Theatres Network and recruit and build the Network

Anaesthetics Curriculum

The RCoA curriculum expects anaesthetics trainees to:

- "Commit to minimising the impact on healthcare from: Globalisation [including climate change]; Unnecessary resource usage [environmental and financial]" (3)
- "Take the initiative in demonstrating the efficient use of resources and encouraging others to do the same" (4)

Anaesthetic trainees can fulfil curriculum requirements and cultivate their leadership skills by using a sustainable healthcare approach in planning measures to reduce resource use and waste and in teaching and promoting sustainable healthcare. There is a need to cultivate future leaders for sustainable anaesthetic care, who can lead by example in promoting a healthy and sustainable future and who engage colleagues across the specialty.

The Intervention

We propose a Sustainability Scholars Programme designed to equip a growing group of leaders for sustainable anaesthetic care.

Part-time Scholarships will be open to trainees on anaesthetics training programmes each year. Appointed scholars will be managed by CSH as an action learning set, receiving both group and individual support and training.

Seconded to the role the Scholars will undertake applied projects as outlined previously.

Key elements of the programme are:

- Development of a group of motivated and talented anaesthetists as future leaders for sustainability. CSH scholarship and fellowship programmes typically attract highly able candidates and provide a unique opportunity to learn about healthcare systems from a different perspective, while developing skills in leadership, service improvement, commissioning, policy development, academic writing and public speaking.
- 2. Contribution to a specialty-wide discourse on sustainability, through regional and national presentations, publications, events and online networking.
- 3. Development and sharing of case studies demonstrating sustainability in practice, including how-to guides and supporting resources.

Benefits

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

Anaesthetics will benefit from the development of anaesthetists with skills in innovation and leadership, who will act as ambassadors for sustainable, high value, low-carbon healthcare. Staff engagement in innovation and resource stewardship will foster a greater understanding of the environmental, social and financial burdens of providing care.

Patients and society will benefit from service changes designed to increase value from resources.

Partners

The Centre for Sustainable Healthcare

CSH is an independent charity working with clinicians, healthcare managers, local communities and patients to create a higher quality, cost-efficient, more environmentally sustainable health service. It has a particular focus on engaging clinicians, promoting the concept of "sustainable clinical practice".

CSH manages the RCPsych Sustainability Scholars 2016-17 alongside Scholars in dentistry and primary care. It's pioneering Sustainable Specialties programme fosters change within existing clinical communities, supported by research into the carbon footprint of alternative technologies and models of care. The specialty-led approach is complemented by tools designed to empower clinicians, including SAP (Sustainable Action Planning for clinical teams), online clinical Networks and the Green Ward Competition.

CSH hosts and manages the Sustainable Healthcare Education (SHE) network of medical schools, which supports the integration of sustainability into undergraduate medical teaching. In 2012-13, CSH jointly coordinated a national consultation on priority learning outcomes for sustainability- now referenced from the General Medical Council's "Outcomes for Graduates" (5).

CSH will be responsible for educational supervision, other partners may wish to co-supervise but this is not a requirement of the programme. CSH will be responsible for programme management including recruitment of the Scholars, administration of their study budgets and liaison with host organisations

Health Education England Anaesthetics Schools

HEE is responsible for delivering excellence in training for future anaesthetists, promoting an innovative and flexible future workforce and fostering talent and leadership.

HEE has experience of supporting and investing in Scholars Programmes in general practice, psychiatry and dentistry. HEE at the Severn GP school describe the Scholars Programme as offering sustainable healthcare training and supporting the development of trainees in areas of leadership, management, a wider understanding of the primary/secondary care interface and the impact of sustainable training and healthcare delivery.

HEE would be responsible for the extension of training, if required, and have previously designated sustainability leads within schools to support and guide scholars to specific contacts/ networks and meetings/conferences.

The Association of Anaesthetists of Great Britain and Ireland

The AAGBI is a professional membership body promoting excellence in anaesthetic care.

The AAGBI co-ordinates a cross-organisational Environmental Task Group and has prioritised leading in sustainable health care. The Association's Environmental Policy commits them to action across their own operations and to encouraging and supporting action by their members on climate change, sustainable resource use and limiting waste.

Appointed scholars will have the opportunity to link with the AAGBI Environmental Task Group, to develop specific projects and/or to contribute to specialty-wide initiatives in sustainable anaesthesia.

Host organisations

Scholars may be embedded within HEE or other organisations. Where this is the case, host organisations 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. Each host 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.

Models of Sustainability Scholarships

Scholars will be supported to learn about sustainable healthcare and to do a project to contribute to this agenda. CSH will provide formal training (3 face-to-face training days), group and individual mentoring and project support. Scholars will take part in a well-established training programme with resources and learning templates. They will also have the opportunity to participate in the Sustainable Operating Theatres network and engage with a wider group of trainees within anaesthetics and other specialties.

Ideally additionally funded time would be created for trainees to pursue their scholarships. However, CSH recognises the need to fit in with existing programmes and resource constraints and therefore propose alternative models for the Scholars scheme.

Scholar programme models	Actions and outputs
(12 month duration)	
One day/week	Sustainable healthcare and QI training
	Project chosen from list or developed by scholar; case-study
	Peer-reviewed publication or conference presentation; education session delivered; posts on Sustainable Operating Theatres network
0.5 days/week	Sustainable healthcare and QI training
	Sustainable healthcare project/ Sustainable quality improvement project
	Education session delivered; national/regional presentation; posts on Sustainable Operating Theatre network
Within current study leave allowance	Sustainable healthcare and QI training
	Applying sustainability to a quality improvement project/ running a Green Ward Competition.
	Presentation of project to colleagues/posts on Sustainable Operating Theatres network

Timescale

Ideally a rolling annual programme is proposed, with Scholars recruited either in Spring or Summer for a one-year appointment.

Costs

Costs will depend on the Scholars model chosen in a given region. Costs include:

- Direct scholar cost for salary/secondment (0.5-1 day/week)
- CSH programme management and supervision (£4-6,000 per scholar depending on model chosen)
- Expenses some sustainability scholars programmes have allocated a specific study budget

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