2010-11 British Council/Medsin NHS Sustainability Project: Student Case Studies



**The British Council/Medsin Climate Change Programme (BCMCCP)**

In 2010, the British Council funded an 8-month long Pilot Programme to recruit and train a number students from around the UK in the issues of climate change and health, and the concepts of sustainable healthcare, and support them to work as ‘Programme Directors’ to work on sustainability in their local NHS Trusts and medical schools. The aim was to further this area of activity and focus on reducing the carbon footprint of their local health services, to engage health professionals, decision-makers, estates managers etc in the issues, and to learn from the process in ways that would be useful to others in the future. It was organised by UCL medical student Mustafa Abbas, then the National Coordinator of the Medsin-affilated activity Healthy Planet, with support from Cambridge medical student Shuo Zhang.

The programme began with a training weekend, of which the Saturday morning was dedicated to knowledge: the ‘key’ things to know about climate change and health, including some economics and policy. Saturday afternoon was dedicated to the NHS: David Pencheon, Director of the NHS Sustainability Development Unit, and Frances Mortimer, Medical Director of the centre for Sustainable Healthcare, led a 3-hour session on sustainability in the NHS. All of Sunday was dedicated to students setting their own programme of action for the following 8 months. Participants were supported to develop a plan of action, adapted to their own schedule and the particular areas they wanted to focus on.

**Background on NHS sustainability**

The Climate Change Act was introduced in 2008 to ensure the UK cuts its carbon emissions by 80% by 2050, against a 1990 baseline. The act in place a legally binding framework allowing the government to introduce measures to mitigate and adapt to climate change. Because climate change is a threat to health, and as the largest public-sector emitter - with a carbon footprint of around 21,000,000 tonnes - the NHS has a duty to respond to these targets. It has committed to reducing its carbon footprint by 10% by 2015; by 34% by 2020 and 50% by 2025.

The ambition of the NHS, as reflected by the work of the NHS Sustainable Development Unit, is to be a visible and effective public sector exemplar in UK sustainable development, and to lead the development of sustainable health systems internationally. To achieve these aims, it needs to deliver safe and cost-effective healthcare whilst simultaneously recognising its broader obligations to public health and the environmental systems upon which it depends. Crucial to this is engagement from health professionals - including medical and nursing students, who are the health professionals of tomorrow.

**Aims and objectives**

The overall aim of the project was to empower and support students to work within their local health services and systems. Within this broader aim, there were also more specific objectives:

* To find out how students would interact with local decision-makers, such as estates or finance officers, or their hospital executives, with regards to the areas above.
* To investigate the possibility of students conducting their own carbon audits and research locally on areas they have access to, such as travel, waste management or recycling.
* To provide a learning resource for other students – in the UK and elsewhere – to plan their own healthcare sustainability projects and audits. This is, in part, the function of this set of case studies drawn from a selection of participants’ write-ups at the end of the project.

**Programme structure**

The project training weekend clearly set out the expected/intended role of participating students: not to campaign or to implement national policy but, through various means, to work positively locally to achieve change for sustainability. They were encouraged to use the ten-point-plan of the NHS Sustainability Development Unit’s report, Saving Carbon Improving Health[[1]](#footnote-1) as a starting point for thinking of ideas for activites (see below) –

1. Energy and carbon management
2. Procurement and food
3. Low carbon travel, transport and access
4. Water efficiency
5. Waste management and recycling
6. Sustainability in the built environment
7. Workforce development and education
8. Developing partnerships and networks
9. Governance and carbon management
10. Finance and carbon literacy

It was suggested that areas 1-5 and 7 would probably be the easiest for students to focus on, but this was not restrictive if students were particularly interested in the later points. After the training weekend in April, students had the opportunity to spend several weeks focusing on self-directed learning around climate, sustainability and health and to research their NHS Trust, establish key contacts, and prepare for the several months of action ahead. Late November was the Programme end point although in the end the programme extended beyond this to 2011.

Participants were strongly encouraged to write a blog or send email updates on what they were doing. A key outcome of this programme was a case study of each participants' personal activities, successes, challenges, and experiences; and an evaluation weekend which was held for participants to share their experiences and reflections on learning outcomes. A number of the programme participants have remained engaged in this agenda, for example through involvement in the Sustainable Healthcare Education Network, internships at the Centre for Sustainable Healthcare and through activities to raise awareness of the NHS sustainability agenda within our medical schools since the end of the Programme.

**Some of the more concrete outcomes of the project:**

* Design for an SSM at HYMS, with input from Head of Sustainability and Sarah Walpole
* Conference on Climate Change and Health in Cambridge
* Seminars in both Ghent and Cambridge
* Student presentation to GP practice staff
* GP practice audit and resultant changes
* Cycling survey at Newcastle with 650 responses
* Leaflet on cycling and cycling support at hospitals in Newcastle
* A project engaging patients with sustainable healthcare in Belgium and managing to achieve policy change around patient blankets.
* One of the SHE Network Learning Modules was designed by a student
* 10:10 GP poster design
* Contributions to the Sustainable Action Planning website
* Investigation into the potential for sustainability benefits from different approaches to pain management

**Key learning points:**

* The fact that the national network is now better mapped/understood was also a key outcome, as were the barriers that students encountered.
* The majority of students involved found it a worthwhile experience, and said that they gained useful skills from it. Everyone encountered challenges, which we often useful learning experiences, and a recurrent theme was the difficulty of convincing senior members of staff and figures of authority of the value of engaging with students to work on this issue.
* Perhaps one of the most frequently mentioned points was the importance of being part of a team and of good communication; students working on their own often felt isolated at points and that project sustainability suffered when there was only one or two students active at a University, since work couldn’t be spread out amongst the group at times when some members were particularly busy.
* Several participants commented that getting replies to emails and accessing data were much more time-consuming than they had anticipated, and they emphasised the importance and value of finding good contacts willing to work together, including both estates and clinical staff and sustainability experts. This is something that future projects would benefit from in terms of preparing students more thoroughly at the start; similarly with providing training on carbon auditing.
* There was a feeling amongst several students that sustainability needed to be incentivised as part of the payments system, for example through the QOF framework, and with more subtle changes such as wards that reduce their energy use through sustainability efforts being allowed to spend a proportion of the money saved in ways that could further improve the sustainability and ambience of the ward environment.
* The conceptual framework that emerged as useful from the evaluation weekend was to consider NHS sustainability from 2 different angles; that of the
* Views regarding the usefulness of engaging with NHS sustainability – as compared to for example lobbying and campaigning or working on medical school sustainability - were mixed, with a case to be made on both sides.

**Hannah (Newcastle)**

**Actions**

* Set up a meeting with the Strategic Health Authority’s Estates Adviser and went through the Building Research Establishment Environmental Assessment Method’.
* Was given a contact list for Sustainable development leads – but all out of date unfortunately
* Met Tony Waterstone (paediatrician interested in climate and health, member of the CHC Board) for advice – no sustainability contacts in the area, but wrote together to chief execs of 3 nearby trusts to request a meeting.
* Met various people from the Northumbria Trust but was told ‘it would never get past the Board of Directors’ – usually for ‘economic/ideological reasons’.
* Met up with Philippa and Jess in York.
* Working with 2 third year medics to promote cycling to work and placements. Carried out an online survey for Newcastle medics, received 650 responses: results included the fact that the current lack of changing and locker facilities is a deterrent to cycling. Aimed to present the findings to relevant hospitals (outcomes?).
* Made a leaflet for medical students outlining cycling facilities and maps, for the 5 hospitals closest to Newcastle.

**Reflections**

* Difficult to make progress after meetings/influence policy, found working alone a bit isolating.

**Advice:**

* Would have been good to have more students at Newcastle.
* Would advise students to make links with any other groups already working on sustainability (People and Planet, NUS Green Impact, Student Hubs etc)

**Jess (HYMS)**

**Actions:**

* Put out an email to the medical school and found lots of students willing to get involved - including to do the menial, non-glamourous stuff too.
* Frances Mortimer passed on details of lecturer at HYMS interested in Sustainable Healthcare – got the response that it was better suited to SSMs than the core curriculum
* Needed to find concrete projects for the students interested.
* Set up a meeting with Marc Beaumont (Head of Sustainability for Hull & E. Yorkshire).
* Marc’s team had wanted to engage with junior docs for some time, but didn’t know how, so found the meeting useful.
* Started to work with Sarah Walpole, who was looking to set up an SSC, Jess came up with ideas following on from discussions with Marc, for 2-week long projects that students could work towards during an SSC. Developed into a week-long itinerary with Marc’s input - a comprehensive outline for an SSC. Didn’t manage to get it in that year but hoped to have it the year after.

**Lessons learned**

* Finding students and coming up with ideas was relatively straight-forward – getting the point across to professionals was more difficult. Often told ‘why not make the medical schools greener?’ which essentially ignores the fact that many students have the means and the motivation to make more ambitious changes than this
* Student have the potential to be ‘ a real tool for sustainability’ but ‘key people in the NHS and in curriculum committees don’t know what to do with this enthusiasm’nd the idea of engaging with students ‘seemed alien to most’ making it very difficult to fulfil our original aims of ‘working with the system’ - rather than focusing on advocacy.
* A lot is going on but most of it is still ‘behind the scenes. Medical students can bring greener healthcare to the fore’. The project showed me that climate change is not someone else’s challenge but everyone and that I, as a medical student, can help to meet it’.
* Without quantitative incentives (QOF payments etc) very difficult to engage many staff.
* ‘I don’t have to turn into one of those world-weary consultants who have an answer for everything and yet a solution for nothing. I know that just because something is not in my job description does not mean I cannot do it’

**Advice**

* A more coordinated scheme, eg with formal introduction to local NHS Boards or sustainability action groups, would have been beneficial
* Have a clear goal with an even clearer plan of how to get there, working around people’s other commitments. Focus on one small topic – sustainable healthcare is a huge subject.

**Lucy (Leicester)**

**Actions:**

* This was a more research-based project, looking whether there was potential for chronic pain management programmes to improve quality of care and reduce emissions, cost - and how if so.
* Patient uptake and adherence better for community based programmes (-> CO2 emissions from transport).
* Questions about carbon impacts of patients returning to normal daily life – obviously a good thing but can increase emissions
* Met a specialist consultant in pain from Leicester General hospital
* Had difficulty learning how to do a full carbon footprint of a care pathway, data and technical challenges
* Lucy and others involved in the project at Leicester (Mo and Rida) also worked to try to set up an SSM at Leicester – they were told it needed to be quite different from the current ‘Health and Development’ one, and also came up against challenges around finding a module leader and others to run sessions within it.

**Reflections/lessons learned:**

* Probably needed either a step-by-step guide to how to carbon footprint, or a carbon footprinting expert: would recommend trying to get one on board or providing more practical training on carbon audits/footprinting next time.
* Documents on carbon footprinting can be long, dull and a bit meaningless...

**Advice:**

* Don’t be over-ambitious.
* Finding (a) good contact(s) is the most important step.
* Keep in regular contact with yourself! Really helpful for maintaining perspective

**Phillippa (Sheffield)**

**Actions**

* Gave a presentation on CC&H at a GP practice using the SAP pwerpoint resources, and then carried out a carbon audit using NHUS Green Impact template, walking around with a clipboard and a camera. Noted down what lights are on, heaters, air cons etc.
* Wrote it up and gave feedback, although the usefulness was limited by the lack of cost-savings data.
* Practice decided to change several of their lights, put up switch off stickers and awareness posters and install a ‘hippo’ water saving device for the very large toilet cistern…
* Trying to work with the hospital to see how they could source their food more locally proved pretty difficult, as they didn’t really see what she was trying to offer/ask.

**Lessons learned:**

* Need to really know the system – who controls which bit of policy where etc - to try to change it.
* Things can be very, very slow (long gaps between email replies, waiting for utility bills etc.
* Need data on finances and time available for any decision to be made.
* Two GPs said they were too busy with trainings, running the practice etc – felt QOFs or similar would be a good way to incentivise action on sustainability.

**Advice:**

* A lot of people felt students were best placed for advocacy/campaigning roles. Found this enjoyable and productive, got more involved towards the end of the project and have made some good contacts in this area.

**Nathalie (Ghent)**

 **SUSTAINABLE HEALTHCARE**

* Nathalie first went to talk to the staff of the dialysis unit at the University Hospital to see if they were interested in a pilot-project. They were very enthusiastic and already had many ideas. She also discovered that EcoLife, an organisation of the Flemish government, has a sub-project called ‘EcoCare’ which supports health care services in becoming more sustainable and had already worked with different health care institutions.
* Before setting up the EcoTeam, students ran a small survey among the staff, asking about their opinion on sustainability, both at home and at work, and also asked who would be interested in joining the team. Most people found sustainability an important issue and 14 people wanted to join the team.
* First meeting - discussed supplies and the overuse of linen cloths; attended by the environmental coordinator, the ‘linen-responsible’ of the hospital (central service), an expert from EcoLife, EcoTeam staff members and Nathalie. The staff had made a list of everything that the unit bought; 500 articles in total. They decided to eliminate 200 and search for more sustainable products for the remaining 300 articles. Nathalie then made an appointment with the head of clinical services of the dialysis unit to ask for his support; after some discussion he promised his full support.
* Before the project, every patient got a clean linen sheet to cover his or her chair and a thick blanket. In January 2011, 1675 linen sheets (cost €995,955) and 529 blanket (€425) were used in the dialysis unit. It was decided not to put any more linen sheets on the chairs, which was generally seen as a waste and to use a linen sheet to cover the patients instead of a blanket.
* One week after the start of implementation, Nathalie randomly selected a number of patients and questioned them about the environment, the importance of sustainable health care, what they thought about the project, and gave them the opportunity to comment. Many patients brought forward their own ideas too. Some patients were worried about hygiene, although they were informed that the project had got approval from the Department of Hospital Hygiene. However, taking the time to listen to them and explain why we had decided to use fewer sheets and talking about their worries proved effective in gaining their support. In the near future the EcoTeam wished to find some extra stocking room for personal blankets and sheets for patients who would like one - this could be used several times and only washed when necessary.

EDUCATION

* Ghent University joined 10:10 as the first Belgian University and a team of very motivated students is worked on awareness raising and to change the University’s policies. The campaign was a great success - setting up an electronic Swap Shop, turning down heating in the hallways and toilets and setting the printers in the libraries on double-sided printing, as well as creating a weekly no-meat day in the student restaurants. In addition, almost 2000 students joined as individuals, pledging to try to cut their carbon footprints by 10%.
* Together with a student group, Nathalie developed a ‘Global Health Continuum’ to be incorporated into the curriculum, as well as organising an international Global Health Short Course, which will take place in April ([www.swissglobalhealth.ugent.be](http://www.swissglobalhealth.ugent.be)) - this hosted some 50 students from around the country. Climate change and health is included in both the continuum and the short course, and sustainable health care will also be part of the new medical curriculum. In addition, they organized a lecture on climate change and health and sustainable healthcare at the University, and the same lecture took place in Antwerp and Leuven.
* At the end of the Programme it was planned to organize a training weekend on sustainable health care where Health and Environment Alliance (HEAL) in Brussels and EcoLife will take care of the theoretical parts and where Nathalie would present her case study, the plan being to assist attending students in developing their own case-study to extend the available expertise in Belgium.

Lessons learnt

* Learnt the importance of communicating with patients and involving them in the project as much as possible, when changing things that directly affect them.
* Most patients are worried about the environment too, especially patients with chronic kidney disease who are aware of their vulnerability and their need for a clean environment.
* Missed opportunities through not communicating more between project participants
* It would have been good to make some kind of database, bringing together all examples on student action for sustainable health care eg. as a ‘student handbook for sustainable health care’ or something.

Advice:

* Investing efforts in education, awareness raising and advocacy for climate change in general should probably be a priority; it’s often still lacking at present. For example - organizing lectures or trying to incorporate the topic in the curriculum, and mobilising students for action and awareness-raising and campaigns.
* Meeting with a small group of motivated staff and working out projects isn’t so difficult, but the process that comes after, to discuss and evaluate interventions with all other people affected, both staff and patients, requires much more energy - but it is the only way to make sure the process of making the care more sustainable will not end when your specific project finishes.
* Very important to find out everything that is already happening and meet with everyone that might be interested, even if you don’t particularly need to ask them something.

**Alice (Bristol)**

**Actions:**

* Several useful contacts made and meeting organised including with:
* Charlie Tomson – consultant nephrologist, national lead in Green Nephology, works at North Bristol Trust
* Emphasis on educating staff about recycling, waste reduction, travel co-benefits
* Amanda Saunders - carbon footprinting for home chemotherapy
* Andy Connor - Green Nephrology fellowship (1 year) footprinting the renal service, also interested in travel auditing
* Anne Morris -
* Trevor Thompson - education, travel footprints, 2nd year students’ brainstorming session

**Reflections:**

* Main challenge was balancing the programme with university work and maintaining enthusiasm etc.
* Things generally took longer than expected.
* More opportunities to act and raise awareness in the university than in the NHS – smaller, simpler, easier to understand.
* Lots of medical students want to get involved but need more information and guidance in order to be useful/effective.

**Advice:**

* 2+ per university would be better
* Recruit a team of other students to get involved
* Share out work to balance other commitments
* Don’t be disheartened if things aren’t straightforward, persevere!

**Elly (Brighton)**

**Actions:**

* Applied for an SSC to be offered, but budget cuts meant this wasn’t successful
* Organised a meeting with the BSMS Dean about ‘greening’ the medical school – got them to sign onto the 10:10 campaign
* Campaigned to Sussex to set up a global health iBSc
* Got a student onto the Royal Sussex County Hospital’s sustainability steering committee meetings
* Joined the local Envt’l Network and ran a meeting on the topic of sustainability in healthcare.
* Organised a talk by a local Occupational Therapist involved in the (then) Campaign for Greener Healthcare (now Centre for Sustainable Healthcare)’s work – went successfully

**Reflections:**

* Established several leads with a lot of potential, but found that a combination of electives and exams made it very difficult to keep momentum up towards the end.

**Advice:**

* Recruit from a wider range of years to improve project sustainability
* Start recruiting at the start of the academic year, with a plan to end (or pause) activities by May

**Some quotes from students’ reports at the end of the Programme**

“Before the weekend ... it (climate change/sustainability) did not take a central place in my life. Now it does, and I think this might stay the same for a long time to come. I would almost say that this project has changed my life and is shaping my future career in a way I had never imagined it would.”

“As a pilot project the BCCCP was a brilliant scheme to be part of. It shows that with a little guidance, a medical student has a lot to offer sustainability efforts both in terms of an extra pair of hands but also in selling the idea of sustainable healthcare to their peers. I was amazed by how much is going on behind the scenes to reduce the NHS carbon footprint, but it is just that- behind the scenes. Medical students can bring green healthcare to the fore. The BCCCP showed me that climate change is not someone else’s challenge but everyone’s and I, as a medical student, can help to meet it.”

“I noticed that getting students involved in a project on sustainable health care is not possible if there is no awareness about the health effects of climate change, the health-co benefits ... and the importance of sustainable health care. If you want a project to continue in the future ... investment in education and awareness-raising becomes a priority.”

“The training weekend was excellent for motivation, enthusiasm and for providing us with a structure to hang our ideas onto.”

“It greatly improved my organizational skills”

“there’s nothing more rewarding than starting something and seeing other people taking over, putting their energy into it and achieving results together”.

“Some patients have many ideas of their own and will be very happy to share their knowledge with you. Nurses often do not have time to listen to the patients and students... can easily fill that gap”

“It was a fun programme and I have learnt a lot of skills and knowledge which I will be able to use in other aspects of my life and throughout my medical career.”

“Many times, people said to me, ‘it’ll never work’ or ‘that will take ages’, and policy-makers said ‘That’s not possible’. Do not listen to them. If possible, ask to talk to their supervisors, and if they don’t want to listen, try to get the support of other students/staff/patients. If they support you, and it’s some kind of a democratic system, policy-makers will have to listen.”

“the training weekend ... enabled me to feel more confident when talking to others about climate change. I thought the structure of the weekend was really good and that it was nice to get to know the other programme directors and listen to their thoughts and ideas.”

“After listening to what was said and talking with other students I felt excited to be a part of this project and I still believe it has great potential. ... hopefully there are now enough case studies to enable the next cohort to leave with a less abstract idea of what they will be doing.”

“I think it’s reminded me of what it is that motivates me, and why I went into medicine in the first place”

1. http://www.sdu.nhs.uk/page.php?area\_id=2 [↑](#footnote-ref-1)