

# Case study: Sustainable Healthcare module for Bristol medical students

## Introduction

Leaders and staff in healthcare need to be aware of sustainability and its importance in the sector. It can help improve patient care in various ways. For example, reducing the NHS' annual 25 million tonne carbon equivalent emissions<sup>1</sup> can help reduce the public's exposure to these harmful gases and reduce the risk of associated illnesses and diseases; reducing the £65 million annual spend on waste disposal<sup>2</sup> can mean the savings are redirected into patient care; lowering the amount of medicines that are wasted in England each year could save up to £3 million and greatly reduce the amount of associated chemicals and pharmaceutical materials released into the environment. These are just 3 examples how the healthcare industry and sustainability are significantly linked.



*Serena, one of the first SSC students, and Matt Cracknell from Feed Bristol  
[www.avonwildlifetrust.org.uk/feedbristol](http://www.avonwildlifetrust.org.uk/feedbristol)*

Sustainability therefore needs to be embedded into the healthcare industry's practices and the working lives of staff and future staff within it. By focusing on students, we can embed understanding of sustainability into their learnings about their career and industry from the very beginning.

**“Climate change has great implications for health and, similarly, healthcare has great effects on the environment.”**

## What we did

While developing a GP-specific sustainability engagement programme using Green Impact<sup>3</sup>, we also designed and delivered an optional student-selected component (SSC) module of the University of Bristol Medicine degree through the School of Social and Community Medicine. We aimed to promote the importance of sustainability to these future staff of the medical industry and to help them see the impact that they each could have – individually and as part of a much larger movement.

Second year medical students were invited to take part in the SSC and have a say in the development of the GPs Green Impact programme working with GPs across Bristol. Four students took the

1 Sustainable Development Unit, 2013, accessible at <http://www.sduhealth.org.uk/policy-strategy/reporting/nhs-carbon-footprint.aspx>

2 Royal College of Nursing, 2011, accessible at [http://www.rcn.org.uk/\\_\\_data/assets/pdf\\_file/0005/372308/004108.pdf](http://www.rcn.org.uk/__data/assets/pdf_file/0005/372308/004108.pdf)

3 <http://sustainability.nus.org.uk/green-impact>

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module in its first year and learned about the huge impacts that the NHS and healthcare has, why changes were needed, and most importantly, how things could be improved. They were trained in environmental auditing and each visited a GP practice, feeding back their findings to the Green Impact development team. They also researched, presented and wrote an essay on a particular aspect of sustainable healthcare. It gave them an opportunity to meaningfully engage in and develop the existing Green Impact programme.

**“If all GPs engaged with the scheme, primary care could be at the forefront of changing our beliefs about climate change.”**

## Impacts and benefits

The students who took the SSC were enthusiastic and eager to use their learnings in a practical way. Because of this, their reflections showed that they found the module useful, interesting and inspiring. Their innovative, evidence-based suggested topics for the Green Impact toolkit were all included in the final version and had impressive impacts. One practice learned that the pharmacy 200 yards from their front door recycled inhalers and are now able to tell patients how they can easily reduce their waste!

**“This course will have a lasting impact on my awareness of how my future career and environmental sustainability are inherently linked.”**

According to the students, the module was informative and thought provoking, providing them with a break from traditional medical topics through an issue that is still relevant to the overall course. Their appreciation of the sustainability impacts of healthcare has made them all more aware of the importance of collaboration in their future roles. They are now also aware of some of the simple changes that can make GP practices and healthcare in general more sustainable.

Their involvement and important development role in Green Impact made their work feel ‘purposeful’ and motivated them to work hard and do a good job. It also helped them make important contacts, which developed their communication and networking skills. Presenting their in-depth assignments to their fellow students and tutors also helped improve their presentation skills and time management, and their reflective accounts improved their independent studying, reflection and critical thinking.

## Looking forward

We are preparing the second year of the SSC, which will largely replicate the first year while taking several learnings into account. Team delivery between University of Bristol staff and NUS has proven to be a key success factor of the module because it increases the amount and types of knowledge available to the students, but we need to communicate regularly and feedback to each other after our sessions to avoid duplicating information. We are also developing the GP visits to become more experimental, with the student helping the practice implement one of the criteria from the Green Impact toolkit and, if possible, measuring the resulting change.

We believe that this type of experiential teaching, giving students the knowledge and responsibility to take the lead, is an important feature of embedding education for social responsibility and sustainability into the curriculum for all students.

**“It was informative, engaging and has changed the way I perceive sustainability for the better.”**

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