

The Michael Pittilo award is open to UK students studying any healthcare discipline at degree level or above, including complementary and alternative therapies that are statutorily regulated or on an Accredited Register approved by the Professional Standards Authority. The FHT is delighted to have been a member of the judging panel and publisher of the winning essay for eight consecutive years.

Our congratulations to this year's winner, Emily Williams, a second-year BSc student of diagnostic radiography at the University of Liverpool. Congratulations also to Reshma Bharamgoudar and Jessica Anderson, who came second and third. Reshma and Jessica's essays are available

at fht.org.uk/readingroom – in the research section of FHT's online reading room. Here is Emily's winning essay:

HOW CAN PATIENTS, COMMUNITIES, HEALTHCARE PROFESSIONALS AND GOVERNING BODIES WORK TOGETHER TO ENSURE SUSTAINABILITY OF THE HEALTHCARE SYSTEM?

Why do we need sustainable healthcare?

Archaeologists often refer to the agricultural revolution as a 'luxury trap': if a harvest was plentiful then people would be able to feed their children better than they were the previous year, thus people would have more children and more mouths to feed.

The NHS in 2017 can be considered a 'luxury trap'; where the progress of modern medicine has succeeded in enabling people to live longer and healthier lives, we are faced with the problem of a larger, ageing population and limited resources.

Metaphorically, the UK healthcare budget can be thought of as a cake cut into many slices; mental health would get one slice of the cake, other slices may go to primary care, emergency medicine and research. Put simply, the cake requires more ingredients and a larger oven to rise to growing demand – we must plan to ensure a sustainable NHS, and we must do this in collaboration with one another, ensuring an engaged relationship with patients and communities.

2017 MICHAEL PITTILO STUDENT ESSAY AWARD

FIRST LAUNCHED IN 2010 BY THE COLLEGE OF MEDICINE, THE MICHAEL PITTILO STUDENT ESSAY AWARD RECOGNISES AND CELEBRATES THE INTEGRATION OF CONVENTIONAL AND COMPLEMENTARY APPROACHES TO HEALTHCARE



Current media coverage of healthcare in the UK may lead some to believe a comprehensive tax-funded NHS as we know it is doomed. Despite this, analysts have shown that there is a sustainable future possible for our healthcare system (NHS England, 2014).

Although there is no perfect algorithm that can solve the problem of having to budget for the health of human lives, protected funding and improved patient satisfaction are just two factors that have allowed the NHS to continue its essential work (NHS England, 2014). A YouGov poll showed that nearly 75% of people consider the NHS to be one of the UK's greatest achievements; despite this, more than 40% believe the NHS will not survive in its current form by 2020 (Polechonski and Farmer, 2013).

With austerity and recession posing a great threat to the health economy, the responsibility of protecting and sustaining the NHS falls not only on parliament, but on the shoulders of patients, communities, healthcare professionals and governing

bodies to create a vision of collaborative efficiency for the future of UK healthcare.

What is sustainability in healthcare?

Bodies are fallible, and as surgeon Atul Gawande stated, 'the core predicament of medicine is uncertainty' (Gawande, 2003). There are unavoidable and unacceptable poor outcomes of care; part of sustainability is reducing the variation of quality in these outcomes within finite resources. The Oxford English Dictionary (2017) defines sustainability as 'the ability to be maintained at a certain rate' – because patient care is a central theme of the NHS, it is impossible to be 'sustainable' without being a dynamic system that can adapt and cater for varying population health. Initiatives such as NHS RightCare set out to achieve sustainable improvement. For them, the sustainability of healthcare refers to the financial optimisation of resources and services that ensures a high standard of patient care (NHS England, 2017).

Looking to the future is an extension of sustainability; embracing new technologies that transform care through better diagnosis, prevention and management of disease is essential to cutting costs and ensuring best practice. Glimpses of future technologies include electronic health data so that patient records can become paperless (NHS England, 2014), and even the introduction of artificial intelligence image reporting in radiology (Freiherr, 2016). In 2014 a trial experiment was undertaken with 50 diabetics for an 'artificial pancreas'. In the experiment, a pump connected to an iPhone was attached to the stomach with glucagon, insulin and a sensor (Russel et al, 2014). This detected the sugar levels in the blood of the patient and sent data to the phone, which then stimulated the pump to inject one of the two hormones.

Diabetes UK estimates the NHS spends over £10bn a year on diabetes (Diabetes UK, 2017), so this may one day be a more efficient way of managing the condition. Sustainable healthcare for the future means harnessing technology to improve our practice.

How do we make healthcare sustainable?

Patients and communities

The first key point raised in the Five Year Forward View was the need for an upgrade in prevention and public health (NHS England, 2014). Prevention can be led by

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communities on a local level; antibiotic resistance awareness campaigns such as Antibiotic Guardian aid service user awareness (BSAC, 2017). Another example is local stop smoking services, which have been successful in cutting down numbers of smokers in the UK (Smokefree NHS, 2017). Platforms such as workplaces are ideal for advocating healthy lifestyles for the prevention of sickness absence. Furthermore, local authorities and councils can manage and improve the health of their populations: for example, cutting down fast food availability near schools and promoting initiatives such as Dementia Friends by the Alzheimer's Society as part of promoting good health within the community and reducing stigma (Alzheimer's Society, 2017).

Good health can be promoted within community spaces, such as youth groups: for example, in 2016 Girlguiding launched its mental health badge – a great example of how preventing ill health and reducing stigma can help reduce pressure on the NHS (Girlguiding, 2017). Finally, patients becoming aware of the wasted time and resources when appointments are not attended, and knowing the appropriate use of primary and emergency services, would help reduce unnecessary loss of time and money.

Healthcare professionals

Caring about sustainability is part of leadership and accountability – two values that prove intrinsic to driving change in healthcare (NHS England, 2014). One method of sustainability is proactive primary care. Multispecialty community providers (MCPs) are a new model for primary care services which, due to the interprofessional nature of their design, lend themselves to a culture of self-improvement that will improve health outcomes and



efficiency (NHS England, 2016). Another example of multidisciplinary integration is the introduction of physiotherapists in GP practices; musculoskeletal conditions make up some 30% of all GP appointments, so this can aid the sustainability of practices (BBC, 2017).

The National Audit Office (2008) found that in one trust 40% of people who died in hospital had no clinical need to be there. Despite 63% of our population wanting to die at home, only 21% of us do – the majority die in hospital (Salter and Wood, 2013). This can be for a variety of reasons: most commonly a lack of social care packages, poor advice and information, and poor pain management. If these factors were improved then hospitals would become more sustainable.

Improving productivity and encouraging shared decision-making with patients means investing in research; this is vital in providing the evidence we need to transform services. If sustainable healthcare is the goal, then research cannot be ignored. A haunting example of this is the discoveries of Alice Stewart, who observed that a high rate of childhood cancers developed because the mothers had received x-rays while pregnant. This data was published in *The Lancet* in 1956, yet it was 25 years before the British Medical Association changed practice (Stewart et al, 1956). In medical research, we must be prepared to act upon evidence and change our minds to avoid requiring more funding into curing diseases that were preventable.

Governing bodies

Bodies play a key role in cultivating the culture of care and transparency that was highlighted as a necessity after the Francis Report (Francis, 2013). They can help drive down costs and improve patient outcomes by ensuring standards of practice are kept updated to outline a minimum expectation. Equipping healthcare professionals with adequate information about best practice



This prize-winning essay is by Emily Williams, studying diagnostic radiography at the University of Liverpool

for their role, and forming appropriate partnerships and investments, is vital. Bodies can also ensure sustainability by developing advanced practitioner



roles to build on the skills held by existing NHS staff: for example, the training of reporting radiographers, who will be less expensive to employ than a radiologist and can relieve pressures on the workload.

The duty of candour guidelines drawn up by the General Medical Council and the Nursing and Midwifery Council provide the theoretical framework that mistakes will happen, and we must respond appropriately when they do (GMC and NMC, 2015).

The sustainability and transformation partnerships (STPs) being developed in England involve discussion with staff, patients and communities (NHS England, 2017). They focus on people making decisions about their own care so that allocation of resources can be optimised for each area. Rather than looking at population health as a single narrative, STPs view the country as a group of alternative narratives that all require different services at different levels of demand and funding. STPs also serve as a way for communities to refocus their vision for health and calibrate their views with local clinical commissioning groups (CCGs) and trusts. Furthermore, good patient experience – a key goal of the Department of Health – leads to improved reputation, which is good for trusts and CCGs as businesses (Department of Health, 2017).

Unfortunately, there is no concrete evidence-base that allows for algorithms of

care that will make every patient satisfied and be financially sustainable: there is no unequivocal perfection in medicine. Rather, a long process of decision analysis and protocol development allows for a utilitarian approach that hopes to achieve the right outcomes for patients. Systems such as value-based life years and risk analysis have been developed as ethical guidelines to assist such decisions.

Conclusion

All these approaches aim to ensure the sustainability of the NHS – better health can be sustained through increased prevention, supported self-care and the integration of services (NHS England, 2014). Differing views about which methods best tackle the issue of healthcare sustainability in the UK are invaluable for refining details and nuances of discussions that lead to changes in financial planning. Interprofessional and service-user coordination is required to shape the future of the NHS: an ecosystem wherein change is unavoidable, but can be sustained by adopting a dynamic, productive approach that ensures high-quality care for service users. **IT**

REFERENCES

For full references, go to fht.org.uk/IT-references

