

The evolving role of surgeons and surgery in the changing NHS

The founding of the NHS in 1948 was a milestone both for British history and the development of health-care equality. Over its 60-year history the NHS has frequently been adapted to suit the needs of the times, but what does the future hold for the NHS? Is this simply another period of change, a new beginning or the death throes for an exemplar institution that has shaped social health care around the world, seen most recently with the attempts to change health-care provision in the USA.

The tenets of the NHS

From its inception the NHS was defined by three core tenets: universality, comprehensive care, and cost free at the point of use (Delamothe, 2008). A health-care service in Britain would still exist without these, but it would not be – by definition – the NHS that countless people have come to depend on.

Universality in the context of the NHS demands that the care provided should be the same for all. In practice universality is difficult to achieve and differences in care quality continue to exist. Reforms over recent years have placed emphasis on patient choice within the NHS; this is exemplified by the advent of consultant league tables and the ‘choose and book’ system (Department of Health, 2008). Improving patient choice tends to enhance the differential between informed patients who may look for and find the centres with the best outcomes, leaving others to experience care from units whose results are listed further down the tables (Werner et al, 2005; Ali, 2009). Thus ‘choice’ in the age of increased patient awareness leads to inequity rather than universality (Oliver and Evans, 2005).

Comprehensive care, the principle that the NHS should include all the services required to ensure the health of the populace as well as treating illness, is an idea that is highly subjective and has changed considerably over time. Patient expecta-

tion regarding the breadth of care provided by the NHS has increased and continues to grow despite the ongoing financial difficulties. The principle of rationing health care is nothing new, but continues to be unpalatable to many (Syrett, 2002). There is a drive to limit procedures considered by some as ‘economically ineffective’ such as varicose vein interventions (McKinsey and Co, 2009; NHS Leeds, 2010). If this trend continues more treatments may begin to fall into this bracket and the NHS may not comprehensively address the health-care needs of patients.

The above changes, when combined, present a valid threat to the core tenets of the NHS as well as, importantly, patient care in general. If this becomes widespread then those who have the ability to seek and obtain private treatment will do so. This undermines the third principle – free care. Thus our future health service has the potential to be an NHS by name only.

Impact on surgery

Surgery has played a key role in the treatment of the ill throughout the history of the NHS. However, the role of surgeons and surgery within our changing NHS is unclear. There are a number of reasons for the potential impact on surgical specialties, although three main points stand out:

1. The development of independent sector treatment centres outside of the NHS
2. The growth of multidisciplinary team working
3. The continuing expansion of technology.

Changes in NHS policy have permitted increased privatization and the development of independent sector treatment centres (House of Commons Health Committee, 2006). These provide common elective operations in a number of communities. Despite mixed evidence

regarding treatment improvement, lowering of costs or higher throughput (Department of Health, 2006; Browne et al, 2008; Pollock and Kirkwood, 2009), government policy has continued to support these enterprises. The increased outsourcing of common surgical procedures presents the concern that surgical training could be compromised through decreased exposure to these operations within the traditional hospital training environment.

Multidisciplinary team working is synonymous with modern medical practice. As this attitude continues to develop, patient care will become increasingly coordinated. It is likely that surgery in the NHS, in the years to come, will comprise surgeons working as members of multidisciplinary teams. As such patients will no longer be treated by either a physician or surgeon, but instead by a combined medical team (Windsor and Forbes, 2007). This is already the case in the management of many oncology patients (Stephens et al, 2006).

Currently there is emphasis on team training, skills and working in surgical specialties which has proved of benefit and is supported by the advent of interventions such as the Surgical Safety Checklist (Robeznieks, 2009). The development of consistent, holistic care will lead to a paradigm shift moving surgery from a discipline to an element within a discipline. This situation has been seen, for example, in the context of coronary artery disease where some patients’ therapeutic path has been changed from bypass surgery to percutaneous intervention (de la Torre-Hernandez et al, 2009; Takayma et al, 2010); in this environment surgeons have been superseded by physician-led teams. With this concept resides the development that the surgeon who previously attended to the complete care of the patient will become responsible for a focal element of a tightly defined management pathway.

Technology within the field of surgery has progressed at an incredible rate over the past decade. This is the case in urological surgery where the use of robotics in prostate resection has now reached up to 40% (Hu et al, 2009). Compared with traditional open radical prostatectomy, robotic minimally invasive resection of the prostate appears to reduce total hospital stay. Some studies, however, suggest that robotic resection results in more genitourinary complications and erectile dysfunction than open surgery (Hu et al, 2009).

Nevertheless, in future health care there is little doubt that robots will play an important role in surgery (Estey, 2009; Finkelstein et al, 2010), but a question that should be considered is who will be using them? It has been mooted that there may be more cost-effective alternatives to surgeons; nurses and technicians have already been trained to carry out simple procedures successfully (Newey et al, 2006). In a similar manner, it is possible that these allied health professionals could be trained to use robotic equipment. A key and irreplaceable attribute of a good surgeon is his/her judgment, but could a physician (or indeed a multidisciplinary team) take on this important role, requesting a robotic operation from a technician as they would a magnetic resonance imaging scan.

Conclusions

The duty to ensure that surgery remains key to patient care and integral to the NHS rests with members of the surgical community. The solution is likely to be a synergism, between efficient independent sector treatment centre-style NHS hospitals carrying out common elective operations while complex cases are managed by centralized multidisciplinary teams, with tech-

nology enhancing both care pathways. Surgeons should aim to lead multidisciplinary teams where appropriate, ensuring optimum patient care throughout management pathways. Technological advancement has already been embraced in a number of specialities and surgery in general should look to replicate these models of success. Independent sector treatment centre rotations could be included into the surgical training programme to ensure educational opportunities are maximized. Through these processes it is hoped that the principles of universal and comprehensive care upon which the NHS was founded may be maintained. **BJHM**

Mahiben Maruthappu

*Kennedy Scholar
Harvard University
Cambridge
MA 02138, USA*

(mahiben.maruthappu@gtc.ox.ac.uk)

Christian Camm

*Medical Student
New College
Oxford*

Joseph Shalhoub

*Clinical Research Fellow
Academic Section of Vascular Surgery
Imperial College London
Charing Cross Hospital
London*

Ali AM (2009) US healthcare reform. Choice and equality in health. *BMJ* **338**: b1903
Browne J, Jamieson L, Lewsey J, van der Meulen J, Copley L, Black N (2008) Case-mix & patients' reports of outcome in Independent Sector Treatment Centres: Comparison with NHS providers. *BMC Health Serv Res* **8**: 78
Delamothe T (2008) Universality, equity, and quality of care. *BMJ* **336**(7656): 1278–81
de la Torre-Hernandez JM, Garcia-Camero T, Burgos-Palacios V et al (2009) Impact of drug eluting stents on the clinical practice of revascularisation of coronary artery disease.

EuroIntervention **5**(4): 460–4

Department of Health (2006) Independent sector treatment centres. www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4129108.pdf (accessed 25 December 2010)

Department of Health (2008) High Quality Care for All: NHS Next Stage Review Final Report. www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_085828.pdf (accessed 29 December 2010)

Estey EP (2009) Robotic prostatectomy: The new standard of care or a marketing success? *Can Urol Assoc J* **3**(6): 488–90

Finkelstein J, Eckersberger E, Sadri H, Taneja SS, Lepor H, Djavan B (2010) Open Versus Laparoscopic Versus Robot-Assisted Laparoscopic Prostatectomy: The European and US Experience. *Rev Urol* **12**(1): 35–43

House of Commons Health Committee (2006) Independent Sector Treatment Centres. www.publications.parliament.uk/pa/cm200506/cmselect/cmhealth/934/934i.pdf (accessed 27 December 2010)

Hu JC, Gu X, Lipsitz SR, Barry MJ, D'Amico AV, Weinberg AC, Keating NL (2009) Comparative effectiveness of minimally invasive vs open radical prostatectomy. *JAMA* **302**(14): 1557–64

McKinsey & Co (2009) Achieving World Class Productivity in the NHS 2009/10 – 2013/14: Detailing the Size of the Opportunity. www.nhshistory.net/mckinsey%20report.pdf (accessed: 27 December 2010)

Newey M, Clarke M, Green T, Kershaw C, Pathak P (2006) Nurse-led management of carpal tunnel syndrome: An audit of outcomes and impact on waiting times. *Ann R Coll Surg Engl* **88**(4): 399–401

NHS Leeds (2010) Aesthetic (Cosmetic) Surgery and other related procedures Evidence Based Framework for Decision Making. www.leeds.nhs.uk/Downloads/Corporate/Commissioning%20Statements/NHS%20Leeds%20cosmetic%20interventions%20available%20on%20the%20NHS.pdf (accessed 5 July 2011)

Oliver A, Evans JG (2005) The paradox of promoting choice in a collectivist system. *J Med Ethics* **31**(4): 187

Pollock A, Kirkwood G (2009) Independent sector treatment centres: learning from a Scottish case study. *BMJ* **338**(7703): 1108–11

Robeznieks A (2009) Check, please. WHO pre-surgical checklist boon to safety: study. *Mod Healthc* **39**(4): 20

Stephens MR, Lewis WG, Brewster AE et al (2006) Multidisciplinary team management is associated with improved outcomes after surgery for esophageal cancer. *Dis Esophagus* **19**(3): 164–71

Syrett K (2002) Nice work? Rationing, review and the 'legitimacy problem' in the New NHS. *Med Law Rev* **10**: 1–27

Takayama T, Hiro T, Hirayama A (2010) Is angioplasty able to become the gold standard of treatment beyond bypass surgery for patients with multivessel coronary artery disease? *Circ J* **74**: 2744–9

Werner RM, Asch DA, Polsky D (2005) Racial profiling: the unintended consequences of coronary artery bypass graft report cards. *Circulation* **111**(10): 1257–63

Windsor A, Forbes A (2007) Is the multidisciplinary team essential for the future management of patients with inflammatory bowel disease? *Colorectal Dis* **9**(6): 478–9

KEY POINTS

- Recently proposed changes to British health care could threaten the core founding principles of the NHS.
- Independent sector treatment centres, multidisciplinary teams and robotics could all play a role in shaping the future of surgery in the NHS.
- It is the duty of the surgical community to ensure surgery remains key to patient care and integral to the NHS.