

Short Communication

## Morality and markets in the NHS

Barnabas J Gilbert<sup>1,\*</sup>, Emma Clarke<sup>2</sup>, Laurence Leaver<sup>2</sup>

#### Abstract

Since its establishment in 1948, the history of the National Health Service (NHS) has been characterized by organisational turbulence and system reform. At the same time, progress in science, medicine and technology throughout the western world have revolutionized the delivery of healthcare. The NHS has become a much loved, if much critiqued, national treasure. It is against this backdrop that the role of this state-funded health service has been brought into moral question. Certainly, the challenges facing healthcare policy-makers are numerous and complex, but in the wake of the Health and Social Care Act (2012), no issue is more divisive than that of market-based reform. Here we explore the turbulent history of the NHS, from its foundation to the birth of the healthcare marketplace. We explore arguments for and against the healthcare market and resolve that, amid an evolving economic and moral framework, the NHS must ensure that its original tenets of equity and autonomy remain at its core. We propose a values-explicit, systems-based approach to renew focus on both the processes and the outcomes of care. **Keywords**: National Health Service (NHS), Marketplace, Morality

Copyright: © 2014 by Kerman University of Medical Sciences

Citation: Gilbert BJ, Clarke E, Leaver L. Morality and markets in the NHS. *Int J Health Policy Manag* 2014; 3: 371–376. doi:10.15171/ijhpm.2014.123

# Introduction – The turbulent politics of the National Health Service (NHS)

Founded by the post-war Attlee government of 1948, the National Health Service (NHS) was the first Western healthcare system to offer free and universal medical care at the point of delivery. Aneurin Bevan, the firebrand Welsh socialist and incumbent Minister of Health, was responsible for spearheading the nationalization of hospitals and extending the benefits of general practitioner care to the entire population (1). Bevan's NHS represented a unique, collectivist approach to the provision of healthcare within a market society, with a firm emphasis on rational planning (2). Throughout its history, successive governments have endeavoured to reshape the structure of the NHS in accordance with changing demography and technology (2).

Under Thatcher, the Conservative Party of the late 1980s perceived the NHS as a venerable but stagnant organization (3). In the early 1990s, the Conservatives established the internal market; health authorities were able to manage their own budgets for the first time and could purchase health services from healthcare 'providers' (2). By exposing providers to market forces, resource allocation would become more efficient – or so the theory went (4). Quickly, the language of markets, choice and competition became the language of policy-makers. However, resistance to the market-based approach prevented a widespread move towards an explicitly mixed public-private model of healthcare provision and the internal market remained highly regulated (5).

When it took office in 1997, the Labour Party changed the popular market-based vocabulary and removed several features of the market, such as the concentration on shortterm 'spot transactions' (6). However, the fundamental changes in service provision remained. By the end of the Blair premiership in 2007, the system had become increasingly

Full list of authors' affiliations is available at the end of the article.

patient-driven and pluralistic.

To date, David Cameron's coalition leadership has been defined by a reversal of the spectacular spending habits of Blair and Brown, and a return to tight fiscal discipline (7). Within this setting, the Health and Social Care Act 2012 was intended to create space for competition. It did this by creating novel commissioning frameworks known as Clinical Commissioning Groups (CCGs) (8,9) and by allowing competition for the provision of healthcare between 'any willing provider', including the private sector. This has been referred to as the 'external market' (10).

Prior to 2012, in the context of healthcare that had been both publicly funded and publicly provided, tight regulation may have provided "little scope for 'real markets' in healthcare" (5). The sudden erosion of the boundary between public and private provision may "amount to the most ambitious attempt yet seen to apply a system of market regulation to the NHS" (11). Although there is little available evidence on the impact of this new approach, the media frenzy surrounding the proposal of the bill stimulated intense public and professional furore over the perceived 'privatization' of the NHS.

# The changing environment of the National Health Service (NHS)

The post-2000 era has been defined by a radical shift in the philosophy of healthcare policy-makers, as the economic and socio-demographic environment of the NHS has changed in a fashion that Attlee *et al.* could not possibly have conceived (2). The British economy is increasingly focused on services and information technology, as opposed to manufacturing; service provision is now consumer- rather than producer-driven. With greater access to information and knowledge, personal autonomy has expanded for the vast majority of the population (6). With the rise of the internet, the patient has



Article History: Received: 29 September 2014 Accepted: 12 November 2014 ePublished: 16 November 2014

\*Correspondence to: Barnabas J Gilbert Email: bgilbert@g.harvard.edu



been reborn as a consumer, and the attitudes of some service users have changed significantly (12,13).

Demand for healthcare has not only expanded, but also evolved. Pharmacological and technological progress, particularly in surgical and diagnostic equipment, has opened vast new therapeutic avenues. The burden of infectious disease has been replaced by new epidemics, principally cardiovascular disease and cancer (2). With an ageing population, the management of chronic conditions such as dementia has become central to the effective running of the health service. Long hospital stays are now a rarity; day case surgery accounts for over 80% of all operations performed (2). The development of a wide range of technologies including imaging, multi-factorial risk algorithms, molecular and genomic profiling is facilitating prediction of the predisposition of healthy individuals to future disease. This has been accompanied by an increase in prophylactic or proactive rather than reactive treatments. Given this context in which the NHS finds itself, it is hardly surprising that the healthcare market has reached the forefront of the policymaker's agenda.

Alongside these cultural and epidemiological changes throughout the UK, the environment within the NHS is changing, described by Care Quality Commission chairman David Prior in 2013 as 'chillingly defensive'. The workforce has become more fragmented, with higher staff turnover and greater dependence on locums (2). Low morale of NHS staff, associated with pay freezes, under-staffing, financiallydriven outcome targets and hierarchical top-down directives in the absence of bottom-up feedback, was one of the factors identified in the Francis report on the mid Staffordshire scandal as contributing to a culture "not conducive to providing good care for patients" (14). In light of this recognition, the current challenge faced by the NHS is how to turn a competitive, market-based system into an organization that learns from its mistakes and from patient-feedback and that builds rather than breaks the morale of its workers. We will argue that the key to this process will be in re-establishing ethical principles at the heart of the health service.

## The healthcare market - a hotbed of debate

The intellectual roots of the healthcare market emerged from the work of Alain Enthoven in the early 1980s. Enthoven noted that flexibility and purchaser power could be increased by 'outsourcing' and independently purchasing traditionally in-house functions (15,16). He used the example of the Ford Motor Company to elucidate this theory: although Ford initially hoped to control the full 'chain of command' – the panel-making, the steel-making to make the panels, the iron production to produce the steel, and so on – the industry later saw the merits of focusing the efforts of the workforce on the jobs they did best, while stimulating competition between suppliers (15–17).

While sole reliance on non-market mechanisms has identifiable problems, evidence of the effects of competition within a healthcare system is equivocal. Empirical research has shown both positive (18) and negative (19,20) effects of competition on quality of care. The theoretical benefits of competition include increased responsiveness to the needs of consumers, the flexibility to increase and reduce supply quickly when required, greater efficiency, and the encouragement of innovation (21). However, as Peter Smith, a leading British health economist, points out: "Markets confer benefits on society only in special circumstances" (22). "In no sector of the economy can the departure from the neoclassical economist's assumptions underlying a competitive market be more pronounced than in the field of healthcare" (23). This is due to a number of factors including major information gaps between providers and consumers and the key role of providers in influencing the healthcare that consumers receive (22).

In addition to its potential benefits, competition can produce instability, variations in performance and inequalities. Therefore the effective implementation of market-type mechanisms requires rigorous oversight to ensure that objectives such as equity and comprehensive healthcare are not compromised.

The application of market competition may be very different depending on the nature of the healthcare service being provided. The negative impact may be small in acute healthcare settings where patient groups are relatively homogeneous and outcome measures are easily defined (i.e. accurate) and consistent (i.e. reliable). In this scenario, well-managed competition may confer benefits. However, it is difficult to envisage these positive effects in the treatment of heterogeneous patient groups with chronic conditions in which there are few accurate or reliable measures of outcome. In addition, the propensity of inter-institutional competition to fragment care, threatening continuity and integration (21) may have a direct impact on the treatment of chronic conditions in which complex patient pathways are highly reliant on interactions with other agencies such as social care (22). It has been suggested that this effect can be inferred from the poorer outcomes of patients with chronic or multiple diseases in the fragmented U.S. healthcare system compared with European systems (24,25).

Overall, empirical evidence to suggest that the private health sector is inherently more efficient than the public sector is lacking. On the contrary, research has suggested that publicly funded healthcare organizations may outperform private providers. The intellectual challenge to the healthcare market is poignantly described by Thomas Rice: "We have examined ... the assumptions that would need to be fulfilled to ensure that a free market results in the best outcome for society; we found none of them even close to being met in health ... economic theory provides no basis for assuming the superiority of competitive approaches" (26).

Within a sector such as healthcare, productivity gains are necessarily limited by a reliance on human interaction – a phenomenon known as Baumol's cost disease (27,28). Just as a string quartet requires four musicians, so a doctor is required to take a history in order to make a reliable diagnosis; history taking cannot simply be cut from the medical agenda. Hence, the healthcare market cannot simply ramp up productivity in the way that other markets might, without compromising the healthcare processes and relationships intrinsic to good patient care.

Whereas previously the internal market of the NHS allowed competition between NHS healthcare providers, the Health and Social Care Act of 2012 made a radical change in opening up the market to 'any willing provider' including the private sector. This has set a precedent for the development of Public-Private Partnerships (PPPs) (29,30). Within this system, contracts are structured around specified operational, clinical and financial outputs, such that accountability can be maintained (31). However, as changes in global banking regulations have led to restrictions in long-term lending, so the absence of liquidity has increased interest rates on project finance to historically high levels, and the ability of publicprivate partnerships to generate economic value for healthcare commissioners has fallen (31). In addition, the marketplace remains burdened by regulation, with each contract entailing administrative costs through procurement processes, lawyers' fees, and audit (32,33).

Some of the risks of PPPs within the healthcare market have been successfully expounded by the health service unions and the left wing commentariat. In accordance with the inverse care law (34), private providers may prioritize patients according to lowest risk rather than greatest need. This 'cherry-picking' may result in an investment bias favoring the younger, healthier, more affluent members of society. Without stringent and complete contracts that generate the right incentive frameworks, providers may be inclined to reduce operational costs at the expense of service quality (35).

#### An evolving moral framework

One of the Government's popular catchphrases - "no decision about me, without me" (36) - illustrates a number of related points. If a patient is to be the driver of his or her own healthcare, then decisions about that care must be made as openly and as locally as possible. The devolution of control to local CCGs involving local doctors, patients and managers in resource allocation has been an attempt to facilitate this. Yet within a morally pluralistic society, it is inevitable that policy-making, however localized, will bring conflict. In the context of healthcare expansion and evolution described previously, it is all the more important that policy-makers seek to understand the many and varied moral issues they face and how to respond most effectively, managing public expectations and incorporating moral and ethical frameworks into policy-making (37). To achieve this, policy-makers must learn to communicate effectively and expansively by embracing, rather than fearing, the media machine, principally the press, the internet and social media outlets.

A major moral issue facing policy-makers is healthcare rationing. In recognising that not all healthcare needs can be met there is a need for distributive justice, whereby benefits and burdens are fairly distributed (38). Although the delegation of power from a national level to local CCGs may promote individual autonomy, an ethical concern is raised by the risk of exacerbating the 'postcode lottery', in terms of the quality and quantity of services available, as has been admitted by leading figures at the Department of Health (39). Although a degree of disparity in services nationwide may be inevitable (though not desirable) within any system, it is arguable that market forces potentiate such inequalities in healthcare delivery, principally by localising treatment-based decisions at the level of the CCG.

An additional concern is that at a local level, primary care physicians are increasingly conflicted between their duties towards individual patients and towards local resource allocation in their role as CCG rationers (40). This has important potential effects on both medical morale and clinical judgement and inevitably changes the balance of the doctor-patient relationship.

A number of critics are morally opposed to the introduction of market-based systems to healthcare. Michael Sandel describes the "corrosive tendency of markets" and their ability to exaggerate inequality between purchasers (41). Some deem this to undermine the principles upon which the NHS was founded. Alan Cribb has emphasized the negative impact of market forces on the nature of 'health-care goods', described as "the aggregative, distributive, or relational conceptions of health-care ends (e.g. population health, health equity, solidarity)" (5). The currently output-driven system may predispose to distortion of priorities and ritualization of practices, with clinical encounters focused on achieving performance indicators rather than good patient care: a tick-box approach. This might result in improved efficiency according to a single outcome-measure, potentially at the expense of care quality. Increased budget consciousness may subvert the motives of doctors, compromising impartiality, while inter-institutional comparison and competition may result in fragmentation of care.

## The solution: a values-explicit, systems-based approach

We have highlighted some of the negative impacts of market forces on both healthcare distribution and the nature of healthcare goods in the context of a changing environment in which there is increasing demand for healthcare and decreasing morale of NHS staff. We propose renewed focus on two approaches: values-explicit and systems-based healthcare, in an attempt to change this situation, alongside modification of the Health and Social Care Act to prevent involvement of the private sector in competing for healthcare provision.

#### Values-Explicit

By a values-explicit approach, we mean two things: 1) values should be introduced alongside and as a means of regulating, market forces; 2) these values should be explicit and consistent throughout the NHS from the Department of Health downwards in an attempt to align the goals of and overcome the clashes of principles between front line clinicians, market managers and politicians.

Critics of the market-based approach have argued that healthcare represents the moral-limit of markets (41) and that the values upon which the NHS was founded and competitive market-forces are fundamentally incompatible. Whether there is a degree to which such values can be incorporated within a market-based system is controversial. We do not believe that abolition of the 'internal market' is the answer, as the theoretical benefits of a market-approach may be achievable under tight regulation. However, the introduction of private sector competition by the Health and Social Care Act may have been a step too far towards 'unbridled capitalism'. From both an economic and a moral stand point the NHS might benefit from the repeal of this aspect of the act. Irrespective of the form in which markets remain part of the NHS, we suggest that a values-based approach to market regulation will be critical.

For example, the expected consequence of market forces applied to local decisions about healthcare rationing is an exacerbation of the 'postcode lottery'. An increase in the scope and power of National Institute for Health and Care Excellence (NICE) with explicit guidance on the values-focus of healthcare rationing—equity, fairness and maximization of individual autonomy—may serve to dampen nationwide healthcare inequalities. Additionally, a focus on value-based processes and quality of care may prevent the distortion of clinical judgement and erosion of the doctor-patient relationship that is a potential consequence of current outcome-based financial rewards.

Although the current government has been keen to depoliticize the day-to-day running of the health service, for example through the creation of NHS England, the marketbased, competitive language of policy-makers has inevitably, over time, percolated through the system to clinicians. In addition, clinicians are increasingly involved in decisions that might be deemed political, such as rationing and distribution of local healthcare resources, which could be seen to have done the very opposite, politicizing the day-to-day running of healthcare. This has magnified the clash of principles between front line clinicians, market managers and politicians. An increased focus of market managers and politicians on values-based healthcare may help to align the motives of policy-makers, managers and doctors. These values should be explicit at every level of the NHS, providing a shared vision with a view to "commitment and enrolment rather than compliance" (42).

### Systems-Based

In the face of a values-explicit approach to healthcare, a significant problem remains. The healthcare service offered in England cannot be understood simplistically in terms of the 40,000 consultations and 200,000 clinical decisions taking place every day, but rather by the relationships between consultations and the various services required (6). In the context of scientific and technological advances in healthcare, interactions between patients and healthcare services are becoming increasingly multiplicative. Current predominantly linear NHS systems are poorly adapted to deal with this and the fragmentation of care that results from interinstitutional competition creates a barrier to the integration of complex care.

The application of a systems approach – the 'fifth discipline', as proposed by Peter Senge – to business organizations, has aided the transformation of companies into learning organizations that are able to understand and deal with complexity (42). We support the application of a systems approach to healthcare, as advocated by Sir Muir Gray (6). By looking holistically at the healthcare system and at the relationships between its elements, complexity can be managed more effectively (43). Rather than focusing on notions of primary, secondary and tertiary care, the systems approach focuses around complete, integrative pathways for health problems and conditions. Theoretical advantages include reducing variation in quality and outcomes, reducing health inequalities, reducing patient harm, reducing waste and improving disease prevention (6). By providing clear

objectives and receiving continuous feedback, this approach has the unique advantage of flexibility, which may avoid the need for structural reorganization (6). Furthermore, the NHS must learn to embrace what Castells terms the 'drivers of the third industrial revolution': citizens, knowledge, and the internet (44,45). These goals are most likely to be achieved through the adoption of a systems-based approach.

In the dynamic environment of the healthcare system, only the patient is constant. The patient's constancy must be embraced by considering patients as pivotal members of clinical teams and by building systems around patients. Patient-held medical records would be one example of a pragmatic and morally appropriate solution to achieve these goals. More generally, the feedback of patients, relatives and carers will prove critical to service planning and delivery, emphasising the importance of patient representation within CCGs.

Within a systems-based approach, the competitive focus of the internal market could be exchanged for one of collaboration, in which commissioners and providers seek to work together. Even competitors can collaborate, as described by the concept of 'co-opetition' (46,47), whereby competing organizations can successfully develop innovations together. The illustration of the ant colony is enlightening: ants cooperate within their own colony, but compete, if necessary, with other colonies. For example, worker ants within a colony are non-reproductive, working only to benefit the reproductive capabilities of the Queen. Ageing workers emigrate to nests at the boundary of the colony to provide the first line of defence against neighbouring colonies, protecting younger and more viable members of the colony (48). Without a hierarchy or a market, ants successfully develop solutions to problems.

The origins of this behavior are contentious with some viewing it purely in survival terms; others describing it as altruistic (48). To an extent, these views can be reconciled. If our conception of evolution by natural selection is correct, this contention arises from the inevitability that the genes persisting at the expense of others are selfish, even if they prescribe altruism (48). However, if "altruism is defined in the original lexical manner as self-denying behavior performed for the benefit of others" (48), its application to ants is justified. Such altruism in ant colonies can be thought of as providing survival benefit in terms of reciprocity: kinaltruism (whereby genes favoring altruism towards genetic relations increase their own propagation by nature of shared genetic material). Whether these theories of evolutionary benefit entirely account for the origins of altruistic behavior is debatable.

Within a business relationship, altruistic behavior can benefit an individual via reciprocity or via the shared benefits of working together towards a mutual goal. For example in the automotive industry, two rival companies may decide to work together on a new engine, sharing technologies to make it economically viable and beneficial to both, even though they will later compete against each other through the application of this engine to different models (49). In healthcare, coopetition could mean the collaboration of providers focusing on different components of a pathway in an integrative manner that is mutually beneficial, by reducing costs and providing a competitive advantage over other providers focusing on individual aspects of care. An existing framework around which co-opetition may evolve are the restrictions imposed by competition law reflected by the Principles and Rules for Cooperation and Competition (50) as applied to both private and public healthcare providers, regulated by Monitor and the Office of Fair Trading. These regulate procurement of NHS services, anti-competitive behaviors, mergers between organizations, and false and misleading advertising of NHS services, striking a balance between the benefits of co-operation and competition (51).

What is often seen to set humans apart from other species is the existence of genuine, 'disinterested altruism' (52), where neither reciprocity nor benefits to kin can explain altruistic behavior. As expounded by Richard Dawkins, "Our conscious foresight – our capacity to simulate the future in imagination – could save us from the worst selfish excesses of the blind replicators. We have the power to defy the selfish genes of our birth and if necessary the selfish memes of our indoctrination. We can even discuss ways of deliberately cultivating and nurturing pure, disinterested altruism – something that has no place in nature" (52).

In his discussion of the morality of markets in healthcare, Daniel Callahan quotes Plato's work on altruism from The Republic: "Plato writes that the physician ... studies only the patient's interest, not his own ... Plato's description of the ethically responsible physician is that, while the physician must be some kind of merchant, selling his skills, his highest aim must, to be true to his profession, to be altruistic ... Plato believed that the physician who sold his services could do so without harming the altruistic core of medicine" (53). Whether altruism can be maintained in the face of competitive markets, as with other values underlying healthcare, is controversial. However, given the fundamental importance of altruism underlying truly patient-centered care, a values explicit model should nurture altruism as one of its core principles.

#### Conclusion

Despite constant change, both in its environment and its internal structure, the NHS has adhered to the values of its founding fathers. In essence, it remains a universal, free, tax-financed system - features which continue to command support across the political spectrum today. The market approach, introduced as a means of improving quality whilst controlling public expenditure, remains controversial. For the service to retain its moral credibility, it must remain patientcentric, reconciling values of equity and autonomy. These fundamental principles should form the basis not only of clinical practice, but also of policy-making. At all levels of the NHS, two questions should be asked about any new policy or guideline: i) are the values explicit?; and ii) has a systems-based approach been adopted? We believe that drawing attention to these two aspects will be as important in improving quality and cost-effectiveness as the current focus on competitive markets. A values-explicit, systems-based approach would focus on both the process and the outcomes of care. It could transform the NHS into a learning organization with huge benefits for both patients and providers.

### Acknowledgements

With thanks to Dr. Paul Brankin and Professor Lord Ara

Darzi for their roles in inspiring this article.

#### Ethical issues

Not applicable.

#### **Competing interests**

Authors declare that they have no competing interests.

#### **Authors' contributions**

All authors contributed to the concept and planning of the article. BJG drafted the initial manuscript which was revised by EC and LL. All authors agreed upon the final manuscript.

#### Authors' affiliations

<sup>1</sup>Harvard University, Cambridge, MA, USA. <sup>2</sup>Green Templeton College, University of Oxford, Oxford, UK.

#### References

- Macleod I. The Future of the Welfare State. London: Conservative Political Centre; 1958.
- Klein R. The New Politics of the NHS: From Creation to Reinvention. 6th edition. Abingdon: Radcliffe Publishing; 2010.
- Letwin SR. *The Anatomy of Thatcherism*. New Brunswick, NJ: Transaction Publishers; 1993.
- Porter MET, Elizabeth O. Redefining Health Care: Creating Value-Based Competition on Results. Boston: Harvard Business School Press; 2006.
- Cribb A. Organizational reform and health-care goods: concerns about marketization in the UK NHS. *J Med Philos* 2008; 33: 221-40. doi: 10.1093/jmp/jhn008
- Grey JA. How to Build Healthcare Systems. Oxford: Offox Press; 2011.
- Klein R. The twenty-year war over England's National Health Service: a report from the battlefield. *J Health Polit Policy Law* 2013; 38: 849-69. doi: 10.1215/03616878-2210503
- Asthana S. Liberating the NHS? A commentary on the Lansley White Paper, "Equity and Excellence". Soc Sci Med 2011; 72: 815-20. doi: 10.1016/j.socscimed.2010.10.020
- O'Flynn N, Potter J. Commissioning health care in England: an evolving story. *Ann Intern Med* 2011; 155: 465-9. doi: 10.7326/0003-4819-155-7-201110040-00009
- Lord Owen D. Fatally flawed: Yes to the NHS Internal Market -No to the External Market; 2011.
- 11. Ham C. Competition in the NHS in England. BMJ 2011; 342: d1035. doi: 10.1136/bmj.d1035
- 12. Grey JA. The Resourceful patient. Oxford: eRosetta Press; 2002.
- Wachter RM. Expected and unanticipated consequences of the quality and information technology revolutions. *JAMA* 2006; 295: 2780-3. doi: 10.1001/jama.295.23.2780
- Francis inquiry: report of the mid staffordshire nhs foundation trust public inquiry and action plan [internet]. 2013. Available from: http://www.2gether.nhs.uk/files/Francis%20Report%20 Update%20Sept%2020131.pdf
- Enthoven AC. Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care. Reading, MA: Addison Wesley Publishing Co.; 1980.
- Enthoven AC. *Reflections on the Management of the National Health Service*. London: Nuffield Provincial Hospitals Trust; 1985.
- Peters T, Waterman RH. In Search of Excellence: Lessons from America's Best Run Companies. New York: Harper Collins; 1990.
- Propper C, Wilson D, Burgess S. Extending Choice in English Health Care: The Implications of the Economic Evidence. *Journal of Social Policy* 2006; 35: 537-57. doi: 10.1017/ S0047279406000079
- 19. Propper C, Burgess S, Green K. Does competition between

hospitals improve the quality of care?: Hospital death rates and the NHS internal market. *J Public Econ* 2004; 88: 1247-72. doi: 10.1016/S0047-2727(02)00216-5

- Propper C, Burgess S, Gossage D. Competition and Quality: Evidence from the NHS Internal Market 1991–9. *The Economic Journal* 2008; 118: 138-70. doi: 10.1111/j.1468-0297.2007.02107.x
- 21. Edwards N. Using markets to reform health care. *BMJ* 2005; 331: 1464-6. doi: 10.1136/bmj.331.7530.1464
- 22. Smith PC. Market Mechanisms and the Use of Health Care Resources. OECD Publishing; 2009
- 23. Smith P. Reforming Markets In Health Care: An Economic Perspective. Buckingham: Open University Press; 2000.
- 24. Bodenheimer T. Disease Management in the American Market. *BMJ* 2000; 320: 563-6.
- McKee M, Nolte E. Responding to the challenge of chronic diseases: ideas from Europe. *Clin Med* 2004; 4: 336-42.
- 26. Rice T. *The Economics of Health Reconsidered*. Chicago: Health Administration Press; 1998.
- 27. Jackson JR. Baumol's disease. Fam Pract Manag 2008; 15: 12.
- Hartwig J. What drives health care expenditure?--Baumol's model of 'unbalanced growth' revisited. *J Health Econ* 2008; 27: 603-23. doi: 10.1016/j.jhealeco.2007.05.006
- Kmietowicz Z. Private firms are told that NHS in England is open for £20bn worth of business. *BMJ* 2012; 345: e6305. doi: 10.1136/bmj.e6305
- McLellan A. Healthcare market review: A weak private sector is bad news for the NHS. *Health Serv J* 2012; 122: 3.
- Hellowell M. The role of public-private parternships in health systems is getting stronger [internet]. 2012. Available from: http:// www.sps.ed.ac.uk/\_\_data/assets/pdf\_file/0008/96245/2012\_PPP\_ getting\_stronger\_Commonwealth\_Health\_Partnerships\_2012.pdf
- Power M. The Audit Society: Rituals of Verification. Oxford: Oxford University Press; 1997.
- Mehmud SM, Neiman D. The Affordable Care Act in brief: a look into January 2014 changes. *Benefits Q* 2013; 29: 34-41.
- 34. Hart JT. The inverse care law. Lancet 1971; 1: 405-12.
- Maynard A. Public and private sector interactions: an economic perspective. Soc Sci Med 1986; 22: 1161-6.
- Leading the way to shared decision making. The Health Foundation: Inspiring Improvement; 2012.
- Fulton J. A New Moral Framework for Health Care Reform. *Humane Medicine* 2006; 12. Available from: http://www. humanehealthcare.com/Article.asp?art\_id=647

- Kass NE. An ethics framework for public health. Am J Public Health 2001; 91: 1776-82.
- Makosinski J. NHS reforms 'risk' creating a postcode lottery [internet]. OnMedica 2011. Available from: http://www.onmedica. com/newsArticle.aspx?id=ab2354d4-b1b2-4b85-8cbfc7f3bf68ea98
- 40. Pratt J. Practitioners and Practices: A Conflict of Values? Oxford: Radcliffe Publishing Ltd; 1995.
- 41. Sandel M. *What Money Can't Buy: The Moral Limits of Markets*. London: Allen Lane; 2012.
- 42. Senge PM. *The Fifth Discipline: The art and practice of The Learning Organisation.* 2nd edition. London: Random House Business; 2006.
- 43. Seddon J. Systems Thinking in the Public Sector: The Failure of the Reform Regime... and a Manifesto for a Better Way. Axminster: Triarchy Press; 2008.
- Castells M. The Information Age: Economy, Society and Culture. Volume 1: The Risk Of The Network Society. Oxford: Wiley-Blackwell; 2009.
- 45. Castells M. *The Theory of the Network Society*. Oxford: Polity Press; 2006.
- LeTourneau B. Co-opetition: an alternative to competition. J Healthc Manag 2004; 49: 81-3.
- 47. LeTourneau B. From co-opetition to collaboration. *J Healthc Manag* 2004; 49: 147-9.
- Hölldobler B, Wilson EO. *The Ants.* Berlin: Springer-Verlag; 1990.
- 49. Hardwick P. 'Coopertition'...The new strategy for working together . *Mississippi Business Journal* 2011. Available from: http://msbusiness.com/blog/2011/01/02/%E2%80%98cooperati on%E2%80%99-the-new-strategy-for-working-together/
- Rahman S. "Co-epetition" how collaborative competition might ultimately benefit the patient. Socialist Health Association [internet]. 2013. Available from: http://www.sochealth. co.uk/2013/07/28/competition-collaboration-coopetition/
- British Medical Association (BMA). Competition Law and the NHS [internet]. Available from: http://bma.org.uk/working-forchange/doctors-in-the-nhs/reconfiguration-and-integration-new/ competition-and-choice-new/competition-law-guide
- 52. Dawkins R. The Selfish Gene. Oxford: Oxford Paperbacks; 1989.
- Callahan D, Wasunna AA. Medicine and the Market : Equity Versus Choice. Chapter 1: From Adam Smith to HMOs: The Origins of Medicine and the Market. Baltimore, MD: Johns Hopkins University Press; 2006.