The Royal College of Pathologists
Pathology: the science behind the cure

HOUSE OF LORDS SELECT COMMITTEE ON THE LONG-TERM SUSTAINABILITY OF THE NHS - Call for Evidence

The Royal College of Pathologists' written submission

September 2016

For more information please contact:
Rachael Liebmann
Registrar

The Royal College of Pathologists
4th Floor
21 Prescot Street
London
E1 8BB

Phone: 020 7451 6700
Email: registrar@rcpath.org
Website: www.rcpath

1 About the Royal College of Pathologists

1.1 The Royal College of Pathologists (RCPath) is a professional membership organisation with charitable status. It is committed to setting and maintaining professional standards and to promoting excellence in the teaching and practice of pathology. Pathology is the science at the heart of modern medicine and is involved in 70 per cent of all diagnoses made within the National Health Service. The College aims to advance the science and practice of pathology, to provide public education, to promote research in pathology and to disseminate the results. We have over 10,000 members across 19 specialties working in hospital laboratories, universities and industry worldwide to diagnose, treat and prevent illness.

1.2 The Royal College of Pathologists comments on the House of Lords Select Committee on the long-term sustainability of the NHS - Call for Evidence . The following comments were made by Fellows of the College during the consultation which ran from 25th July until 9th September 2016 and collated by Dr Rachael Liebmann, Registrar.

2 Consultation responses

2.1 The future health care system

2.1.1 The NHS has changed considerably since its inception in 1948, and if anything the pace of change is increasing. There is a requirement to build flexibility into the NHS to meet those changes which are predictable, but more importantly those that are not.

2.1.2 Pathology is the study of disease and this scientific understanding underpins modern medicine. Pathology is fundamental to the diagnostic process and for monitoring ongoing disease. The modernisation of pathology services over the last 10 years has been a prelude to the current round of service transformation. As pathology diagnostic services cut across the traditional boundaries of primary, secondary and tertiary care, we therefore have unique experience of the challenges and possible solutions to achieving a sustainable NHS. Through understanding the mechanisms and manifestations of disease and ensuring the quality of investigations, pathology can contribute significantly to an NHS that could be the first healthcare system in the world to implement a cost-effective integrated approach to disease prevention, early detection, diagnosis and treatment that would benefit its population and its economy.

2.1.3 The implementation of whole genome sequencing soon after birth has the potential to replace the current limited metabolic heel-prick screen, and at the same time provide knowledge of genetic predisposition to disease and pharmacogenomic data to ensure optimal use of drugs and avoidance of side-effects. Such a programme would be likely to be be cost-effective since as more data is gathered, machine learning could allow greater predictive capacity.

2.1.4 Genetic screening is insufficient to guide healthcare provision for individuals in isolation, as disease is usually the result of a combination of predisposition and environmental

factors, including lifestyle choices such as smoking. We therefore need to put in place a system of health checks based on evidence of benefit. It is already commonplace for GPs to check blood pressure, cholesterol level and weight. The ability to screen for early disease potentially allows early intervention, and often better outcomes for patients. The health economics of screening programmes are rigorously examined by the national screening committee, and it is important that this work continues to avoid inappropriate testing and expense.

2.1.5 The importance of monitoring the health of those with chronic disorders is well known. The use of point of care devices providing diagnostic information to the patient and their doctors is increasingly important.

2.1.6 The need for hospital admission will always be appropriate for acute disease, trauma and more invasive investigation of illness. Technological advances in laboratory investigations and in imaging methods provide more accurate diagnosis and treatment planning. These advances will continue with a risk of increasing costs. Drug costs are likely to continue to increase, and the importance of companion diagnostics to limit the use of such drugs to those who can most benefit from them is an important area for investment.

2.1.7 The different ways in which primary care, secondary care and nationally commissioned services are incentivised within the NHS and the market-driven fragmentation within the English NHS has led to financial compartmentalisation rather than clinical pathways and the needs of the service. This leads to the preservation of financial vested interests and confusion between clinical effectiveness and cost improvement. Streamlining and clarifying the financial relationships between sectors of the services might begin to release the investment necessary to improve the success rate of laboratory consolidation. Such investment should be in improved local connectivity, and nationally via the National Laboratory Medicine Catalogue to help deliver the 2020 vision. Scottish Fellows pointed out that in Scotland there is close working between the professions, Colleges and Scottish Government. As a result the realistic medicine programme focuses on driving priorities while offloading waste or excess.

2.1.8 College Fellows expressed the opinion that a health service free at the point of delivery was crucial and most respondents considered the NHS to be entirely sustainable provided the population have a clear idea what the NHS is for. At the moment, it is a massive organisation which treats everything from cheap and relatively trivial complaints through to hugely expensive cancer drugs which provide a couple of extra weeks of life. This is not sustainable because the NHS can always find bigger and better ways to spend money. If there is a political will to ensure that we can afford the NHS, the cash limits must be clear. And most importantly it must be politicians who set the cash limits. Handing the responsibility for rationing healthcare to the National Institute of Health and Care Excellence (NICE) was considered to represent a failure of political leadership. So the view of the profession is that politicians should stop inferring that with ever increasing efficiencies the public purse will supply all the healthcare that anyone could possibly want. It is time for explicit admissions from the elected government that rationing in some form has always existed and will have to get tighter as an inevitable consequence of scientific developments, healthcare economics and population demographics. The view was expressed that it should be for politicians to decide what the nation can afford and

to say how much will be spent. Then if the population disagrees the cost of increasing standards will have to be part of a manifesto or a referendum. It was considered that the current system allows politicians to abdicate their responsibility for healthcare rationing.

2.1.9 Finally, the expectations of patients, carers, families and primary and secondary care need to be managed so that decisions on the most appropriate type and place of treatment can be made rationally. The decision about whether to refer someone to hospital or indeed to undertake a diagnostic test should be predicated on the benefit expected. The Choosing Wisely programme aims to ensure that patients are appropriately informed about the benefits and positive and negative consequences of investigations and interventions.

2.2 Resource issues, including funding, productivity, demand management, and resource use

2.2.1 The current tax-based system has the advantage that there are no extra costs associated with collection of fees. It is arguable that charging for prescriptions costs more than it saves, and it is likely that any similar such initiatives will detract rather than add to the total funding available. The College does not believe that charging for diagnostic services would be in the best interests of the NHS or patients. As a profession we have serious concerns around the commercialisation of pathology diagnostic services, as this can have an adverse impact on the availability of interpretive advice, training the future workforce, standards and quality and the long term sustainability of services and research.

2.2.2 The Royal College of Pathologists has considerable experience of the difficulties of demand management, as the number of diagnostic tests requested has increased continuously over the last 30 years, and the pace of increase shows no signs of reducing. This may reflect the added value of diagnostics to the scientific practice of medicine. However, there is no point in doing a diagnostic test unless it is going to alter a patient's management. One can perhaps take this further and suggest that there is no advantage in admitting a patient to hospital for tests unless they are fit to receive treatment.

2.2.3 We have found that electronic requesting of tests and acknowledgement of reports ensures that tests are not requested unless they are truly needed by the requesting physician. We welcome the optimisation of diagnostic pathways implied by the 28 day cancer diagnostics project. Pathology needs to impact on patient pathways in ways that deliver the greatest benefit.

2.2.4 The main concern Fellows have is that any proposed changes in healthcare provision must maintain the protection patients have to be free from the twin abuses of over investigation and over treatment. Perhaps the most important principle of the NHS is that all our patients can rely on receiving the most efficient assessment, investigation and management of their illness; not because UK health care is free at the point of access but because the clinicians do not have any direct pecuniary interest in the investigation and management of individual patients. This is what makes the NHS so efficient and such good value for money.

2.3 Workforce

2.3.1 As the need for pathology diagnostic services increases, there is a corresponding need to train the workforce to operate laboratory equipment, interpret the results, and report them appropriately in an environment that promotes quality. The College has responsibility for the training and examination of both medical and scientific staff engaged in pathology across 19 specialties, the majority of which are essential to the safe operation of the NHS. In our view it is essential that pathology is included in the training of doctors, nurses and other allied health professionals across the NHS. The understanding of disease diagnosis and monitoring underpins the safe practice of health care at every level, and this is the business of pathologists. Through laboratory accreditation we have many years experience of quality management and continuous quality improvement. Unreliable investigations and advice are ultimately more costly to the service.

2.3.2 The College views the impact of Brexit with concern, as the UK is fortunate to attract many scientists and doctors from Europe into pathology. As a College we also participate in a large number of European initiatives, and have published joint guidance with Europe in a number of areas, including molecular pathology. The College Fellows have grave concerns about research funding as much pathology research is collaborative across Europe.

2.3.3 The reduction in medical academic staff, and particularly academic pathologists, is a major concern as it limits the number of pathologists who can be trained for future requirements. Pathology is an integral part of almost all health research so is at the forefront of innovation. Most clinical trials will involve the assessment of tissues (for cancer) or blood samples; the quality of the clinical trial and the interpretation of the outcome is critically dependent on accurate pathology diagnostics.

2.3.4 We should not rely on other countries to train pathologists for us, just as we would find it unacceptable to train large numbers of pathologists who then benefited other countries.

2.3.5 Retention of pathologists is an issue, and is likely to become a greater problem in the next 20 years as many of those currently in post are due to retire during this time. Working conditions, reimbursement, and demand management of workload are all important factors which can be used to mitigate the problem. Recent pension changes and the reduction and potential future loss of Clinical Excellence Awards are resulting in many doctors retiring earlier than they had originally intended, resulting in loss of the most experienced part of the workforce.

2.3.6 Workforce re-profiling allows for increasing diversification of service delivery by scientific and medical staff with the most appropriate skill mix and supports evolving services. The NHS needs to support staff – its most valuable resource – and help them to develop their potential.

2.3.7 In molecular pathology and genetics, we are encouraging a range of training options for new pathologists and those already in post. This range of opportunities includes postgraduate and undergraduate courses, conferences, internet modules, and the concept of just-in-time learning allowing need to dictate the acquisition of knowledge. Just-in-time learning is

important as it is an expensive option to train people in skills and knowledge that they do not then use.

2.4. Models of service delivery and integration

2.4.1 The current disconnection between primary and secondary care in England is counter-productive and integrated models, supported by pathology services should be able to help. This includes increased point of care monitoring of chronic disease, using diagnostic devices linked to central laboratories. Hospital-based blood sciences laboratories already provide a large proportion of their work within the community through GP phlebotomy services. Pathology already crosses these boundaries and is able to facilitate the wide debate around service transformation.

2.4.2 There seems to be an increasing reliance on emergency departments to provide care which could be provided within the community. This includes access to diagnostic tests, such as simple blood tests, which are rarely available out of hours and not accessible to patients who are housebound. Community phlebotomy services are urgently needed, and reliance on district nurses who may not be experts in obtaining blood, or indeed trained to do so, is not ideal. In some areas, community phlebotomy is available, and we believe that this is making a difference. Increasingly there is a plethora of medical 'apps' allowing mobile diagnostic assistance. Self-testing will enhance these technological tools.

2.5. Prevention and public engagement

2.5.1 Prevention is usually better than cure for people and the country, but may be more expensive in the short term, requiring up-front investment for long term benefit. This includes screening for disease, but there is now an opportunity to intervene early using coordinated diagnostic technologies based on risk and lifestyle. It may also be possible to complete the circle, by using the results of diagnostic technologies to influence behaviour.

2.5.2 We need better public engagement. Not lecturing but informing and engaging patients. Patients having access to their own medical records, including pathology diagnostic test results, may increase their engagement but will vastly increase the need for information and people to interpret and explain results. Pathologists are ideally placed to do this but it will require a significant increase in workforce.

2.6 Digitisation of services, Big data, and Informatics

2.6.1 Pathologists have continuously embraced new technologies to improve their practice over many decades, if not centuries. The combination of changes in the molecular understanding of disease and advances in digital technology, including artificial intelligence, and improvements and diagnostic devices could be integrated to provide monitoring of health for the population. This would allow early intervention during the pathogenesis of disease which is likely to be both cost-effective and result in better patient outcomes.