



The Royal College of Pathologists

Pathology: the science behind the cure

# College response to Department for Health and Social Care consultation - Advancing our health: prevention in the 2020s

8 October 2019

## Introduction

This response from the Royal College of Pathologists (RCPATH) to [advancing our health: prevention in the 2020s – consultation document](#) has been compiled collating views from the Chair of the Medical Microbiology Specialty Advisory Committee (SAC) and College views on key areas from the paper. Our members include medically and veterinary qualified pathologists and clinical scientists in 17 different specialties, including cellular pathology, haematology, clinical biochemistry, medical microbiology and veterinary pathology.

## Key areas

### Early diagnosis

Pathologists play a critical role in research, advancing medicine and devising new treatments to fight viruses, infections and diseases. Ensuring faster and better diagnosis is one of the challenges facing pathologists. Advances in [digital pathology](#) have the potential to provide the combined benefits of improving patient care and supporting the pathology workforce by enabling them to work more efficiently and flexibly.

We welcome the government's ambitious commitment to earlier cancer diagnosis. In order to deliver earlier diagnosis, which leads to better outcomes for patients, it is vital to have the right number of health staff in the right places.

Pathologists are at the heart of cancer prevention through screening, diagnosis, monitoring and treatment. Pathology is the service that handles the blood samples and the cells and tissues removed from suspicious 'lumps and bumps'. They identify the nature of the abnormality and, if malignant, provide evidence to the clinician on the type of cancer, its grade and, for some cancers, the likely profile of responsiveness to certain treatments.

Pathologists will play a crucial role in Rapid Diagnostic Centres - 16 of our pathology disciplines will support the pathways, and we need to ensure we continue to have these experts supporting patients. Currently, a significant proportion of cancers present in the emergency department, and the hope is that improved diagnosis will lead to better outcomes.

### **Challenges in cancer diagnostics**

There has been a year-on-year increase in demand for pathology services, both in the number and complexity of tests performed.

- Staffing levels have not risen in line with demand and pathology services are unable to recruit to vacant posts. It can take up to 15 years to train a pathologist.
- It is anticipated that a third of consultant histopathologists will retire in the next five years. And there are not enough trainee doctors in post to fill this gap.
- The NHS target (set out in the Cancer Taskforce strategy report in 2015) is for a definitive cancer diagnosis for 95% of patients within four weeks by 2020. However the pathology workforce is facing increasing pressures.

### **Outpatient transformation**

The NHS Long Term Plan has some good elements for long-term care and mental health. The implementation of areas such as outpatient transformation will rely on the skills and expertise of all pathology disciplines, from haematology to clinical biochemistry. All cancer and much chronic disease management, from initial diagnosis to guiding patients' treatment, is dependent on pathologists and whilst cost reduction is mentioned in the plan in the context of tests, the importance of the right test at the right time, such as that for familial hypercholesterolaemia, is the key to effective good value healthcare.

### **Genomics**

The Royal College of Pathologists thinks genomics has huge potential to improve patient care, but we need a proper regulatory regime to ensure this potential is realised and the risks are mitigated.

We are excited by the opportunities for genomics to advance medicine and improve health. Genomics has already transformed the lives of many and promises much more in the future.



We need to be pragmatic about how we approach the scaling up of the 100,000 genome project, addressing the challenges and setting realistic expectations.

Genomic tests should only be approved for use in healthcare if there is evidence of benefit to the individuals being tested. When used for screening this means that before implementation they must meet the same requirements as other types of screening test.

Genomic tests can lead to confusing and/or worrisome results. For example, a person's test results may reveal unexpected information. This might be about a disease that is completely unrelated to the reason for the test, or about the genetic relationships between people. Commercial providers do not, at present, support patients who are left confused and anxious. NHS providers are left dealing with unexpected or difficult outcomes, placing additional strain on the NHS whilst the commercial providers take their profits.

Selling whole genome sequencing to those that can afford it will create a two-tier health service and be of limited research value.

We advise creation of a regulatory body similar to the Human Fertilisation and Embryology Authority (HFEA) to oversee genomic testing in the UK. This would protect the public and the NHS, and support the UK's continuing global leadership in collaborative genomic research and delivery of a high-quality genomics clinical service.

### **The workforce implications of genomic testing**

We welcome the intention to build a genomics workforce that includes clinical scientists and medical doctors. This should include their role in education, through engagement and training programmes, for the wider community of healthcare professionals and the public. However, the workforce implications of genomics testing go beyond genetics services. Similar considerations must be made for the histopathology and microbiology workforce in particular, as well as other disciplines where incorporation of genomic information into pathology reports – while already routine – will become more widespread and more detailed. Our training processes will need to be adapted to the advent of digital images across all disciplines, and we will work closely with stakeholders to ensure that trainees and our existing workforce have access to the most up-to-date and accessible resources for training.

### **Smoking**

The College supports the key measures proposed by [Action on Smoking and Health](#) and the Smokefree Action Coalition to move towards a smoke-free society:

- To require manufacturers and importers of cigarettes to include Government mandated pack inserts to support quitting.
- To increase the age of sale from 18 to 21.

### **Comments from Dr David Jenkins, Chair Medical Microbiology SAC and RCPATH Council member**

1. While the motives and ambitions underlying these actions deserve whole-hearted support, in many instances the interventions are aspirational and lack a sound evidence base for their effectiveness. Acknowledging that there will be more information in the detail of the



interventions, nevertheless there is a concern that interventions will not be grounded in well-established behavioural change principles and practice and that the opportunities for improvement will be missed.

2. In some areas, there is substantial hope invested in the ability of new technology to deliver improvement. In reality, there will be many disappointments – interventions will fail for a number of reasons – and policy makers should ensure that governance processes are designed to catch these failures at a stage before harm, lost opportunity and wasted investment occur.
3. Another concern is that the wide range of the Paper will lead to diffusion of effort and a lack of coordination. This worry is heightened by the need for many different agencies to be involved in delivering these interventions, so that there is the danger of both duplicated effort and overlooked problems.
4. Many of the causal factors of ill health interact and feedback on each other. Smoking and high alcohol consumption often occur together; lack of exercise can result in obesity and being overweight can put people off from exercising.
5. Policy should recognise these interactions and interdependencies and ensure that interventions capture as many of them as possible at the same time. In turn, policy should focus on promoting combined health messages and making the message as simple as possible. For example, the initial letters of smoking, alcohol, food and exercise spell SAFE and this is a mnemonic that could help agencies and individuals keep all these factors in mind.
6. Given the eminence of poverty as a causal factor of ill health, it is notable that policy aimed at reducing inequality has a low profile in the Paper. While poverty and inequality are clearly objects for political action, addressing these drivers of chronic disease and early death is a valid public health concern.
7. Being born poor or disabled or being made unemployed or becoming chronically ill are not deliberate lifestyle choices. Further, political action in these areas is often seen only as an expense. The reality is that investment in reducing poverty and eliminating inequality provides guaranteed returns in health, economic productivity, community cohesion and reduced crime.
8. Political imperatives are too often constrained by the need to deliver tangible benefits before the next election. This is as true for local authorities as it is for national government. Consequently, political support for public health interventions is liable to focus on outcomes that can be demonstrated within election cycles. Such short termism acts against the trialling and implementation of public health interventions that require a longer lifespan, such as action in childhood aimed at preventing adult obesity.
9. This dilemma can be addressed in two ways; establish a body that sets public health policy independently of government, in a way that is analogous to the Bank of England's interest rate setting authority, or agree a broad political consensus for public health actions that are not subject to revision by a new government.
10. In any case, the Green Paper has identified the substantial improvement required in public health evidence-based practice, and it is important the a subsequent White Paper sets out ways in which public health research can be funded on a long term and substantial basis.
11. Public health actions require data to identify and prioritise concerns, generate and test hypotheses and measure the outcome of interventions.
12. The NHS is immensely rich in healthcare data. Primary care records and secondary care databases contain the clinical histories and pathology results of millions of citizens. However, to a very great extent, this rich seam of potential information is untapped and its value remains latent.
13. The White Paper that emerges from the Green Paper should commit to developing health data analysis in imaginative and creative ways through the application of modern data mining and deep learning techniques.



14. Health data should be seen as one of the pillars of a newly invigorated public health research agenda. Other important structures should be disciplines drawn from the social sciences, including behavioural change and behavioural economics, diffusion and implementation science and medical anthropology as well as more established areas of public health.
15. Pathology disciplines are key to diagnosing and measuring ill health. Many successful interventions of the past have depended on pathology laboratories. This will inevitably be the case in the future. In addition, as cited above, pathology laboratories are an immensely important repository of data that can provide a spatial and temporal perspective on past and future health of populations.
16. The Green Paper mentions the importance of controlling antimicrobial resistance if future health care is to be sustainable. While antimicrobial resistance is addressed by the recently published UK Government National Action Plan and 20 year vision papers, it should be pointed out that, since a prime driver of antimicrobial resistance is the use of antimicrobials and that the health issues highlighted in the Green Paper contribute to the bulk of antimicrobial prescriptions, successful implementation of the interventions envisaged in the Green Paper will be of substantial benefit in tackling antimicrobial resistance.



## Contact details

This response was authored by Janine Aldridge, Public Affairs Officer.

E: [janine.aldrige@rcpath.org](mailto:janine.aldrige@rcpath.org)

T: 020 7451 6769

## About the Royal College of Pathologists

The Royal College of Pathologists is a professional membership organisation with more than 11,000 fellows, affiliates and trainees, of which 23% are based outside of the UK. We are committed to setting and maintaining professional standards and promoting excellence in the teaching and practice of pathology, for the benefit of patients.

Our members include medically and veterinary qualified pathologists and clinical scientists in 17 different specialties, including cellular pathology, haematology, clinical biochemistry, medical microbiology and veterinary pathology.

The College works with pathologists at every stage of their career. We set curricula, organise training and run exams, publish clinical guidelines and best practice recommendations and provide continuing professional development. We engage a wide range of stakeholders to improve awareness and understanding of pathology and the vital role it plays in everybody's healthcare. Working with members, we run programmes to inspire the next generation to study science and join the profession.

