

Cancer Research UK's view on the diagnostic workforce in England: August 2017

Diagnosing a patient at an early stage is critical to giving them the best chance of survival. NHS diagnostics services therefore play a central role in supporting shared ambitions to provide world-leading cancer outcomes. With cancer incidence increasing it's crucial that diagnostic services have the capacity to deal with rising demand. A different approach to diagnosis is needed, whereby more tests are provided to support early diagnosis, meet demand and create a sustainable service. Fundamental to achieving this is having a sufficient diagnostics workforce.

The Cancer Strategy for England made a number of recommendations to address workforce issues in cancer services. This paper sets out Cancer Research UK's position on the diagnostics workforce, with a particular focus on what we want to see reflected in the upcoming Health Education England (HEE) cancer workforce strategy. We set out a summary below.

Summary:

- Cancer survival in England lags behind international comparisons. To achieve better survival outcomes for patients we must diagnose more patients at an early stage.
- In 2015, just over half (54%) of all patients diagnosed in England were diagnosed at stages one and two. There is significant variation in the proportion diagnosed at an early stage by cancer type and by location.
- Achieving earlier diagnosis will involve conducting more diagnostic testing. Various drivers for more testing include a growing and aging population (and therefore increasing incidence), symptom awareness campaigns, a lower threshold of risk to refer people with symptoms, and changes to screening programmes.
- Diagnostic services are already struggling to deliver tests, highlighted by missed cancer waiting times and reluctance to introduce the Faecal Immunochemical Test (FIT) into the bowel screening programme at the optimal sensitivity.
- While we recognise there are some avenues to explore to reduce demand for diagnostics tests and streamlining patient pathways, these will not overcome the shortfall in key professional groups delivering tests in England. For example, there are currently not enough trained staff to fill current posts, as shown by high levels of vacancies and outsourcing.
- Cancer Research UK has published three reports relating to capacity in imaging, endoscopy and pathology services, all highlighting shortages in these key diagnostic professions.
- Workforce planning to date has been based on poor data, providers stating what they can afford rather than need to deliver clinical best practice, and it is difficult for the service to foresee innovation which may change workforce needs.

Recommendations:

HEE's cancer workforce plan should set out how the NHS and Government will take the following actions in 17/18 to address shortages in the diagnostic workforce:

- **Clinical radiology:** HEE should consider urgent coordinated international recruitment options to address immediate shortages and increase the number of training places in their Commissioning Plans for 2018/19. They should aim to have at least 3000 consultant clinical radiologists working in the NHS by 2020.
- **Diagnostic radiography:** DH and HEE need to work together to increase numbers of diagnostic radiographers; confusion over who has responsibility is having a significant impact on training and planning. They should also review the impact of bursary changes on training applications for radiography.

- **Endoscopy:** Government should increase the number of endoscopists so that at least 750,000 more endoscopies (including colonoscopies) can be done each year in the NHS from 2020. The current training programme for non-medical endoscopists (200 more by 2018) is unlikely to address the increasing level of demand.
- **Sonography:** DH should implement the cancer strategy recommendation to make sonography a separate registration which would enable quicker training of more sonographers, who deliver ultrasound scans.
- **Cellular pathology:** HEE should increase training places for pathologists in their Commissioning Plans for 2018/19.

In addition, we would also like to see the following actions taken, broken down by organisation:

Health Education England

- Forecasts by HEE should (for example) include the demands from the bowel screening programme – noting that the non-medical endoscopists are *not* currently being trained to conduct colonoscopies, which are the follow up test required from an abnormal FIT – and how many endoscopists would be needed to deliver the best screening programme.
- Ensure that Commissioning Plans for 2018/19 reflects the outcomes of this cancer workforce review
 - Any changes to medical school places or speciality training allocations should be implemented as soon as possible. This should include a commitment to train more radiologists, radiographers, endoscopists and cellular pathologists.
- Consider coordinated international recruitment options for clinical radiology. This should be done with expert input from the Royal College of Radiologists. We estimate that at least 300 more consultant clinical radiologists would be needed by 2020. The coordination from Global Health Exchange would help break down barriers with Tier 2 visas and local provider HR departments.
- Continue to run, and potentially expand, the non-medical endoscopy accelerated training programme, alongside publishing outcomes and improvements based on the pilot evaluation
- Explore the need for more accelerated training schemes, such as dissection and reporting for biomedical scientists; or advanced practitioner radiographers for reporting some images.

NHS England and NHS Improvement

- Ensure that current efforts to achieve the 62 day cancer waiting times target are sustainable and take into account future demand. This should mean that solutions include recruiting more workforce.
- Explore ways to support providers with:
 - Telereporting
 - Networked approach to imaging and pathology
 - International recruitment
- Work with professional bodies to encourage use of skills mix approaches.
- Ensure that policy changes and new models of service delivery are clearly articulated with their workforce needs to HEE, Alliances and Providers. This should include the numbers estimated for the optimal introduction of FIT, the 28 day faster diagnostic standard, use of NICE referral guidelines.

Department of Health

- A new approach to workforce planning is needed, which is based on best-practice and clinical need. The DH should work with HEE to deliver on the mandated review of current

workforce (now several months overdue) and adopt a long term solution to workforce planning.

- Ensure that the HEE plan is published by December, and that the commitments within are supported by Government at the time of publication
- To address data gaps and inaccurate workforce planning, local cancer alliances must ensure that accurate information is being recorded and this is communicated to Local Education and Training Boards.
- Consult key stakeholders on the new consultant contract to ensure current and future medical students and trainees are recruited and retained. This consultation should include:
 - Professional bodies, such as the Royal Colleges
 - British Medical Association
 - General Medical Council
 - Research organisations, including medical research funders

Cancer Alliances

- If not already, conduct diagnostic demand and capacity analysis.
- To address data gaps and inaccurate workforce planning, Cancer Alliances must ensure that accurate information based on realistic forecasted demand, rather than budget availability, is being recorded and this is communicated to Local Education and Training Boards.

Providers

- Ensure that accurate information about workforce needs are flagged to the relevant Local Education and Training Board. This will support the work to address data gaps and inaccurate workforce planning.
- Employ more diagnostic staff in line with best clinical practice and not just affordability.
- Put staff forward to take part in accelerated training schemes, such as that for non-medical endoscopists.

Professional bodies

- Ensure that the findings from their workforce surveys are shared with Local Education and Training Boards, NHS England and Health Education England to support workforce planning
- Work collaboratively to ensure that the implementation of skills mix changes – such as radiographer reporting – is done to improve capacity and skills development where possible
- Establish where other professional groups could conduct more interpretation of the scans they request: using international comparisons where radiologists have shared their duties with clinicians.

Future focus

While addressing immediate shortages, efforts should also be made in parallel to explore solutions to reduce demand or change practice.

New approaches

Testing the safety and effectiveness of innovative approaches to diagnostic services is paramount. Several questions should continue to be explored. This includes: could the introduction of new triage tests reduce demand, such as using Faecal Immunochemical Testing in symptomatic patients to rule out colorectal cancer? Could mammograms be reported by just one radiologist, rather than double reporting? Can health professionals use their time better by streamlining approaches to Multidisciplinary Teams (MDTs)?

Artificial Intelligence

Explore use of Artificial Intelligence for diagnostic tests, and establish data standards so that this could be introduced and used widely in the NHS. Data quality and large datasets are likely to be needed to fully test and research AI approaches. Regulators will need to establish the level of evidence and safety they are comfortable with when AI is used to augment the work of imaging and pathology teams. Underpinning this will be a need for sustainable and secure information technology infrastructure.

Early detection

Cancer Research UK are funding research which aims to find pre-symptomatic disease, using tests for biomarkers – such as liquid biopsies and tests for circulating tumour DNA. These could significantly change the way people are investigated for cancer in future. It could lead to a different sequence of investigations (with a 'biopsy' undertaken first, before a scan or scope), or a need for less scans or scopes after liquid biopsy triages some patients and rules out cancer.

Restructuring of diagnostic services and new clinical roles

Multi-disciplinary diagnostic centres, as tested by ACE wave 2, may lead to new models needing to be commissioned and staffed. There are also discussions about more generalist diagnostician roles being helpful when people present with non-red flag (more vague symptoms) – this may be an extension of a GP's expertise, or might be a new role that needs to combine understanding of a range of diagnostic tests and pathways.

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