

CAPACITY TO DIAGNOSE? AN ANALYSIS OF CANCER DIAGNOSTIC ACTIVITY IN ENGLAND

MARCH 2018



**CANCER
RESEARCH
UK**


EXECUTIVE SUMMARY

Earlier diagnosis of cancer can save lives and avert treatment costs. It is critical to improving cancer outcomes in England, and the cancer strategy suggests investing now to drive improvements in earlier diagnosis can lead to savings for the NHS in future. It is in the interests of patients, clinicians and the NHS to make rapid progress on diagnosing cancer earlier.

Yet the evidence suggests that cancer patients in England are often diagnosed at a later stage than patients in comparable countries.^{i,ii} A key theme of the cancer strategy, [*Achieving world-class cancer outcomes, a strategy for England 2015-2020*](#)ⁱⁱⁱ, was therefore diagnosing patients earlier. It proposed a number of initiatives to achieve this. Many of these will require increased diagnostic activity, such as updated NICE referral guidelines for suspected cancer.^{iv} These guidelines lower the threshold of suspicion before people are referred to a specialist or for diagnostic tests and therefore lead to an increase in activity.^v Diagnostic services are essential to diagnose and monitor a huge range of conditions so boosting capacity will also benefit other diseases beyond cancer.

However, an increase in diagnostic activity requires more staff and equipment, and more funding to support these. The cancer strategy recognised that pressures on diagnostic services limits the ability for large increases in investigative testing to be made and that the implementation of the new NICE guidelines will not be a success without a “significant injection of resource to improve capacity”.^{vi} Without the equipment and trained personnel, the aspirations of the cancer strategy will not be met.

Cancer Research UK welcomed NHS England and the Government’s 2015 commitment to increase funding for diagnostic capacity. This included ‘up to £300m more on diagnostics every year’ by 2020.^{vii} Growth was modelled



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(for the Five Year Forward View) as a 7% increase in overall diagnostic activity year on year to 2020/21. The 7% increase was part of clinical commissioning group (CCG) allocations in the baseline funding for CCGs.^{viii, ix} It is important to note that neither the £300m increase, nor the 7% activity projections are likely to fulfil the growth in cancer diagnostics.

Nationally, this modelled growth and CCG planning guidance suggests that diagnostic capacity is a top priority. However, at a time when NHS finances are increasingly stretched and there are numerous competing priorities, including improving A&E performance, there is a danger that when faced with local realities, resources will not be spent where they are intended.^x There is also a risk that this modelled growth is not sufficient to meet demand, and that waiting times targets (showing the mismatch between capacity and demand) will be missed.

Although all areas of England are likely to need to increase diagnostic activity, the analysis in this report (echoing the findings of the Atlas of Variation^{xi}) shows there is substantial variation in levels of activity. It should be noted this variation has not been adjusted for different population characteristics so may be clinically appropriate. All areas would be expected to see increases over time due to an ageing and

growing population, more comprehensive implementation of NICE referral guidelines and other drivers of increased activity. Halfway through the duration of the cancer strategy, it is timely to assess the progress made to increase diagnostic capacity, the extent to which these variations in diagnostic activity persist, as well as the areas where action is still required if the NHS is to deliver on the ambitions it has signed up to through the cancer strategy.

AIMS

This report:

- analyses activity levels (and waiting times, which can show where demand exceeds capacity)
- assesses the extent to which resources allocated to increase diagnostic activity are being used for that purpose
- explores why this might not be happening
- makes recommendations to support national government – and NHS England – to meet the ambitions of the cancer strategy.

METHOD

The report draws on a range of information sources, including publicly available datasets and responses from 106 CCGs to a survey conducted between April and June 2017. It also recognises the context in which diagnostic services are operating in – such as the capped expenditure process potentially reducing spend on diagnostics, and the use of referral management centres.

The tests analysed in this report are:

- Imaging (barium enema, CT, fluoroscopy, MRI, medical photography, non-obstetric ultrasound, nuclear medicine, PET/CT, SPECT, Xray)

- Endoscopy (colonoscopy, cystoscopy, flexible sigmoidoscopy, gastroscopy, urodynamics)
- Histopathology

These tests were chosen due to their relevance to cancer diagnosis, although they may also be used when there is no suspicion of cancer, to characterise a cancer when a diagnosis has been made, or as a surveillance tool to assess a patient's progress.

Limitations in the data mean that it is not possible to determine what these tests were ordered for but they are likely to reflect, in part, an increase in cancer diagnostic activity. It is also not possible to distinguish the contribution that tests due to cancer screening programmes have made.

Due to the differences in funding, structures and data across the UK, the analyses and recommendations in this report are specific to England.

KEY FINDINGS

DIAGNOSTIC ACTIVITY HAS INCREASED NATIONALLY, BUT THERE IS LOCAL VARIATION

Nationally, diagnostic activity is increasing. For example, over 4.6 million more imaging tests were performed in 2015/16 compared to 2012/13.^{xii} Although these tests are regularly used to diagnose cancer, many have wider clinical uses. For example, imaging may be used for musculoskeletal, cardiovascular or any number of other symptoms, diseases and conditions. But a significant proportion of this activity will be cancer-related.

Although diagnostic activity has increased in most CCGs, there is substantial variation. For example, since 2013/14, some CCGs have reported an increase in CT activity of 6.2% per capita, whereas others have reported a reduction of 2.1%.^{xiii} The reasons for these discrepancies are unclear and could be the

result of different factors, including changes to populations, issues with equipment, staff shortages, local service configurations or CCG boundaries.

WAITING TIMES PERFORMANCE SUGGESTS THERE MAY STILL BE ISSUES WITH CAPACITY

Waiting times for tests have increased substantially, suggesting that capacity and activity are not keeping pace with demand. Routine diagnostic waiting times are not specific to people with suspected cancer, but around a quarter of all people diagnosed with cancer will come through a 'GP referral' route, which is likely to include routine referrals.

During 2016/17, an average of nearly 10,000 (9,642) patients every month waited for longer than six weeks for a routine diagnostic test. This is an increase of 130% on the number in 2008/9. This may not be reflected in missed waiting times targets (for 99% of people to receive a diagnostic test within 6 weeks) if the overall number of tests has also increased as it may remain relatively stable as a proportion.

During this same period, the number of people being referred for a test rose by 111%. This suggests that increases in demand are not the sole explanation for missed waiting times as the proportion waiting is greater than the increase in referrals – there may also be problems with capacity or efficiency.

Long diagnostic waiting times appear to be endemic in some CCGs. For example, several CCGs were amongst the poorest performing for a variety of different tests.

CCGS ARE AWARE OF NATIONAL COMMITMENTS TO ENSURE 'ADEQUATE DIAGNOSTIC

CAPACITY' BUT THERE ARE VARYING APPROACHES, INCLUDING SOME REDUCTIONS

Nine in ten (89%) CCGs responding to our survey were aware of the NHS England 2016/17 planning guidance 'must do' to ensure "*adequate diagnostic capacity*".

Despite the additional resources allocated to CCGs, 29% of respondents that provided budget allocations for diagnostics in 2015/16 and 2016/17 (n=7) reported a decrease in the amount allocated between these years. Some CCGs that reported reduced allocations were unable to provide data on activity or waiting times.

CCGs were asked to provide information on plans they had to improve and expand diagnostic capacity in 2017/18. Nearly a third (30) of responding CCGs could not provide this information either because plans were not recorded formally or because they had no plans to expand capacity beyond existing levels. Of these, two thirds (22) said that the CCG did not intend to increase capacity in 2016/17, despite national guidance and the uplift in funding.

But there are some encouraging examples of CCGs playing an active role in designing new approaches to streamline diagnostic pathways and enable significant increases in activity.

HOWEVER, CCG DATA ON ACTIVITY, WAITING TIMES AND BUDGETS FOR DIAGNOSTICS IS NOT COMPREHENSIVE

Responding to the survey, very few CCGs reported holding comprehensive information on diagnostic activity and waiting times.

There are also some significant discrepancies between CCG data and national datasets, meaning some commissioners may be unable to accurately assess health needs, monitor performance and ensure value for money.

CCGs responding to the survey held largely patchy information on expenditure on tests relevant to cancer. Only one quarter (26%) of respondents were able to provide full information on budget allocations for diagnostics.

Very few (12%, 13) CCGs provided budget allocation forecasts for 2017/18. Of these, some are planning to reduce allocations.

RECOMMENDATIONS

Based on the findings in this report, we make a series of recommendations to ensure that additional resources are devoted to diagnostic capacity. These should be allocated as originally intended. Data should improve for the planning, delivery and accountability for diagnostic tests relevant to cancer.

Cancer Alliances should:

- Work with CCGs, STPs and providers to undertake a review of current and future diagnostic activity relevant to cancer.
- Identify within their Alliance any significant variations in activity between CCGs, investigate the reasons, and agree a published action plan to address any unwarranted variation.
- Review the commissioning of referral pathways to ensure they meet national guidance, such as the NICE recognition and referral guidance for suspected cancer or the National Optimal Lung Cancer Pathway.

- Highlight where future demand may exceed capacity – to inform national funding and workforce plans.
- Share their diagnostic activity forecasts with Local Education and Training Boards (LETB) and Local Workforce Action Boards (LWABs) to inform local workforce plans.
- Explain where and why CCGs have not met the 7% increase in activity.
- Audit the impact that referral management centres have on cancer diagnoses and take corrective action if necessary.

NHS England (including the National Cancer Programme and Directors of Commissioning Operations) should:

- Publish an update to demonstrate progress made on increasing diagnostic capacity.
 - Use CCG and alliance analyses to hold CCGs to account on meeting planning guidance.
 - Make it clear (alongside NHS Improvement) that increases in diagnostic activity should not be compromised by the new Capped Expenditure Process. The financial processes required to implement the Capped Expenditure Process should be considered as a means of ensuring that funding is deployed for the purpose that it was initially allocated, as well as to control overall costs.
2. The use of additional funding for diagnostics could be monitored using a similar system to the Mental Health Investment Standard^{xiv}, set out in 2018/19 NHS planning guidance. This says that CCGs' auditors will evaluate their 2018/19 year-end position to show investment has risen at a faster rate than overall programme funding.

Health Education England should:

- Use information from CCGs and alliances on their workforce needs to inform national action, such as increasing training places or coordinating post-graduate training.

The Department of Health should:

- Ensure that funding for diagnostic capacity is sufficient to meet future demand, and if not, increase and ring-fence this additional funding so it can be clearly demonstrated that it has been used for its intended purpose. This was a Government commitment so requires oversight from DH.
- Reassess capital investment requirements for diagnostics and consider the case for further investment to support increases in activity. This is timely in the context of the Department of Health's intention to develop a new capital strategy and the Government's manifesto commitment to "introduce the most ambitious programme of investment in buildings and technology the NHS has ever seen."

3. NHS Digital should:

- Improve diagnostic datasets so that the purpose and finding of an investigation is recorded, as well as the test that is undertaken. New national datasets should be implemented to record activity for endoscopy and pathology, to enable effective planning and commissioning of services. This is building on existing work to create a national endoscopy database and similar work on pathology.^{xv}
- Work with CCGs to understand why some discrepancies occur between the figures in nationally reported data and locally held information on diagnostic activity and ascertain the true picture.

CONCLUSION

We welcome efforts from the Government and the NHS to diagnose cancer earlier – but these can be improved further with more scrutiny on how additional resources are deployed. The additional resources to boost diagnostic capacity should be used as originally intended. Increasing diagnostic capacity underpins all efforts to diagnose a greater proportion of people at an earlier stage. More diagnostic staff and kit means that initiatives like Be Clear on Cancer, NICE's NG12 referral guidance, the 28-day Faster Diagnosis Standard and improvements to bowel and cervical screening have a better chance of success. And in future, better data should improve the planning, delivery and accountability for diagnostic tests relevant to cancer.

<http://www.cancerresearchuk.org/about-us/we-develop-policy/our-policy-on-early-diagnosis/our-policy-on-diagnostic-services>

Cancer Research UK is the world's largest independent cancer charity dedicated to saving lives through research. It supports research into all aspects of cancer and this is achieved through the work of over 4,000 scientists, doctors and nurses. In 2016/17, we spent £432 million on research in institutes, hospitals and universities across the UK. We receive no funding from the Government for our research and are dependent on fundraising with the public. Cancer Research UK wants to accelerate progress so that three in four people survive their cancer for 10 years or more by 2034.

This project was commissioned by the Cancer Research UK Policy Development team, and was written in 2017 by Incisive Health.

For more information, or for a copy of the full report, please contact policydepartment@cancer.org.uk

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- ⁱⁱⁱ Independent Cancer Taskforce, [Achieving world-class cancer outcomes, a strategy for England 2015-2020](#), July 2015
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- ^v National Institute for Health and Care Excellence, [Suspected cancer: recognition and referral, NICE guideline \[NG12\]](#), June 2015
- ^{vi} Independent Cancer Taskforce, [Achieving world class cancer outcomes, a strategy for England 2015-2020](#), 2015
- ^{vii} <https://www.gov.uk/government/news/from-2020-people-with-suspected-cancer-will-be-diagnosed-faster>
- ^{viii} Department of Health, ['From 2020, people with suspected cancer will be diagnosed faster'](#), September 2015
- ^{ix} NHS England, [Achieving World-Class Cancer Outcomes: Taking the strategy forward](#), May 2016
- ^x MailOnline, ['Jeremy Hunt pledges £100 million for struggling A&E units amid claims some are being forced to shut overnight'](#), June 2017
- ^{xi} NHS England and Public Health England, [The 2nd Atlas of Variations in NHS Diagnostic Services in England 2017](#), accessed August 2017
- ^{xii} NHS England, [Diagnostic Imaging Dataset](#), accessed August 2017
- ^{xiii} NHS England, [Diagnostic waiting times and activity](#), accessed August 2017
- ^{xiv} NHS England and NHS Improvement 2018/19 Planning Guidance <https://www.england.nhs.uk/wp-content/uploads/2018/02/planning-guidance-18-19.pdf>
- ^{xv} NHS Digital <https://digital.nhs.uk/diagnostics-data-service>