NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Diagnostic services: organisation and delivery

Topic

The Department of Health in England and NHS England has asked NICE to develop service guidance on the organisation and delivery of diagnostic services.

For more information about why this guideline is being developed, and how the guideline will fit into current practice, see the context section.

Who the guideline is for

- Healthcare professionals in primary, secondary and tertiary care who access, use or refer for diagnostics.
- Commissioners of diagnostic services.
- Secondary and tertiary care providers of diagnostic services.
- All settings in which NHS care is provided or commissioned.

It may also be relevant for:

- Private sector or voluntary organisations (for example community trusts) commissioned to provide services for the NHS.
- People using services, families and carers and the public.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive.

Equality considerations

NICE has carried out an equality impact assessment during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

The guideline will look at inequalities relating to access to diagnostic service provision, for example for people living in remote geographical locations, people with physical and mental disabilities, non-English speaking populations and people from disadvantaged socioeconomic backgrounds.

1 What the guideline is about

1.1 Who is the focus?

Groups that will be covered

- People needing diagnostic tests.
- Staff who refer for, carry out, or receive and interpret the results of diagnostic services.
- No specific subgroups of people have been identified as needing specific consideration.

1.2 Settings

Settings that will be covered

- All settings in which NHS care is commissioned or provided including:
  - primary care
  - secondary care
  - tertiary care
  - the community (including in people's homes).

1.3 Activities, services or aspects of care

Key areas that will be covered

1 What and how services are grouped together.
2 Who should provide and deliver services.
3 Where services are delivered.
4 When services should be available.
5 How services are accessed and reporting between services.
6 Information and support needs of people using services, their families and carers.

Areas that will not be covered

1 Which test to use to diagnose clinical conditions.
2 Subsequent changes in management following results of diagnostic tests.
3 Which screening services should be provided.
4 Ambulatory monitoring of ongoing therapies in the home.
5 Face-to-face tests that are carried out in the course of the clinical examination.

1.4 Economic aspects

We will take economic aspects into account when making recommendations. We will develop an economic plan that states for each review question (or key area in the scope) whether economic considerations are relevant, and if so whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS and personal social services (PSS) perspective, as appropriate.

The preferred unit of effectiveness is the quality-adjusted life year (QALY). Further detail on the methods, including where NICE's standard health economic approaches may not apply, can be found in the interim methods guide for developing service guidance and the manual on developing NICE guidelines.

1.5 Key issues and questions

While writing this scope, we have identified the following key issues, and key questions related to them:

1 What and how services are grouped together:

1.1 Does the use of multidisciplinary teams offering integrated reporting improve patient outcomes?

1.2 Does co-location of services improve patient outcomes? If so, what is the most effective combination of co-located services to achieve optimum patient outcomes?

2 Who should provide and deliver services:

2.1 What are the indicators that would define a quality diagnostic service?

3 Where services are delivered:

3.1 Does offering access to diagnostic services outside of secondary care (for example, in primary care, in the community, at home) improve patient outcomes?

3.2 Does providing point of care testing in primary care improve patient outcomes?

4 When services should be available (availability of services out of hours):

4.1 Does the provision of same day results from diagnostic services improve patient outcomes?

4.2 Does the availability of out-of-hours diagnostic services improve patient outcomes?

5 How services are accessed and reporting between services:

5.1 Does the referral pathway for diagnostic services affect patient outcomes?

5.2 Does offering patient agreed bookings for diagnostic services improve outcomes?

6 Information and support needs of people using diagnostic services, their families and carers:

6.1 What information and support do people using diagnostic services (and their families and carers) want at different points during their pathway within diagnostic services?

These key issues will be used to develop more detailed review questions, which guide the systematic review of the literature.

1.6 Main outcomes

The main outcomes that will be considered when searching for and assessing the evidence are:

1 Waiting time from presentation to diagnostic test.
2 Waiting time from presentation to reporting of results.
3 Patient and carer views and satisfaction.
4 Staff satisfaction among providers of diagnostic services.
5 Use of healthcare resources (e.g. number of visits to hospital).
6 Health-related quality of life (psychological impact).

2 Links with other NICE guidance, NICE quality standards, and NICE Pathways

2.1 NICE guidance

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to diagnostic services:

- Patient experience in adult NHS services (2012) NICE guideline CG138

- Service user experience in adult mental health (2011) NICE guideline CG136

NICE guidance in development that is closely related to this guideline

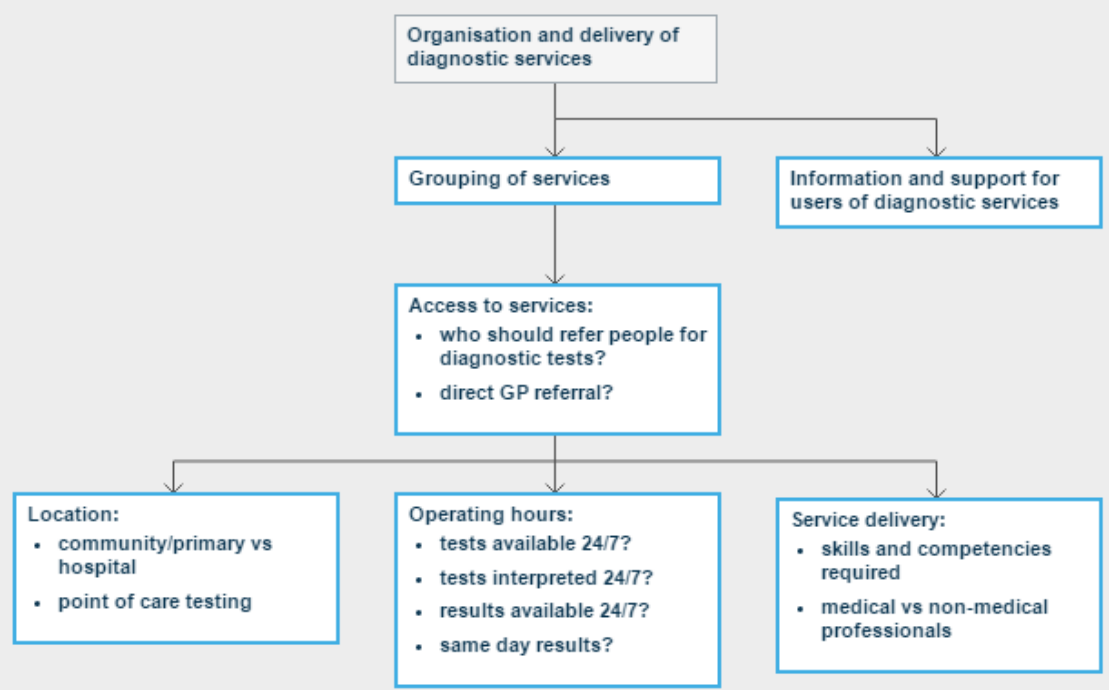
NICE is currently developing the following guidance that is closely related to this guideline:

Service delivery and organisation for acute medical emergencies. NICE guideline. Publication expected November 2016.

2.2 NICE Pathways

NICE Pathways bring together all related NICE guidance and associated products on a topic in an interactive topic-based flow chart.

When this guideline is published, the recommendations will be added to a new NICE pathway. An outline of this pathway, based on the scope, is included below. It will be adapted and more detail added as the recommendations are written during guideline development.



3 Context

3.1 Key facts and figures

A diagnostic service is a service that undertakes or provides diagnostic tests. These are procedures or measurements performed to confirm, or determine the presence or absence of, disease or abnormality. Diagnostic tests are usually done after a person reports symptoms, or they can be based on the results of other medical tests, or carried out for people with risk factors for specific conditions.

The demand for diagnostic services is increasing due to increased life expectancy, previously unrecognised unmet need, undiagnosed populations, newly introduced preventive strategies and advances in technology. According to NHS diagnostic waiting times and activity data (NHS England, May 2015), a total of 19 million 'key diagnostic tests' were undertaken in the whole of 2014/15. This is a 5.9% increase from 2013/14. Monthly activity (the number of diagnostic tests undertaken during the month) has increased over the past 12 months. The average monthly increase in activity was 0.7%, while the average monthly increase in activity per working day was 0.3%.

The NHS Atlas of Variation in Diagnostic Services (November 2013) highlights significant variation in the quality and provision of diagnostic services across England. Unwarranted variation (that is, variation that is not explained by genuine differences in clinical need) is a significant concern, but in many cases it is currently lacking explanation. Unwarranted variation means that a patient's ability to access diagnostic services, and their ultimate health outcomes, could be affected by their postcode.

Waiting times are key issue for diagnostic services. The 2013/14 NHS Constitution pledges that patients should not be required to wait 6 weeks or longer for a diagnostic test. This is part of the legal right to treatment within 18 weeks of referral. NHS trusts face a financial penalty for non-delivery of this standard.

According to NHS diagnostic waiting times and activity data, the total number of patients waiting 6 weeks or longer from referral for one of 15 key diagnostic tests to be undertaken was 13,000 (at the end of March 2015). This was 1.5% of the total number of patients waiting at the end of the month. The estimated average (median) time that a patient had been waiting for a diagnostic test was 2.0 weeks at the end of March 2015. In the past 12 months (April 2014 to March 2015) the total number of patients waiting for a diagnostic test has continued to increase with an average monthly increase of 0.5%.

The move towards a 7-day NHS may have an impact on the provision of diagnostic services, which underpin clinical decision-making. Challenges and improvements in diagnostic services across seven days (NHS Improving Quality) identifies variation in the availability of diagnostic services outside normal working hours, which it is claimed can lead to delayed diagnosis, poorer clinical outcomes and poorer patient experience.

3.2 Current practice

There is inconsistency in how diagnostics services are accessed. Some services can be accessed directly from primary care and others only by a secondary care referral. Access by secondary care referral can increase patient waiting times because the patient has to first wait to be seen in the secondary clinic, then wait for the diagnostics tests.

Some diagnostic tests are available at the point of care, whereas others require the involvement of laboratories and highly specialised equipment. Factors such as the portability of equipment mean that an increasing variety of tests can be provided in the community.

Some diagnostic services are provided locally, whereas others are centralised in large hubs (or are in the process of being centralised). Some services are co-located with the relevant clinical specialty, even though the service may provide investigations for a broader range of specialties.

The number of tests passing through diagnostic services may be higher if they are also used for population-based screening, and tests relating to the ongoing management of chronic disease.

Some populations find it more difficult to access diagnostic services. These include older people, people with multiple comorbidities or chronic conditions who may need their condition to be monitored frequently, people who live in remote geographical locations, people in travelling communities and others of no fixed abode, such as homeless people.

Having diagnostic services in a variety of geographical locations may mean that patients need to travel significant distances between sites. This could result in costly transport, as well as time off work and school for families or carers. Patients may also need to attend several different units for tests if these are not co-located or provided as a 'one-stop shop'.

3.3 Policy, legislation, regulation and commissioning

Policy

The availability of safe effective services over 7 days a week is a current NHS priority. Delivery of diagnostic services is central to any service transformation. Ensuring high quality care for all and managing an increasing demand for services requires innovative transformation in the delivery of services as discussed in NHS England's framework for planning for people.

Relevant published policy documents include:

- Equality for all – delivering safe care seven days a week – case studies (NHS Improvement Quality)
- NHS services – open seven days a week: every day counts (NHS Improvement Quality)
- NHS services, seven days a week forum
- Everyone counts: planning for patients 2014/15 to 2018/19 (NHS England)
- Challenges and improvements in diagnostic services across seven days (NHS Improvement Quality).

Legislation, regulation and guidance

Best practice guidance is produced by the Medical Royal Colleges. The National Screening Committee produces recommendations on screening programmes across the UK. Accreditation schemes exist for most diagnostic disciplines:

- imaging
- pathology and genetic testing
- endoscopy
- physiological measurement.

Commissioning

Commissioning of diagnostic services is recognised as a particular challenge, especially ensuring that the services delivered are of high value, effective and timely to support all clinical pathways. Information has been produced by NHS improvement with a view to aiding commissioners and service providers in meeting this challenge:

- Top tips to overcome the challenge of commissioning diagnostic services
- Directory of diagnostic services for commissioning organisations.

4 Further information

This is the draft scope for consultation with registered stakeholders. The consultation dates are 5 October to 2 November 2015.

The guideline is expected to be published in November 2017.

You can follow progress of the guideline.

Our website has information about how NICE guidelines are developed.

5 Proposed review questions

1	What and how services are grouped together (for example co-

	location): 1.1 Does the use of multidisciplinary teams offering integrated reporting improve patient outcomes? 1.2 Does co-location of services improve patient outcomes? If so, what is the most effective combination of co-located services to achieve optimum patient outcomes?
2	Who should provide and deliver services: 2.1 What are the indicators that would define a quality diagnostic service?
3	Where services are delivered (including the use of integrated reporting and multidisciplinary teams) 3.1 Does offering access to diagnostic services outside of secondary care (for example, in primary care, in the community, at home) improve patient outcomes? 3.2 Does providing point of care testing in primary care improve patient outcomes?
4	When services should be available (availability of services out of hours): 4.1 Does the provision of same day results from diagnostic services improve patient outcomes? 4.2 Does the availability of out-of-hours diagnostic services improve patient outcomes?
5	How services are accessed and reporting between services: 5.1 Does the referral pathway for diagnostic services affect patient outcomes?

	5.2 Does offering patient agreed bookings for diagnostic services improve outcomes?
6	Information and support needs of people using diagnostic services, their families and carers: 6.1 What information and support do people using diagnostic services (and their families and carers) want at different points during their pathway within diagnostic services?

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