NICE National Institute for Health and Care Excellence

Lung cancer in adults

Quality standard

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This standard is based on TA181, TA184, TA190, TA192, NG12, CSG4 and NG122.

This standard should be read in conjunction with QS13, QS15 and QS124.

Introduction and overview

This quality standard covers the diagnosis and management of lung cancer in adults (18 years and over), and the supportive care provided to people with lung cancer.

Introduction

There are more than 40,000 new cases of lung cancer in the UK each year and more than 35,000 people die from the condition; more than for breast cancer and colorectal cancer combined. It is the second commonest cancer in men and women, and the leading cause of cancer death in men and women.

About 90% of lung cancers are caused by smoking. Now that fewer men smoke, lung cancer deaths in men have decreased by more than a quarter in the UK (a 27% reduction between 1971 and 2006). However, the number of women who smoke has risen and deaths from lung cancer in women have increased. The incidence of lung cancer in England and Wales is believed to be 47.4 per 100,000 population, and is strongly associated with deprivation; the rate is almost 2.5 times higher in most deprived male groups compared with the least deprived and 3 times greater among women.

The prognosis for lung cancer is poor, with a mortality rate of 40.1/100,000 population and only 1 in 10 people living for more than 5 years after diagnosis. The prevalence reflects this poor prognosis with an estimate of 65,000 individuals living with lung cancer in 2008. Only about 5.5% of lung cancers are currently cured. Although the cure rate is rising slowly, the rate of improvement has been slower than for other common cancers, and outcomes in the UK are worse than those in some European countries and North America. There is evidence that outcomes vary within the UK, which, among other factors, may be explained by variations in the standard of care.

Lung cancer has one of the lowest survival outcomes of any cancer because over two-thirds of patients are diagnosed at a late stage when curative treatment is not possible. Earlier diagnosis and referral to specialist teams would make a significant difference to survival rates. Many of the patients are elderly with co-existing comorbid problems making them unfit for radical treatment but new surgical techniques may enable more patients with complex medical problems to benefit from surgery.

This quality standard describes markers of high-quality, cost-effective care that, when delivered collectively, should contribute to improving the effectiveness, safety and experience of care for people with lung cancer in the following ways:

- Preventing people from dying prematurely.
- Enhancing quality of life for people with long-term conditions.
- Helping people to recover from episodes of ill health or following injury.
- Ensuring that people have a positive experience of care.
- Treating and caring for people in a safe environment and protecting them from avoidable harm.

The NHS Outcomes Framework 2011/12 is available.

Overview

The quality standard for lung cancer requires that services should be commissioned from and coordinated across all relevant agencies encompassing the whole lung cancer care pathway. An integrated approach to provision of services is fundamental to the delivery of high-quality care to people with lung cancer.

List of quality statements

Statement 1 People are made aware of the symptoms and signs of lung cancer through local coordinated public awareness campaigns that result in early presentation.

Statement 2 People with a chest X-ray result suggesting lung cancer and people aged 40 and over with unexplained haemoptysis are offered an appointment to see a cancer specialist within 2 weeks.

Statement 3 This statement has been removed. For more details see update information.

Statement 4 People with known or suspected lung cancer have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Statement 5 People with lung cancer are offered a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

Statement 6 People with lung cancer, following initial assessment and computed tomography (CT) scan, are offered investigations that give the most information about diagnosis and staging with the least risk of harm.

Statement 7 People with lung cancer have adequate tissue samples taken in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers.

Statement 8 This statement has been removed. For more details see update information.

Statement 9 People with lung cancer are offered assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Statement 10 People with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Statement 11 People with lung cancer stage I–III who are offered radiotherapy with curative intent receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Statement 12 People with stage IIIB or IV non-small-cell lung cancer are offered systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Statement 13 People with small-cell lung cancer have treatment initiated within 2 weeks of the pathological diagnosis.

Statement 14 People with lung cancer are offered a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

Statement 15 People with lung cancer have access to all appropriate palliative interventions delivered by expert clinicians and teams.

In addition, quality standards that should also be considered when commissioning and providing a lung cancer service are listed in related NICE quality standards.

Quality statement 1: Public awareness

Quality statement

People are made aware of the symptoms and signs of lung cancer through local coordinated public awareness campaigns that result in early presentation.

Quality measure

Structure: Evidence of local arrangements to ensure that people are made aware of the symptoms and signs of lung cancer through local coordinated public awareness campaigns that result in early presentation.

Process: Proportion of people newly diagnosed with lung cancer who were identified as a result of a local public awareness campaign.

Numerator – the number of people in the denominator who were identified as a result of a local public awareness campaign.

Denominator – the number of people newly diagnosed with lung cancer who presented with at least 1 symptom suggesting lung cancer.

Outcome:

a) People with a new diagnosis of lung cancer whose first contact with secondary care for their cancer is an emergency hospital visit or admission.

b) 3-month and 1-year survival rates from diagnosis.

c) Public awareness of symptoms and signs of lung cancer.

d) Stage at diagnosis.

What the quality statement means for each audience

Service providers ensure that services are in place to support people to be made aware of the symptoms and signs of lung cancer through local coordinated public awareness campaigns that result in early presentation.

Healthcare professionals support and participate in local coordinated public awareness campaigns to make people aware of the symptoms and signs of lung cancer and that result in early presentation.

Commissioners ensure they commission local coordinated public awareness campaigns to make people aware of the symptoms and signs of lung cancer and that result in early presentation.

People are made aware of the symptoms and signs of lung cancer through local public awareness information and activities, and see a healthcare professional if they experience symptoms of lung cancer.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendation 1.1.1

Data source

Structure: Local data collection.

Process: Local data collection.

Outcome:

a) Data fields necessary for the calculation of the number of lung cancer patients who were referred to a consultant following accident and emergency attendance are available in the National Cancer Outcomes and Services dataset, which is available from the National Cancer Intelligence Network.

National Cancer Intelligence Network work on 'routes to diagnosis' produces reports on the proportion of lung cancer cases whose first presentation to secondary care was via an emergency admission.

b) Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit surviving to 3 months and 1 year after diagnosis.

1-year survival from lung cancer is also an improvement area within the NHS Outcomes Framework 2012/13 (1.4v).

c) Local data collection. The lung cancer awareness measure is available from Cancer Research UK.

d) Local data collection.

Definitions

Symptoms and signs suggesting lung cancer include the following:

- haemoptysis (in particular persistent haemoptysis in smokers/ex-smokers older than 40 years)
- unexplained or persistent (that is, lasting more than 3 weeks):
    - cough
    - chest/shoulder pain
    - dyspnoea
    - weight loss
    - chest signs
    - hoarseness
    - finger clubbing
    - features suggesting metastasis from a lung cancer (for example, in brain, bone, liver or skin)
    - cervical/supraclavicular lymphadenopathy
- signs of superior vena cava obstruction (swelling of the face/neck with fixed elevation of jugular venous pressure)
- stridor.

Early presentation means a person presents to a healthcare professional soon after they recognise that they fulfil criteria for seeking help, normally within 2 weeks. For example, if they have had a persistent cough for 3 weeks or haemoptysis they should seek help from a healthcare professional within 2 weeks.

Quality statement 2: Appointment with a cancer specialist

Quality statement

People with a chest X-ray result suggesting lung cancer and people aged 40 and over with unexplained haemoptysis are offered an appointment to see a cancer specialist within 2 weeks.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with chest X-ray results suggesting lung cancer and people aged 40 and over with unexplained haemoptysis are seen by a cancer specialist within 2 weeks.

Process:

a) Proportion of people with chest X-ray results that suggest lung cancer who are seen by a cancer specialist within 2 weeks.

Numerator – the number of people in the denominator who are seen by a cancer specialist within 2 weeks.

Denominator – the number of people with chest X-ray results that suggest lung cancer.

b) Proportion of people aged 40 and over with unexplained haemoptysis who are seen by a cancer specialist within 2 weeks.

Numerator – the number of people in the denominator who are seen by a cancer specialist within 2 weeks.

Denominator – the number people aged 40 and over with unexplained haemoptysis.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with chest X-ray results that suggest lung cancer and people aged 40 and over with unexplained haemoptysis to be seen by a cancer specialist within 2 weeks.

Healthcare professionals refer people with chest X-ray results that suggest lung cancer and people aged 40 and over with unexplained haemoptysis for an appointment with a cancer specialist in cancer within 2 weeks.

Commissioners ensure they commission services to provide an appointment to see a cancer specialist within 2 weeks for people with chest X-ray findings that suggest lung cancer and people aged 40 and over with unexplained haemoptysis.

People with signs of possible lung cancer on a chest X-ray and people aged 40 and over who are coughing up blood (and there is no other cause) are offered an appointment to see a cancer specialist within 2 weeks.

Source guidance

Suspected cancer: recognition and referral (2015, updated 2017) NICE guideline NG12, recommendation 1.1.1

Data source

Structure: Local data collection.

Process: Local data collection. Data on cancer waiting times are available via NHS England.

Quality statement 3: Chest X-ray report

This statement has been removed. For more details see update information.

Quality statement 4: Lung cancer clinical nurse specialist

Quality statement

People with known or suspected lung cancer have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with known or suspected lung cancer have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Process:

a) Proportion of people with known or suspected lung cancer who have been given the name and contact number of a lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Numerator – the number of people in the denominator who have been given the name and contact number of a lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Denominator – the number of people with known or suspected lung cancer.

b) Proportion of people with lung cancer who had a lung cancer clinical nurse specialist present at diagnosis.

Numerator – the number of people in the denominator who had a lung cancer clinical nurse specialist present at diagnosis.

Denominator – the number of people with lung cancer.

c) Proportion of people with lung cancer who have been assessed by a lung cancer clinical nurse specialist.

Numerator – the number of people in the denominator who have been assessed by a lung cancer clinical nurse specialist.

Denominator – the number of people with lung cancer.

Outcome: Patient satisfaction with access to and support from a lung cancer clinical nurse specialist.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with known or suspected lung cancer to have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Healthcare professionals ensure people with known or suspected lung cancer have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

Commissioners ensure they commission services for people with known or suspected lung cancer to have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.

People with known or suspected lung cancer know how to contact a named lung cancer specialist nurse between hospital visits.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.2.2, 1.3.33 and 1.6.3

Data source

Structure: Local data collection.

Process:

a) Local data collection. The Department of Health National Cancer Patient Experience Survey report 2010 (data can be disaggregated for lung cancer) contained information on the proportion of patients given the name of a clinical nurse specialist and the proportion of patients reporting they found it easy to contact their clinical nurse specialist.

b) Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit who have had a lung cancer clinical nurse specialist present at diagnosis.

c) National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit who have seen a lung cancer clinical nurse specialist.

Data fields necessary for the calculation of the number of lung cancer patients who were seen by a clinical nurse specialist are available in the National Cancer Outcomes and Services dataset, which is available from the National Cancer Intelligence Network.

Outcome: Local data collection. The National Cancer Patient Experience Survey report 2010 (data can be disaggregated for lung cancer) contained information on the proportion of patients reporting they found it easy to contact their clinical nurse specialist.

Definitions

The National Cancer Peer Review Programme's Manual for Cancer Services defines the clinical nurse specialist in the lung measures 11-2C-113 and 11-2C-114 as:

A core member of the multidisciplinary team who has successfully completed a programme of study in their specialist area of nursing practice, which has been accredited for at least 20 credits at first degree level or equivalent.

Responsibilities include:

- contributing to the multidisciplinary discussion and patient assessment/care planning decision of the team at their regular meetings
- providing expert nursing advice and support to other health professionals in the nurse's specialist area of practice
- involvement in clinical audit
- leading on patient and carer communication issues and coordination of the patient pathway for patients referred to the team – acting as the key worker or responsible for nominating the key worker for the patient's dealings with the team
- ensuring that results of patients' holistic needs assessment are taken into account in the decision-making

- contributing to the management of the service
- utilising research in the nurse's specialist area of practice.

Quality statement 5: Holistic needs assessment

Quality statement

People with lung cancer are offered a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer are offered a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

Process:

a) Proportion of people with lung cancer who have a care plan based on a holistic needs assessment undertaken at diagnosis.

Numerator – the number of people in the denominator who have a care plan based on a holistic needs assessment undertaken at diagnosis.

Denominator – the number of people with lung cancer.

b) Proportion of people with lung cancer who have a care plan based on a holistic needs assessment undertaken at diagnosis and other key stages of care.

Numerator – the number of people in the denominator who have a care plan based on a holistic needs assessment undertaken at diagnosis and other key stages of care.

Denominator – the number of people with lung cancer.

c) Proportion of people with lung cancer who receive specialist services as a result of a care plan based on a holistic needs assessment.

Numerator – the number of people in the denominator who receive specialist services as a result of a care plan based on a holistic needs assessment.

Denominator – the number of people with lung cancer.

Outcome:

a) Patient satisfaction with support offered.

b) Patient satisfaction with support received.

What the quality statement means for each audience

Service providers ensure that services are in place for people with lung cancer to be offered a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

Healthcare professionals offer people with lung cancer a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

Commissioners ensure they commission services for people with lung cancer to be offered a holistic needs assessment at each key stage of care that informs their care plan and the need for referral to specialist services.

People with lung cancer are offered an assessment of all their needs at each stage of care, the results of which are used to form part of their care plan and indicate whether referral to a specialist service is necessary.

Source guidance

Improving supportive and palliative care for adults with cancer (2004) NICE guideline CSG4, recommendations KR2, KR13, KR14 (key recommendations) and 8.10

Data source

Structure: Local data collection.

Process: a), b) and c) Local data collection.

Outcome:

a) Local data collection. The Department of Health National Cancer Patient Experience Survey report 2010 (data can be disaggregated for lung cancer) contained information on the proportion of patients who were given information about support and self-help groups for people with cancer, and the proportion of patients that received information from hospital staff about how to get financial help or benefits.

b) Local data collection.

Definitions

A holistic needs assessment should consider all aspects of a person's needs, including physical, social, psychological and spiritual. Assessments should encompass all aspects of supportive and palliative care, including the preferences of patients and carers with respect to:

- written and other forms of information
- face-to-face communication
- involvement in decision-making
- control of physical symptoms
- psychological support
- social support
- spiritual support
- rehabilitation
- complementary therapies
- self-management and peer support
- family support
- bereavement support
- involvement in the design and delivery of services
- financial support
- smoking cessation advice and support.

Key stages of care include diagnosis, starting treatment, during treatment, at the end of treatment, at relapse and when death is approaching.

People referred for specialist services should receive them within a timeframe that does not cause avoidable physical, social, psychological or spiritual distress and should not exceed 2 weeks.

Specialist services include respiratory medicine, clinical and medical oncology, surgery, palliative care, lung cancer clinical nurse specialists, smoking cessation, psychological support services and other non-core services where there are clinical indications (for example cardiology).

Quality statement 6: Investigations

Quality statement

People with lung cancer, following initial assessment and computed tomography (CT) scan, are offered investigations that give the most information about diagnosis and staging with the least risk of harm.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer following initial assessment and CT scan are offered investigations that give the most information about diagnosis and staging with the least risk of harm.

Process:

a) Proportion of people with lung cancer following initial assessment and CT scan who have pathologically confirmed mediastinal staging.

Numerator – the number of people in the denominator who have pathologically confirmed mediastinal staging.

Denominator – the number of people with lung cancer following initial assessment and CT scan.

b) Proportion of people with lung cancer following initial assessment and CT scan who receive 2 or more invasive tests for diagnostic and staging purposes.

Numerator – the number of people in the denominator who receive 2 or more invasive tests for diagnostic and staging purposes.

Denominator – the number of people with lung cancer following initial assessment and CT scan.

Outcome:

a) Complications following invasive or minimally invasive tests.

b) Histological confirmation rate.

c) People with lung cancer who have stage recorded.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with lung cancer following initial assessment and CT scan to be offered investigations that give the most information about diagnosis and staging with the least risk of harm.

Healthcare professionals offer people with lung cancer investigations that give the most information about diagnosis and staging with the least risk of harm, following initial assessment and CT scan.

Commissioners ensure they commission services for people with lung cancer following initial assessment and CT scan to be offered investigations that give the most information about diagnosis and staging with the least risk of harm.

People with lung cancer, after their first assessment and CT scan (a type of scan that uses X-rays to obtain images of inside the body), are offered further tests that give the most information about the type and stage of their cancer with the least risk of harm.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.3.1–1.3.28

Data source

Structure: Local data collection.

Process: a) and b) Local data collection.

Outcome:

a) Local data collection.

b) and c) The Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit who have a histologically confirmed diagnosis of lung cancer with stage recorded.

Quality statement 7: Tissue diagnosis

Quality statement

People with lung cancer have adequate tissue samples taken in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer have adequate tissue samples taken in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers.

Process:

a) Proportion of people with lung cancer who have a second diagnostic test in order to obtain additional pathological information.

Numerator – the number of people in the denominator who have a second diagnostic test in order to obtain additional pathological information.

Denominator – the number of people with lung cancer.

b) Proportion of people with lung cancer who have a pathological diagnosis.

Numerator – the number of people in the denominator who have a pathological diagnosis.

Denominator – the number of people with lung cancer.

c) Proportion of people with lung cancer who have a tumour type identified.

Numerator – the number of people in the denominator who have a tumour type identified.

Denominator – the number of people with lung cancer.

d) Proportion of people with non-small-cell lung cancer who have a tumour sub-type identified.

Numerator – the number of people in the denominator who have a tumour sub-type identified.

Denominator – the number of people with non-small-cell lung cancer.

e) Proportion of people with non-small-cell lung cancer where reported tumour sub-type is 'not otherwise specified'.

Numerator – the number of people in the denominator where reported tumour sub-type is 'not otherwise specified'.

Denominator – the number of people with non-small-cell lung cancer.

f) Proportion of people with lung cancer who have an analysis of predictive markers.

Numerator – the number of people in the denominator who have an analysis of predictive markers.

Denominator – the number of people with lung cancer.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with lung cancer to have adequate tissue samples taken in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers.

Healthcare professionals take adequate tissue samples in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers, for people with lung cancer.

Commissioners ensure they commission services for people with lung cancer to have adequate tissue samples taken in a suitable form to provide a complete pathological diagnosis including tumour typing and sub-typing, and analysis of predictive markers.

People with lung cancer have a sample of tumour tissue removed for laboratory analysis, which will give enough information about the type and sub-type of the tumour to give a complete diagnosis.

Source guidance

- Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendation

- 1.3.11
- Pemetrexed for the first-line treatment of non-small-cell lung cancer (2009) NICE technology appraisal guidance 181, recommendation 1.1
- Gefitinib for the first-line treatment of locally advanced or metastatic non-small-cell lung cancer (2010) NICE technology appraisal guidance 192, recommendation 1.1

Data source

Structure: Local data collection.

Process:

a) Local data collection.

b) The Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit who have a histologically or cytologically confirmed diagnosis of lung cancer.

c) and f) Local data collection.

d) and e) National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit with non-small-cell lung cancer where the sub-type is limited to 'not otherwise specified'.

Definitions

Tumour sub-typing is the pathological classification of tumours into sub-types according to the differentiation of the cell type.

Predictive markers are molecular characteristics of the tumour that may predict response to systemic therapy.

A complete pathological diagnosis is set out in The Royal College of Pathologists Dataset for lung cancer histopathology reports.

Quality statement 8: Curative treatment in people of borderline fitness

This statement has been removed. For more details see update information.

Quality statement 9: Access to specialist assessment

Quality statement

People with lung cancer are offered assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer are offered assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Process: Proportion of people with lung cancer who receive assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Numerator – the number of people in the denominator who receive assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Denominator – the number of people with lung cancer.

Outcome:

a) Surgery rates.

b) Multimodality rates.

c) Radiotherapy rates.

d) Overall active treatment rates.

e) Chemotherapy rate for small-cell lung cancer.

f) Chemotherapy rate for stage IIIB and IV (performance status 0 and 1) non-small-cell lung cancer.

What the quality statement means for each audience

Service providers ensure that services are in place for people with lung cancer to be offered assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Healthcare professionals offer people with lung cancer assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

Commissioners ensure they commission services for people with lung cancer to be offered assessment for multimodality treatment by a multidisciplinary team comprising all specialist core members.

People with lung cancer are offered an assessment by their multidisciplinary team involving all of the key specialists to see if a combination of more than 1 treatment is suitable for them.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.4.19 and 1.4.33

Data source

Structure: Local data collection. The National Cancer Peer Review measure 08-2C-102 will collect data on the multidisciplinary team structure and named core members.

Process: Local data collection.

Outcome: a), b), c), d), e) and f) The Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit receiving treatment, broken down by treatment type.

Definitions

Specialist core members of a multidisciplinary team, as detailed in the National Cancer Peer Review Programme's Manual for Cancer Services in lung measure 11-2C-101, are:

- designated respiratory physician(s)
- designated thoracic surgeon(s)
- a clinical oncologist

- a medical oncologist (where the responsibility of chemotherapy is not undertaken by the clinical oncologist core member)
- an imaging specialist
- a histopathologist
- a designated cytologist
- a lung nurse specialist
- a core member of the specialist palliative care team.

Quality statement 10: Access to radiotherapy

Quality statement

People with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Process: Proportion of people with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery who are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Numerator – the number of people in the denominator who are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Denominator – the number of people with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery to be assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

Clinical oncologists specialising in thoracic oncology assess people with non-small-cell lung cancer stage I–III and good performance status who are unable to undergo surgery for radiotherapy with curative intent.

Commissioners commission services that ensure people with non-small-cell lung cancer stage I–III and good performance status but who are unable to undergo surgery are assessed for radiotherapy with curative intent by a clinical oncologist specialising in thoracic oncology.

People with non-small-cell lung cancer stage I–III who are fit but are unable to have surgery are assessed by a specialist in cancers of the chest (a clinical oncologist specialising in thoracic oncology) to see if radiotherapy to try and cure the cancer would be suitable for them.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.4.19, 1.4.24, 1.4.27, 1.4.28 and 1.4.29

Data source

Structure: Local data collection.

Process: Local data collection.

Quality statement 11: Optimal radiotherapy

Quality statement

People with lung cancer stage I–III who are offered radiotherapy with curative intent receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer stage I–III who are offered radiotherapy with curative intent receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Process: Proportion of people with lung cancer receiving radiotherapy with curative intent who receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Numerator – the number of people in the denominator who receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Denominator – the number of people with lung cancer receiving radiotherapy with curative intent.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with lung cancer stage I–III who are offered radiotherapy with curative intent to receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Healthcare professionals ensure people with lung cancer stage I–III who are offered radiotherapy with curative intent receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

Commissioners ensure they commission services for people with lung cancer I–III who are offered radiotherapy with curative intent to receive planned treatment techniques that optimise the dose to the tumour while minimising the risks of normal tissue damage.

People with early or locally spread (stage I–III) lung cancer who are offered radiotherapy to try and cure the cancer receive treatment techniques that focus the radiation on the tumour while keeping damage to the healthy tissue to a minimum.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.4.26 to 1.4.31

Data source

Structure: Local data collection.

Process:

Data fields necessary for the extraction of data on radiotherapy dose, fractionation and scheduling are available in the National Cancer Intelligence Network National Radiotherapy Dataset.

Definitions

Examples of optimising radiotherapy techniques include 4-D radiotherapy planning and treatment, image-guided radiotherapy, intensity-modulated radiotherapy and stereotactic body radiotherapy.

Quality statement 12: Systemic therapy for advanced non-small-cell lung cancer

Quality statement

People with stage IIIB or IV non-small-cell lung cancer are offered systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with stage IIIB or IV non-small-cell lung cancer are offered systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Process:

Proportion of people with stage IIIB or IV non-small-cell lung cancer who receive systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Numerator – the number of people in the denominator who receive systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Denominator – the number of people with stage IIIB or IV non-small-cell lung cancer.

What the quality statement means for each audience

Service providers ensure there are systems in place for people with stage IIIB or IV non-small-cell lung cancer to be offered systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Healthcare professionals offer systemic therapy to people with stage IIIB or IV non-small-cell lung cancer in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

Commissioners ensure they commission services for people with stage IIIB or IV non-small-cell lung cancer to be offered systemic therapy in accordance with NICE guidance, that is directed by histology, molecular markers and PD-L1 expression.

People with advanced (stage IIIB or IV) non-small-cell lung cancer are offered chemotherapy in accordance with NICE guidance, determined by the type of the tumour (histology) and other laboratory tests.

Source guidance

- Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.4.45–1.4.51
- Pemetrexed for the first-line treatment of non-small-cell lung cancer (2009) NICE technology appraisal guidance 181, recommendations 1.1 and 1.2
- Pemetrexed for the maintenance treatment of non-small-cell lung cancer (2010 updated 2017) NICE technology appraisal guidance 190, recommendation 1.1
- Gefitinib for the first-line treatment of locally advanced or metastatic non-small-cell lung cancer (2010) NICE technology appraisal guidance 192, recommendation 1.1

Data source

Structure: Local data collection.

Process:

a) The Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of patients submitted to the audit receiving chemotherapy for stage IIIB and IV (performance status 0 and 1) non-small-cell lung cancer.

b) Local data collection.

Data fields necessary for the extraction of data on patients receiving cancer chemotherapy are available in the National Cancer Intelligence Network Systemic Anti-Cancer Therapy dataset.

Definitions

Systemic therapy includes conventional cytotoxic chemotherapy and biological agents that target specific molecular pathways on the tumour to inhibit cellular function.

People with stage IIIB or IV non-small-cell lung cancer are offered systemic therapy in accordance with the NICE guideline on lung cancer, recommendations 1.4.45–1.4.51.

Quality statement 13: Small-cell lung cancer

Quality statement

People with small-cell lung cancer have treatment initiated within 2 weeks of the pathological diagnosis.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with small-cell lung cancer have treatment initiated within 2 weeks of the pathological diagnosis.

Process: Proportion of people with small-cell lung cancer who have treatment initiated within 2 weeks of the pathological diagnosis.

Numerator – the number of people in the denominator who have treatment initiated within 2 weeks of the pathological diagnosis.

Denominator – the number of people with small-cell lung cancer.

What the quality statement means for each audience

Service providers ensure that systems are in place for people with small-cell lung cancer to have treatment initiated within 2 weeks of the pathological diagnosis.

Healthcare professionals initiate treatment for people with small-cell lung cancer within 2 weeks of the pathological diagnosis.

Commissioners ensure they commission services for people with small-cell lung cancer to have treatment initiated within 2 weeks of the pathological diagnosis.

People with small-cell lung cancer have treatment started within 2 weeks of their diagnosis.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendation 1.4.52

Data source

Structure: Local data collection.

Process: Data fields necessary for the calculation of the interval between the date of tissue diagnosis and date of first chemotherapy treatment are available in the National Cancer Outcomes and Services dataset, which is available from the National Cancer Intelligence Network.

The Health and Social Care Information Centre National Lung Cancer Data Audit collects data on the proportion of small-cell lung cancer patients submitted to the audit receiving treatment within a given timeframe.

Definitions

Treatment for small-cell lung cancer is in accordance with the NICE guideline on lung cancer, recommendations 1.4.53–1.4.57 and 1.4.59–1.4.67, and NICE technology appraisal guidance on topotecan for the treatment of relapsed small-cell lung cancer.

Quality statement 14: Optimal follow-up regime

Quality statement

People with lung cancer are offered a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer are offered a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

Process:

a) Proportion of people with lung cancer who receive a specialist follow-up appointment within 6 weeks of completing initial treatment.

Numerator – the number of people who receive a specialist follow-up appointment within 6 weeks of completing initial treatment.

Denominator – the number of people with lung cancer who complete initial treatment.

b) Proportion of people with lung cancer who receive regular specialist or protocol-led clinical nurse specialist follow-up after completing initial treatment.

Numerator – the number of people in the denominator who receive regular specialist or protocol-led clinical nurse specialist follow-up after completing initial treatment.

Denominator – the number of people with lung cancer who complete initial treatment.

Outcome: Patient satisfaction with follow-up care.

What the quality statement means for each audience

Service providers ensure that systems are in place for people with lung cancer to be offered a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

Healthcare professionals offer people with lung cancer a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

Commissioners ensure they commission services for people with lung cancer to be offered a specialist follow-up appointment within 6 weeks of completing initial treatment and regular specialist follow-up thereafter, which can include protocol-led clinical nurse specialist follow-up.

People with lung cancer are offered a specialist follow-up appointment within 6 weeks of completing initial treatment, and regular follow-up appointments with a specialist or the lung cancer specialist nurse.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.6.1 and 1.6.2

Data source

Structure: Local data collection.

Process: a) and b) Local data collection.

Outcome: Local data collection.

Definitions

Regularity of further follow-up will be determined by patient preference.

Protocol-led follow-up means that the indications for follow-up by a clinical nurse specialist, the content of that follow-up and the actions to be taken in response to findings, are agreed in writing in a structured format.

Quality statement 15: Palliative interventions

Quality statement

People with lung cancer have access to all appropriate palliative interventions delivered by expert clinicians and teams.

Quality measure

Structure: Evidence of local arrangements and written clinical protocols to ensure that people with lung cancer have access to all appropriate palliative interventions delivered by expert clinicians and teams.

Process:

a) Proportion of people with lung cancer and bronchial obstruction who receive endobronchial treatments.

Numerator – the number of people in the denominator who receive endobronchial treatments.

Denominator – the number of people with lung cancer and bronchial obstruction.

b) Proportion of people with lung cancer and pleural effusion who receive pleural aspiration or drainage.

Numerator – the number of people in the denominator who receive pleural aspiration or drainage.

Denominator – the number of people with lung cancer and pleural effusion.

What the quality statement means for each audience

Service providers ensure that systems are in place for people with lung cancer to have access to all appropriate palliative interventions delivered by expert clinicians and teams.

Healthcare professionals provide access to all appropriate palliative interventions delivered by expert clinicians and teams, for people with lung cancer.

Commissioners ensure they commission services for people with lung cancer to have access to all appropriate palliative interventions delivered by expert clinicians and teams.

People with lung cancer can access appropriate palliative treatments and care (palliative treatment and care helps with pain, discomfort and other symptoms and improves quality of life), from expert clinicians and healthcare teams.

Source guidance

Lung cancer: diagnosis and management (2019) NICE guideline NG122, recommendations 1.5.1–1.5.19

Data source

Structure: Local data collection.

Process: a) and b) Local data collection.

Definitions

Appropriate palliative interventions include:

- palliative chemotherapy
- palliative radiotherapy
- endobronchial treatments (including radiotherapy, brachytherapy, photodynamic therapy, electrocautery, cryotherapy, laser, stenting and debulking)
- pleural aspiration or drainage
- non-drug interventions (psychosocial support, breathing control and coping strategies).

Expert clinicians and teams refer to specialist palliative care teams that should include palliative medicine consultants and palliative care nurse specialists together with a range of expertise provided by physiotherapists, occupational therapists, pharmacists, social workers and those able to give spiritual and psychological support.

Using the quality standard

It is important that the quality standard is considered by commissioners, healthcare professionals and patients alongside current policy and guidance documents, including Improving outcomes in lung cancer: the manual (Department of Health, 1998) and the Manual for cancer services: lung measures (National Cancer Peer Review Programme, 2008), listed in the development sources section.

Quality measures and national indicators

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of healthcare. They are not a new set of targets or mandatory indicators for performance management.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so aspirational achievement levels are likely to be 100% (or 0% if the quality statement states that something should not be done). However, it is recognised that this may not always be appropriate in practice taking account of patient safety, patient choice and clinical judgement and therefore desired levels of achievement should be defined locally.

See NICE's how to use quality standards for further information, including advice on using quality measures.

Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are published on the NICE website.

Good communication between health and social care professionals and people with lung cancer is essential. Treatment and care, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People with lung cancer should have access to an interpreter or advocate if needed.

Related NICE quality standards

When commissioning and providing a high-quality service for lung cancer, the following related quality standards should also be considered:

- Patient experience in adult NHS services (2012, updated 2019) NICE quality standard 15
- End of life care for adults (2011, updated 2017) NICE quality standard 13

Development sources

Evidence sources

The documents below contain clinical guideline recommendations or other recommendations that were used to develop the quality standard statements and measures.

- Lung cancer: diagnosis and management (2019) NICE guideline NG122
- Suspected cancer: recognition and referral (2015) NICE guideline NG12
- Gefitinib for the first-line treatment of locally advanced or metastatic non-small-cell lung cancer (2010) NICE technology appraisal guidance 192
- Pemetrexed for the maintenance treatment of non-small-cell lung cancer (2010 updated 2017) NICE technology appraisal guidance 190
- Topotecan for the treatment of relapsed small-cell lung cancer (2009) NICE technology appraisal guidance 184
- Pemetrexed for the first-line treatment of non-small-cell lung cancer (2009) NICE technology appraisal guidance 181
- Improving supportive and palliative care for adults with cancer (2004) NICE guideline CSG4

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Department of Health (2011) Improving outcomes: a strategy for cancer
- Department of Health (2008) Manual for cancer services: lung measures
- Department of Health (2007) Cancer Reform Strategy
- Department of Health (1998) Improving outcomes in lung cancer: the manual

Definitions and data sources

References included in the definitions and data sources sections can be found below:

- Dataset for lung cancer histopathology reports (third edition)
- National Cancer Outcomes and Services Dataset
- National Cancer Patient Experience Survey
- National Cancer Peer Review Programme
- NHS Outcomes Framework 2012/13
- National Lung Cancer Data Audit
- Linked ONS-HES mortality data
- Lung Cancer Awareness Measure

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Update information

September 2019: Statement 10 has been amended to clarify the population covered by the statement. Minor changes have also been made to the source guidance reference in statement 9 and to remove out-of-date information in the measures and data sources in statement 11.

March 2019: Changes have been made to align this quality standard with the updated NICE guideline on lung cancer. Statements 10 and 11 on radiotherapy and statement 12 on systemic therapy for advanced non-small-cell lung cancer have been amended in line with the updated guideline. Statement 3 on chest X-ray report and statement 8 on curative treatment in people of borderline fitness have been removed because the recommendations from NICE in these areas have changed. Definitions, links and source guidance references have also been updated throughout.

November 2015: This quality standard has been updated to ensure alignment with the NICE guideline on suspected cancer: recognition and referral. This guideline was updated in 2015 and replaces the previous guideline as a development source for the quality standard.

In particular, a new statement on appointment with a cancer specialist updates and replaces the previous statement 2 on referral for chest X-ray.

About this quality standard

NICE quality standards are a set of specific, concise statements and associated measures. They set out aspirational, but achievable, markers of high-quality, cost-effective patient care, covering the treatment and prevention of different diseases and conditions. Derived from the best available evidence such as NICE guidance and other evidence sources accredited by NHS Evidence, they are developed independently by NICE, in collaboration with NHS and social care professionals, their partners and service users, and address 3 dimensions of quality: clinical effectiveness, patient safety and patient experience.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard has been incorporated into the NICE Pathway on lung cancer.

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Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- British Thoracic Society
- Association for Respiratory Technology and Physiology
- Royal College of Radiologists
- Royal College of Pathologists
- Royal College of Nursing (RCN)
- British Thoracic Oncology Group (BTOG)
- National Lung Cancer Forum for Nurses