NICE National Institute for Health and Care Excellence

NICE quality standard

Ovarian cancer

Quality standard
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This standard is based on CG122, TA55, TA91 and TA222.

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

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Quality statement 1: Symptoms and CA125

Quality statement

Women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer are offered a CA125 test.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure all women aged 50 years and over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer are offered a CA125 test.

Data source: Local data collection.

Process

Proportion of women aged 50 years and over reporting at least one symptom occurring persistently or frequently that suggests ovarian cancer who receive a CA125 test.

Numerator – the number of women in the denominator receiving a CA125 test.

Denominator – the number of women aged 50 years and over reporting at least one symptom occurring persistently or frequently that suggests ovarian cancer.

Data source: Local data collection.

What the quality statement means for different

audiences

Service providers ensure systems are in place for women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer to be offered a CA125 test.

Healthcare professionals offer a CA125 test to women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer.

Commissioners ensure they commission services that provide CA125 tests for women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer.

Women aged 50 years or over with one or more symptoms associated with ovarian cancer that occur often (more than 12 times a month) or for a while (over a month) are offered a blood test called a CA125 test. The CA125 test measures the amount of a protein produced by some ovarian cancers in the blood. Symptoms associated with ovarian cancer include feeling 'bloated', loss of appetite or feeling full quickly, pain in the abdomen or pelvic area, needing to pass urine urgently or more often than usual, and unexplained tiredness, weight loss or changes in bowel habit (for example, constipation or diarrhoea).

Source guidance

Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendations 1.1.1.2, 1.1.1.5, 1.1.2.1 (key priorities for implementation), 1.1.1.3 and 1.2.1.1

Definitions of terms used in this quality statement

Women aged 50 years or over

The statement applies to women aged 50 years and over. However, women under 50 years should be offered the CA125 test if clinically appropriate.

Symptoms suggestive of ovarian cancer

Symptoms include:

- persistent abdominal distension (women often refer to this as 'bloating')
- feeling full and/or loss of appetite
- pelvic or abdominal pain
- increased urinary urgency and/or frequency
- unexplained weight loss
- unexplained fatigue
- unexplained changes in bowel habit or
- symptoms that suggest irritable bowel syndrome if the woman is 50 years or over.

Persistent is defined as for at least 1 month and frequent is defined as 12 times per month. [Adapted from NICE's guideline on ovarian cancer, recommendations 1.1.1.2, 1.1.1.3 and 1.1.1.5]

Equality and diversity considerations

The statement includes women aged 50 years and over as they have a higher risk of developing ovarian cancer than women aged under 50 years based on the epidemiological profile of the disease. Over 80% of women diagnosed with ovarian cancer are aged over 50 years. The highest age-specific incidence rates are seen for women aged 80 to 84 years at diagnosis (69 per 100,000), dropping to 64 per 100,000 in women aged 85 and over (Cancer Research UK). However ovarian cancer can occur in women aged under 50 years, and incidence increases with age, with the highest age-specific incidence rates for women under 50 years occurring in those aged 45 to 49 years at diagnosis (19 per 100,000). Therefore, women under 50 years should be offered the CA125 test if clinically appropriate.

Quality statement 2: Ultrasound

Quality statement

Women with raised CA125 have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure all women with raised CA125 have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results.

Data source: Local data collection.

Process

Proportion of women with raised CA125 who have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results.

Numerator – the number of women in the denominator who have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results.

Denominator – the number of women with raised CA125.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure systems are in place for women with raised CA125 to have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results. To meet the 2-week timescale, service providers ensure systems are in place for ultrasounds to be arranged directly from primary care.

Healthcare professionals ensure women with raised CA125 have an ultrasound of their abdomen and pelvis within 2 weeks of receiving the CA125 test results.

Commissioners ensure they commission services that provide an ultrasound of the abdomen and pelvis within 2 weeks of receiving the test results for women with raised CA125.

Women with raised CA125 levels in their blood have an ultrasound scan of their abdomen and pelvis within 2 weeks of receiving the results of their blood test.

Source guidance

- Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendations 1.1.2.2 (key priority for implementation) and 1.2.3.1
- The Royal College of Radiologists. iRefer: Making the best use of clinical radiology: referral guidelines, recommendation CA42 diagnosis (US)

Definitions of terms used in this quality statement

Raised CA125

CA125 of 35 IU/ml or greater.

Quality statement 3: Advice

Quality statement

Women with normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, are reassessed by their GP within 1 month.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements and written clinical protocols to ensure women with normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, are reassessed by their GP within 1 month.

Data source: Local data collection.

Process

a) Proportion of women with normal CA125 and no confirmed diagnosis but continuing symptoms, who are reassessed by their GP within 1 month.

Numerator – the number of women in the denominator who are reassessed by their GP within 1 month.

Denominator – the number of women with normal CA125 and no confirmed diagnosis but continuing symptoms.

Data source: Local data collection.

b) Proportion of women with raised CA125 but normal ultrasound and no confirmed

diagnosis but continuing symptoms, who are reassessed by their GP within 1 month.

Numerator – the number of women in the denominator who are reassessed by their GP within 1 month.

Denominator – the number of women with raised CA125 but normal ultrasound, and no confirmed diagnosis but continuing symptoms.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure systems and written clinical protocols are in place for women with normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, to be reassessed by their GP within 1 month.

GPs proactively reassess women who have normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, within 1 month.

Commissioners ensure they commission services that reassess women who have normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, by their GP within 1 month.

Women with normal CA125 results, or raised CA125 but a normal ultrasound scan, with no confirmed diagnosis but continuing symptoms, are reassessed by their GP within 1 month.

Source guidance

Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendations 1.1.2.4 (key priority for implementation) and 1.1.1.4

Definitions of terms used in this quality statement

Normal CA125

CA125 of less than 35 IU/ml.

Raised CA125

CA125 of 35 IU/ml or greater.

Within 1 month

One month starts from receipt of the normal CA125 or normal ultrasound result.

Symptoms suggesting ovarian cancer

Symptoms include:

- persistent abdominal distension (women often refer to this as 'bloating')
- feeling full and/or loss of appetite
- pelvic or abdominal pain
- increased urinary urgency and/or frequency
- unexplained weight loss
- fatigue
- changes in bowel habit or
- symptoms that suggest irritable bowel syndrome if the woman is 50 or over.

[Adapted from NICE's guideline on ovarian cancer, recommendations 1.1.1.2, 1.1.1.3 and 1.1.1.5]

Non-ovarian cancer reasons for raised CA125

Physiological conditions:

- ovulation
- pregnancy
- retrograde menstruation.

Benign gynaecological conditions:

- endometriosis
- benign ovarian cysts
- uterine leiomyomata (fibroids).

Other non-malignant disease:

- autoimmune disease (such as Sjogren's syndrome, polyarteritis nodosa, systemic lupus erythematosus)
- sarcoidosis
- benign gastrointestinal diseases (such as colitis, diverticulitis)
- chronic active hepatitis
- cirrhosis
- pericarditis
- pancreatitis (acute and chronic)
- renal disease with serum creatinine greater than 2.0.

Non-ovarian malignant conditions:

- malignant ascites
- disseminated malignancy (such as breast and lung)
- disseminated malignancies from any site involving pleural or peritoneal surfaces

- a proportion of:
  - non-Hodgkin's lymphoma
  - pancreatic cancers
  - cervical cancers
  - endometrial cancers.

[Adapted from the United Kingdom Collaborative Trial for Ovarian Cancer Screening protocol list]

Quality statement 4: Malignancy indices

Quality statement

Women with a risk of malignancy index (RMI I) score of 250 or greater are referred to a specialist gynaecological cancer multidisciplinary team.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure women with an RMI I score of 250 or greater are referred to a specialist gynaecological cancer multidisciplinary team.

Data source: Local data collection.

Process

Proportion of women with an RMI I score of 250 or greater referred to a specialist gynaecological cancer multidisciplinary team.

Numerator – the number of women in the denominator referred to a specialist gynaecological cancer multidisciplinary team.

Denominator – the number of women with an RMI I score of 250 or greater.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure systems are in place for women with an RMI I score of 250 or greater to be referred to a specialist gynaecological cancer multidisciplinary team.

Healthcare professionals ensure women with an RMI I score of 250 or greater are referred to a specialist gynaecological cancer multidisciplinary team.

Commissioners ensure they commission services for women with an RMI I score of 250 or greater to be referred to a specialist gynaecological cancer multidisciplinary team.

Women with suspected ovarian cancer have their 'risk of malignancy', or RMI I, score calculated (using their CA125 and ultrasound results and whether they have had the menopause) to help find out if ovarian cancer is likely. Women with a high RMI I score (250 or more) are referred to a team of healthcare professionals who are experienced in treating women with ovarian cancer, called a specialist gynaecological cancer multidisciplinary team.

Source guidance

Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendation 1.2.2.1 (key priority for implementation)

Definitions of terms used in this quality statement

Risk of malignancy index

NICE's guideline on ovarian cancer defines how RMI I should be calculated in the appendix. RMI I combines three pre-surgical features: CA125, menopausal status (M) and ultrasound score (U). The RMI is a product of the ultrasound scan score, the menopausal status and the CA125 level (IU/ml).

RMI = U x M x CA125

The ultrasound result is scored 1 point for each of the following characteristics:

multilocular cysts, solid areas, metastases, ascites and bilateral lesions. U = 0 (for an ultrasound score of 0), U = 1 (for an ultrasound score of 1), U = 3 (for an ultrasound score of 2 to 5).

The menopausal status is scored as 1 = pre-menopausal and 3 = post-menopausal. The classification of 'post-menopausal' is a woman who has had no period for more than 1 year or a woman over 50 who has had a hysterectomy.

CA125 is measured in IU/ml and can vary between 0 and hundreds or even thousands of units. [Adapted from the NICE guideline on ovarian cancer appendix: risk of malignancy index]

Multidisciplinary team

Specialist core members of a multidisciplinary team are described in the National Cancer Peer Review Programme's Manual for Cancer Services in gynaecology measure 11-2E-101.

Quality statement 5: Initial staging CT

Quality statement

Women who are offered staging for ovarian cancer, following ultrasound, are offered CT of the abdomen and pelvis as the initial staging investigation.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements and written clinical protocols to ensure women who are offered staging for ovarian cancer, following ultrasound, are offered CT of the abdomen and pelvis as the initial staging investigation.

Data source: Local data collection.

Process

Proportion of women who are offered staging for ovarian cancer, following ultrasound, who receive CT of the abdomen and pelvis as the initial staging investigation.

Numerator – the number of women in the denominator receiving CT of the abdomen and pelvis as the initial staging investigation.

Denominator – the number of women who are offered staging for ovarian cancer, following ultrasound.

Data source: National Cancer Outcomes and Services Dataset, available from the National Cancer Intelligence Network.

What the quality statement means for different audiences

Service providers ensure systems and written clinical protocols are in place so that women who are offered staging for ovarian cancer, following ultrasound, are offered CT of the abdomen and pelvis as the initial staging investigation.

Healthcare professionals ensure women who are offered staging for ovarian cancer, following ultrasound, are offered CT of the abdomen and pelvis as the initial staging investigation.

Commissioners ensure they commission services that offer women who are offered staging for ovarian cancer, following ultrasound, a CT of the abdomen and pelvis as the initial staging investigation.

Women who are offered investigations to find out the stage of the ovarian cancer, following ultrasound, are offered a CT scan of the abdomen and pelvis as the first investigation.

Source guidance

- Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendations 1.2.3.2 and 1.2.3.3
- The Royal College of Radiologists. iRefer: Making the best use of clinical radiology: referral guidelines, recommendation CA43 staging (CT)

Quality statement 6: CT reporting

Quality statement

Women who have CT for staging of ovarian cancer have the results reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements and written clinical protocols to ensure that women who have CT for staging of ovarian cancer have the results reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Data source: Local data collection.

Process

Proportion of women who have CT for staging ovarian cancer that have the results reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Numerator – the number of women in the denominator having their CT staging results reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Denominator – the number of women who have CT for staging of ovarian cancer.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers ensure systems are in place for women who have CT for staging of ovarian cancer to have it reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Healthcare professionals ensure women who have CT for staging of ovarian cancer have it reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Commissioners ensure they commission services in which CT for staging of ovarian cancer is reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team.

Women who have a CT scan to find out the stage of the ovarian cancer have the results reported by a radiologist who is a key member of the specialist gynaecological cancer multidisciplinary team.

Source guidance

TEG consensus.

Definitions of terms used in this quality statement

A core member of the gynaecological cancer multidisciplinary team

A member of the gynaecological cancer multidisciplinary team who attends (or, if unable to attend, is represented by a colleague who attends) at least two thirds of the multidisciplinary team meetings.

Specialist core members of a multidisciplinary team are described in the National Cancer Peer Review Programme's Manual for Cancer Services in gynaecology measure 11-2E-101.

Quality statement 7: Other imaging

Quality statement

Women with an indeterminate adnexal mass on ultrasound are offered MRI for further characterisation.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure women with an indeterminate adnexal mass on ultrasound have MRI for further characterisation.

Data source: Local data collection.

Process

Proportion of women with an indeterminate adnexal mass on ultrasound who have MRI for further characterisation.

Numerator – the number of women in the denominator who have MRI for further characterisation.

Denominator – the number of women with an indeterminate adnexal mass on ultrasound.

Data source: National Cancer Outcomes and Services Dataset, available from the National Cancer Intelligence Network.

What the quality statement means for different

audiences

Service providers ensure systems are in place for women with an indeterminate adnexal mass on ultrasound to have MRI for further characterisation.

Healthcare professionals ensure women with an indeterminate adnexal mass on ultrasound are offered MRI for further characterisation.

Commissioners ensure they commission services in which women with an indeterminate adnexal mass on ultrasound have MRI for further characterisation.

Women with a mass, growth or lump next to their womb, which usually arises from the ovary or fallopian tube (called an adnexal mass), found by ultrasound, are offered an MRI scan to help find out if it is cancerous or non-cancerous.

Source guidance

The Royal College of Radiologists. iRefer: Making the best use of clinical radiology: referral guidelines, recommendations CA42 diagnosis (MRI) and CA43 staging (MRI)

Quality statement 8: Optimal surgical staging

Quality statement

Women with suspected stage I ovarian cancer have optimal surgical staging.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements and written clinical protocols to ensure women with suspected stage I ovarian cancer have optimal surgical staging.

Data source: Local data collection.

Process

a) Proportion of women with stage I ovarian cancer that had optimal surgical staging.

Numerator – the number of women in the denominator who had optimal surgical staging.

Denominator – the number of women with stage I ovarian cancer.

Data source: National Cancer Outcomes and Services Dataset, available from the National Cancer Intelligence Network.

b) Proportion of women with stage I ovarian cancer that had upfront systematic retroperitoneal lymphadenectomy.

Numerator – the number of women in the denominator who had upfront systematic retroperitoneal lymphadenectomy.

Denominator – the number of women with stage I ovarian cancer.

Upfront systematic retroperitoneal lymphadenectomy is not recommended for women with stage I ovarian cancer, and therefore an audit standard of 0% should be expected in this process measure.

Data source: National Cancer Outcomes and Services Dataset, available from the National Cancer Intelligence Network.

What the quality statement means for each audience

Service providers ensure systems are in place for women with suspected stage I ovarian cancer to have optimal surgical staging.

Healthcare professionals ensure women with suspected stage I ovarian cancer have optimal surgical staging.

Commissioners ensure they commission services in which women with suspected stage I ovarian cancer have optimal surgical staging.

Women with suspected stage I ovarian cancer (which is cancer that has not spread from the ovaries) have surgery (known as optimal surgical staging) that involves removing the cancerous tissue and making a full assessment of the stage of the cancer.

Source guidance

Ovarian cancer: recognition and initial management. NICE guideline CG122 (2011), recommendations 1.3.1.2, 1.3.2.1 (key priorities for implementation) and 1.3.1.1

Definitions of terms used in this quality statement

Optimal surgical staging

Optimal surgical staging does not include upfront systematic retroperitoneal lymphadenectomy. NICE's guideline on ovarian cancer states systematic retroperitoneal lymphadenectomy should not be included as part of standard surgical treatment for women who appear to have stage I disease.

NICE's guideline on ovarian cancer defines the constituents of optimal surgical staging as:

- midline laparotomy to allow thorough assessment of the abdomen and pelvis
- a total abdominal hysterectomy, bilateral salpingo-oophorectomy and infracolic omentectomy
- biopsies of any peritoneal deposits
- random biopsies of the pelvic and abdominal peritoneum
- retroperitoneal lymph node assessment.

[Adapted from the NICE guideline on ovarian cancer, recommendation 1.3.1.1]

About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about how NICE quality standards are developed is available from the NICE website.

See our webpage on quality standards advisory committees for details about our standing committees. Information about the topic experts invited to join the standing members is available from the webpage for this quality standard.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Diversity, equality and language

Equality issues were considered during development and equality assessments for this quality standard are available. Any specific issues identified during development of the

quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

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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.

- National Cancer Intelligence Network
- Royal College of Pathologists
- Royal College of Radiologists
- Society and College of Radiographers (SOR)