

1           **NATIONAL INSTITUTE FOR HEALTH AND CARE**  
2   **EXCELLENCE**

3   **Guideline scope**

4           **Familial ovarian cancer: identifying and**  
5   **managing risk**

6   The Department of Health and Social Care in England has asked NICE to  
7   develop a guideline on familial ovarian cancer.

8   The guideline will be developed using the methods and processes outlined in  
9   [developing NICE guidelines: the manual](#).

10   This guideline will also be used to develop the NICE quality standard for  
11   familial ovarian cancer.

12   This scope uses the term 'women' throughout, but this should be taken to  
13   include those who do not identify as women but who have female pelvic  
14   organs.

15   **1           Why the guideline is needed**

16   About 340,000 to 440,000 women in the UK carry a pathogenic variant that  
17   increases their risk of ovarian cancer. This includes pathogenic variants in  
18   *BRCA1*, *BRCA2*, *RAD51C*, *RAD51D*, *BRIP1*, *PALB2*, *MLH1*, *MSH2* and  
19   *MSH6* genes. It is estimated that 15% to 20% of women with high-grade  
20   epithelial ovarian cancer also carry a pathogenic variant that is associated  
21   with increased risk of ovarian cancer.

22   Over 50% of women with a pathogenic variant do not have any close family  
23   members with cancer. Currently, only around 3% of women who carry a  
24   pathogenic variant which increases the risk of ovarian cancer have been  
25   identified as a result of genetic testing. This proportion will increase with  
26   improved availability of genetic testing. Most women who carry a pathogenic  
27   variant will not develop ovarian cancer. But, guidance is needed on how to

1 assess their risk of developing ovarian cancer, what risk-reducing  
2 interventions should or should not be offered, and what support should be  
3 given.

#### 4 **Key facts and figures**

- 5 • Ovarian cancer is the most common cause of death from gynaecological  
6 cancer. [Cancer Research UK's ovarian cancer statistics](#) show that it:
  - 7 – is the sixth most common cancer among women
  - 8 – accounted for around 5% of women's cancer deaths in 2018.
- 9 • Survival rates in England are improving, however overall survival remains  
10 poor and 5-year survival rates are lower compared with most European  
11 countries.
- 12 • The [International Agency for Research on Cancer](#) projects that the number  
13 of women with ovarian cancer in the UK is going to increase by 23%  
14 between 2020 and 2040 (from 6,056 to an estimated 7,454 of women).

#### 15 **Current practice**

- 16 • Provision of genetic testing varies in the NHS. Not all women who have  
17 relatives with ovarian cancer (with or without breast cancer) are currently  
18 offered genetic testing. There is growing evidence showing the utility and  
19 cost effectiveness of genetic testing.
- 20 • Risk-reducing salpingo-oophorectomy is currently an option for preventing  
21 ovarian cancer in women who have a high risk of developing ovarian  
22 cancer. However, there is variation in practice. Some women may be  
23 having risk-reducing surgery when they do not need it and others who may  
24 benefit from risk-reducing surgery may not be offered it. Also, use of  
25 hormone-replacement therapy after risk-reducing surgery varies.
- 26 • Some centres use a specific surgico-pathological protocol to assess  
27 histological samples removed during surgery to identify occult in situ or  
28 invasive lesions. But, this is not uniformly done, so some occult in situ or  
29 invasive cancers may be missed.

## 1 **Policy, legislation, regulation and commissioning**

2 The [chief medical officer's 2016 report](#) and the [NHS independent Cancer](#)  
3 [Taskforce strategy \(2015 to 2020\)](#) highlight the benefits of genetic testing in  
4 the NHS. The [NHS Long Term Plan](#) supports using genetic testing to provide  
5 more personalised care for people with cancer. This guideline will focus on  
6 identifying and managing the risk of familial ovarian cancer using genetic  
7 testing and risk-reducing interventions. This could improve health outcomes  
8 for several [NHS Outcomes Framework Indicators](#).

## 9 **2 Who the guideline is for**

10 This guideline is for:

- 11 • healthcare professionals working in primary, secondary and tertiary care
- 12 • cancer alliances
- 13 • commissioners of ovarian cancer services (including clinical commissioning  
14 groups and NHS England specialised commissioning)
- 15 • voluntary sector organisations working with women who have increased  
16 risk, or a diagnosis, of familial ovarian cancer
- 17 • women with suspected or diagnosed familial ovarian cancer, their families  
18 and carers
- 19 • women with ovarian cancer
- 20 • women at increased risk of familial ovarian cancer.

21 NICE guidelines cover health and care in England. Decisions on how they  
22 apply in other UK countries are made by ministers in the [Welsh Government](#),  
23 [Scottish Government](#), and [Northern Ireland Executive](#).

## 24 **Equality considerations**

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

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

1 The guideline will look at inequalities relating to:

- 2 • accessing genetic testing, and fertility and menopause services, including
- 3 socioeconomic and geographical factors, and factors relating to age and
- 4 disabilities.
- 5 • accessing and providing information that could inform decisions about
- 6 genetic testing risk-reducing treatment. This includes people for whom
- 7 English is not their first language or who have other communication needs.

8 The guideline will also consider potential inequalities for trans people  
9 (particularly trans men) and non-binary people in relation to accessing  
10 services, including testing.

## 11 **3 What the guideline will cover**

### 12 **3.1 Who is the focus?**

#### 13 **Groups that will be covered**

14 Women who:

- 15 • have ovarian cancer (with or without breast cancer)
- 16 • carry a pathogenic variant that increases the risk of ovarian cancer,
- 17 including in genes such as *BRCA1*, *BRCA2*, *RAD51C*, *RAD51D*, *BRIP1*,
- 18 *PALB2*, *MLH1*, *MSH2* and *MSH6*
- 19 • have a relative who carries a pathogenic variant that increases the risk of
- 20 ovarian cancer, including in genes such as *BRCA1*, *BRCA2*, *RAD51C*,
- 21 *RAD51D*, *BRIP1*, *PALB2*, *MLH1*, *MSH2* and *MSH6*
- 22 • have a family history of ovarian cancer (with or without a family history of
- 23 breast cancer)
- 24 • have a family history or a diagnosis of a syndrome associated with an
- 25 increased risk of ovarian cancer, such as Lynch syndrome
- 26 • come from populations with an increased prevalence of pathogenic variants
- 27 associated with ovarian cancer.

## 1 **3.2 Settings**

### 2 **Settings that will be covered**

3 All settings where NHS commissioned care is provided.

## 4 **3.3 Activities, services or aspects of care**

### 5 **Key areas that will be covered**

6 We will look at evidence in the areas below when developing the guideline,  
7 but it may not be possible to make recommendations in all the areas.

8 1 Individual and family support

9 2 Configuration of ovarian cancer risk assessment and management  
10 services

11 3 Risk prediction or assessment methods for familial ovarian cancer

12 4 Risk thresholds for genetic testing

13 5 Genetic testing for familial ovarian cancer

14 6 Familial ovarian cancer surveillance

15 7 Primary preventive medicines

16 8 Risk-reducing surgery

17

18 Note that guideline recommendations for medicines will normally fall within  
19 licensed indications; exceptionally, and only if clearly supported by evidence,  
20 use outside a licensed indication may be recommended. The guideline will  
21 assume that prescribers will use a medicine's summary of product  
22 characteristics to inform decisions made with individual patients.

### 23 **Areas that will not be covered**

24 1 Recognition and initial management of ovarian cancer

### 25 **Related NICE guidance**

#### 26 **Published**

- 27 • [Suspected cancer: recognition and referral](#) (2015, updated 2021) NICE  
28 guideline NG12

- 1 • [Olaparib plus bevacizumab for maintenance treatment of advanced](#)  
2 [ovarian, fallopian tube or primary peritoneal cancer](#) (2021) NICE  
3 technology appraisal guidance TA693
- 4 • [Niraparib for maintenance treatment of advanced ovarian, fallopian tube](#)  
5 [and peritoneal cancer after response to first-line platinum-based](#)  
6 [chemotherapy](#) (2021) NICE technology appraisal guidance TA673
- 7 • [Entrectinib for treating NTRK fusion-positive solid tumours](#) (2020) NICE  
8 technology appraisal guidance TA644
- 9 • [Larotrectinib for treating NTRK fusion-positive solid tumours](#) (2020) NICE  
10 technology appraisal guidance TA630
- 11 • [Colorectal cancer](#) (2020) NICE guideline NG151
- 12 • [Olaparib for maintenance treatment of relapsed platinum-sensitive ovarian,](#)  
13 [fallopian tube or peritoneal cancer](#) (2020) NICE technology appraisal  
14 guidance TA620
- 15 • [Testing strategies for Lynch syndrome in people with endometrial cancer](#)  
16 (2020) NICE diagnostics guidance DG42
- 17 • [Familial breast cancer: classification, care and managing breast cancer and](#)  
18 [related risks in people with a family history of breast cancer](#) (last updated  
19 2019) NICE guideline CG164
- 20 • [Menopause: diagnosis and management](#) (2015, updated 2019) NICE  
21 guideline NG23
- 22 • [Early and locally advanced breast cancer: diagnosis and management](#)  
23 (2018) NICE guideline NG101
- 24 • [Niraparib for maintenance treatment of relapsed, platinum-sensitive](#)  
25 [ovarian, fallopian tube and peritoneal cancer](#) (2018) NICE technology  
26 appraisal guidance TA528
- 27 • [Pancreatic cancer in adults: diagnosis and management](#) (2018) NICE  
28 guideline NG85
- 29 • [Tests in secondary care to identify people at high risk of ovarian cancer](#)  
30 (2017) NICE diagnostic guidance DG31
- 31 • [Molecular testing strategies for Lynch syndrome in people with colorectal](#)  
32 [cancer](#) (2017) NICE diagnostics guidance DG27

- 1 • [Ovarian cancer: recognition and initial management](#) (2011) NICE guideline  
2 CG122
- 3 • [Metastatic malignant disease of unknown primary origin in adults: diagnosis  
4 and management](#) (2010) NICE guideline CG104
- 5 • [Guidance on the use of paclitaxel in the treatment of ovarian cancer](#) (2003,  
6 updated 2005) NICE technology appraisal guidance TA55
- 7 • [Improving supportive and palliative care for adults with cancer](#) (2004) NICE  
8 cancer service guideline CSG4

### 9 **In development**

- 10 • [Niraparib for maintenance treatment of relapsed, platinum-sensitive  
11 ovarian, fallopian tube and peritoneal cancer \(CDF review TA528\)](#) NICE  
12 technology appraisal guidance. Publication expected December 2021
- 13 • [Olaparib for maintenance treatment of recurrent, platinum-sensitive  
14 ovarian, fallopian tube and peritoneal cancer that has responded to  
15 platinum-based chemotherapy \(CDF review of TA620\)](#) NICE technology  
16 appraisal guidance. Publication date to be confirmed

### 17 **NICE guidance about the experience of people using NHS services**

18 NICE has produced the following guidance on the experience of people using  
19 the NHS. This guideline will not include additional recommendations on these  
20 topics unless there are specific issues related to familial ovarian cancer:

- 21 • [Medicines optimisation](#) (2015) NICE guideline NG5
- 22 • [Patient experience in adult NHS services](#) (2012) NICE guideline CG138
- 23 • [Medicines adherence](#) (2009) NICE guideline CG76

### 24 **3.4 Economic aspects**

25 We will take economic aspects into account when making recommendations.  
26 We will develop an economic plan that states for each review question (or key  
27 area in the scope) whether economic considerations are relevant, and if so  
28 whether this is an area that should be prioritised for economic modelling and  
29 analysis. We will review the economic evidence and carry out economic

1 analyses, using an NHS and personal social services perspective, as  
2 appropriate.

### 3 **3.5 Key issues and draft questions**

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

#### 6 1 Individual and family support

7 1.1 What information and support is needed by women with familial  
8 ovarian cancer or who are at increased risk of ovarian cancer (with  
9 or without breast cancer), and their families and carers?

10 1.2 Which interventions are effective for supporting women at  
11 increased risk of ovarian cancer to make decisions about  
12 management options?

#### 13 2 Configuration of ovarian cancer risk assessment and management 14 services

15 2.1 What is the most effective configuration of services for referral,  
16 risk assessment and risk management for women at increased risk  
17 of ovarian cancer (including fertility, menopause and psychological  
18 support services)?

#### 19 3 Risk prediction or assessment methods for familial ovarian cancer

20 3.1 What are the optimal methods of assessing the probability of  
21 having a pathogenic variant associated with familial ovarian  
22 cancer?

23 3.2 What are the optimal methods of assessing the absolute risk of  
24 ovarian cancer in women at increased risk of ovarian cancer?

#### 25 4 Risk thresholds for genetic testing

26 4.1 At what carrier probability should a person with a family history  
27 of ovarian cancer (with or without breast cancer) be offered genetic  
28 testing?

1 4.2 At what carrier probability should a person with a family history  
2 of Lynch syndrome be offered genetic testing?

3 4.3 Which populations with a high prevalence of pathogenic  
4 variants would meet the risk threshold for genetic testing?

5 4.4 At what carrier probability should women with ovarian cancer  
6 (with or without breast cancer) be offered genetic testing?

7 5 Genetic testing for familial ovarian cancer

8 5.1 Which genes should be included in a gene panel when testing  
9 for pathogenic variants that increase the risk of familial ovarian  
10 cancer?

11 6 Familial ovarian cancer surveillance

12 6.1 What are the benefits and risks of surveillance for women at  
13 increased risk of familial ovarian cancer?

14 6.2 How effective are different methods of surveillance for women  
15 at increased risk of familial ovarian cancer?

16 7 Primary preventive medicines

17 7.1 How effective are preventive medicines for reducing the  
18 incidence of ovarian cancer for women at increased risk of familial  
19 ovarian cancer?

20 8 Risk-reducing surgery

21 8.1 How effective is risk-reducing surgery for women at increased  
22 risk of familial ovarian cancer (also considering risk threshold, age  
23 and extent of surgery)?

24 8.2 What surgico-pathologic protocol should be followed for risk-  
25 reducing surgery for women at increased risk of familial ovarian  
26 cancer?

1                   8.3 What are the benefits and risks of hormone replacement  
2                   therapy after risk-reducing surgery for women at increased risk of  
3                   familial ovarian cancer?

### 4   **3.6       Main outcomes**

5   The main outcomes that may be considered when searching for and  
6   assessing the evidence are:

- 7   • disease-related morbidity
- 8   • disease-specific survival
- 9   • fertility
- 10  • health-related quality of life
- 11  • ovarian cancer
- 12  • overall survival
- 13  • prognostic accuracy
- 14  • psychological wellbeing
- 15  • resource use
- 16  • symptoms related to the menopause
- 17  • test accuracy
- 18  • treatment-related morbidity.

19

## 20  **4       NICE quality standards and NICE Pathways**

### 21  **4.1       NICE quality standards**

22  **NICE quality standards that will use this guideline as an evidence**  
23  **source when they are being developed**

- 24  • Familial ovarian cancer. NICE quality standard. Publication date to be  
25  confirmed

## 1 **4.2 NICE Pathways**

2 [NICE Pathways](#) bring together everything we have said on a topic in an  
3 interactive flowchart. When this guideline is published, the recommendations  
4 will be included in a new NICE Pathway on familial ovarian cancer.

5

## 6 **5 Further information**

This is the draft scope for consultation with registered stakeholders. The  
consultation dates are 22 November to 20 December 2021.

The guideline is expected to be published in March 2024.

You can follow progress of the [guideline](#).

Our website has information about how [NICE guidelines](#) are developed.

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