

# Cryopreservation to preserve fertility in people diagnosed with cancer

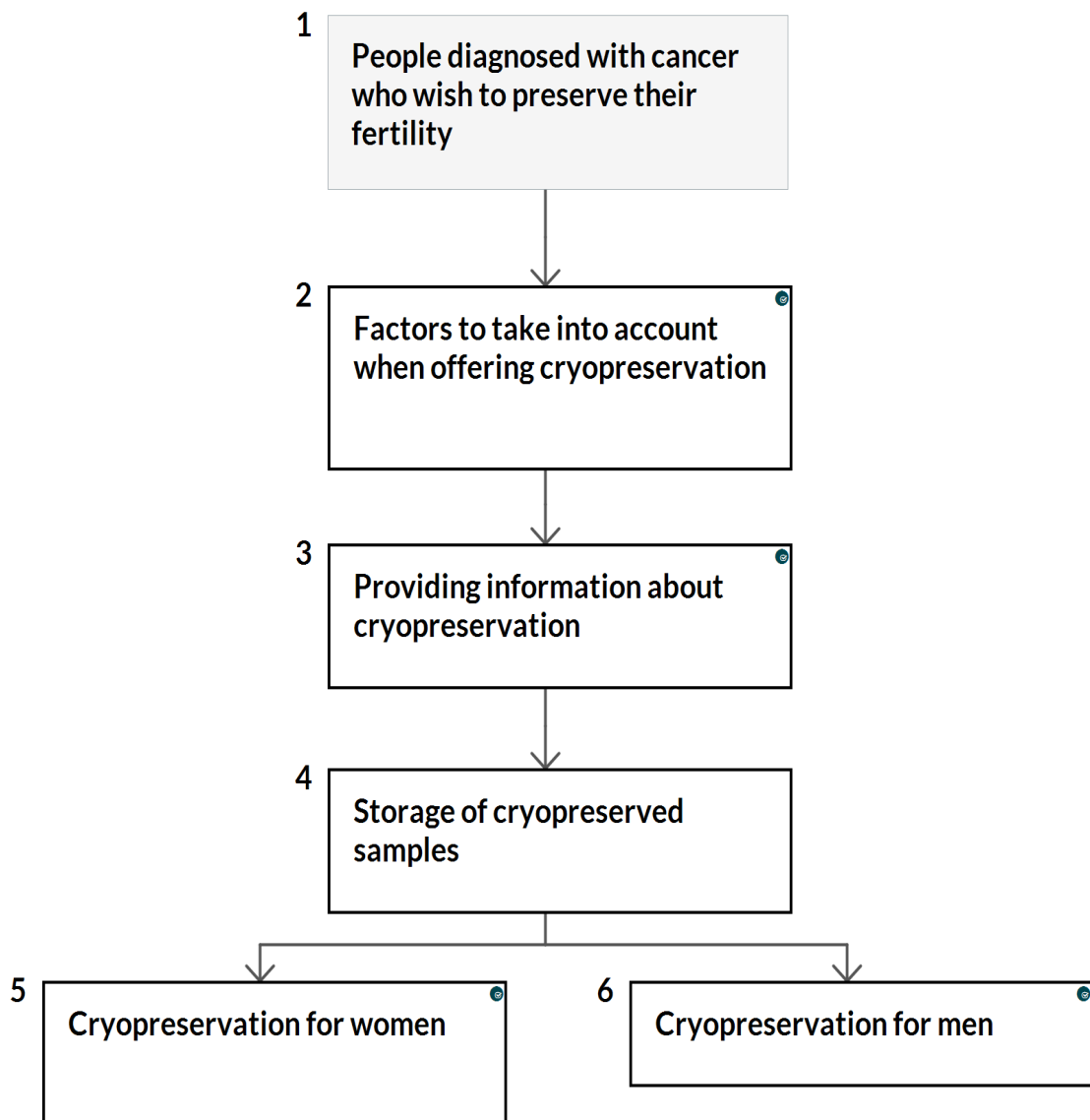
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

<http://pathways.nice.org.uk/pathways/fertility>

NICE Pathway last updated: March 2021

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



## 1 People diagnosed with cancer who wish to preserve their fertility

No additional information

## 2 Factors to take into account when offering cryopreservation

When considering and using cryopreservation for people before starting chemotherapy or radiotherapy that is likely to affect their fertility, follow recommendations in 'The effects of cancer treatment on reproductive functions' (2007)<sup>1</sup>.

For cancer-related fertility preservation, **do not apply** the eligibility criteria used for conventional infertility treatment.

**Do not use** a lower age limit for cryopreservation for fertility preservation in people diagnosed with cancer.

When deciding to offer fertility preservation to people diagnosed with cancer, take into account the following factors:

- diagnosis
- treatment plan
- expected outcome of subsequent fertility treatment
- prognosis of the cancer treatment
- viability of stored/post-thawed material.

When using cryopreservation to preserve fertility in people diagnosed with cancer, use sperm, embryos or oocytes.

### Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

7. Fertility support

## 3 Providing information about cryopreservation

At diagnosis, the impact of the cancer and its treatment on future fertility should be discussed

<sup>1</sup> Royal College of Physicians, The Royal College of Radiologists, Royal College of Obstetricians and Gynaecologists. The effects of cancer treatment on reproductive functions: Guidance on management. Report of a Working Party. London: RCP, 2007.

between the person diagnosed with cancer and their cancer team.

Inform people diagnosed with cancer that the eligibility criteria used in conventional infertility treatment do not apply in the case of fertility cryopreservation provided by the NHS. However, those criteria will apply when it comes to using stored material for assisted conception in an NHS setting.

## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

### 7. Fertility support

#### 4 Storage of cryopreserved samples

Store cryopreserved material for an initial period of 10 years.

#### 5 Cryopreservation for women

Offer oocyte or embryo cryopreservation as appropriate to women of reproductive age (including adolescent girls) who are preparing for medical treatment for cancer that is likely to make them infertile if:

- they are well enough to undergo ovarian stimulation and egg collection **and**
- this will not worsen their condition **and**
- enough time is available before the start of their cancer treatment.

In cryopreservation of oocytes and embryos, use vitrification instead of controlled-rate freezing if the necessary equipment and expertise is available.

## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

### 9. Cryopreservation before cancer treatment

## 6 Cryopreservation for men

Offer sperm cryopreservation to men and adolescent boys who are preparing for medical treatment for cancer that is likely to make them infertile.

Use freezing in liquid nitrogen vapour as the preferred cryopreservation technique for sperm.

Offer continued storage of cryopreserved sperm, beyond 10 years, to men who remain at risk of significant infertility.

### Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

9. Cryopreservation before cancer treatment

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## Sources

Fertility problems: assessment and treatment (2013 updated 2017) NICE guideline CG156

## Your responsibility

### Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

### Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and

their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

### **Medical technologies guidance, diagnostics guidance and interventional procedures guidance**

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, 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 interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.