MD120 Lesson 1

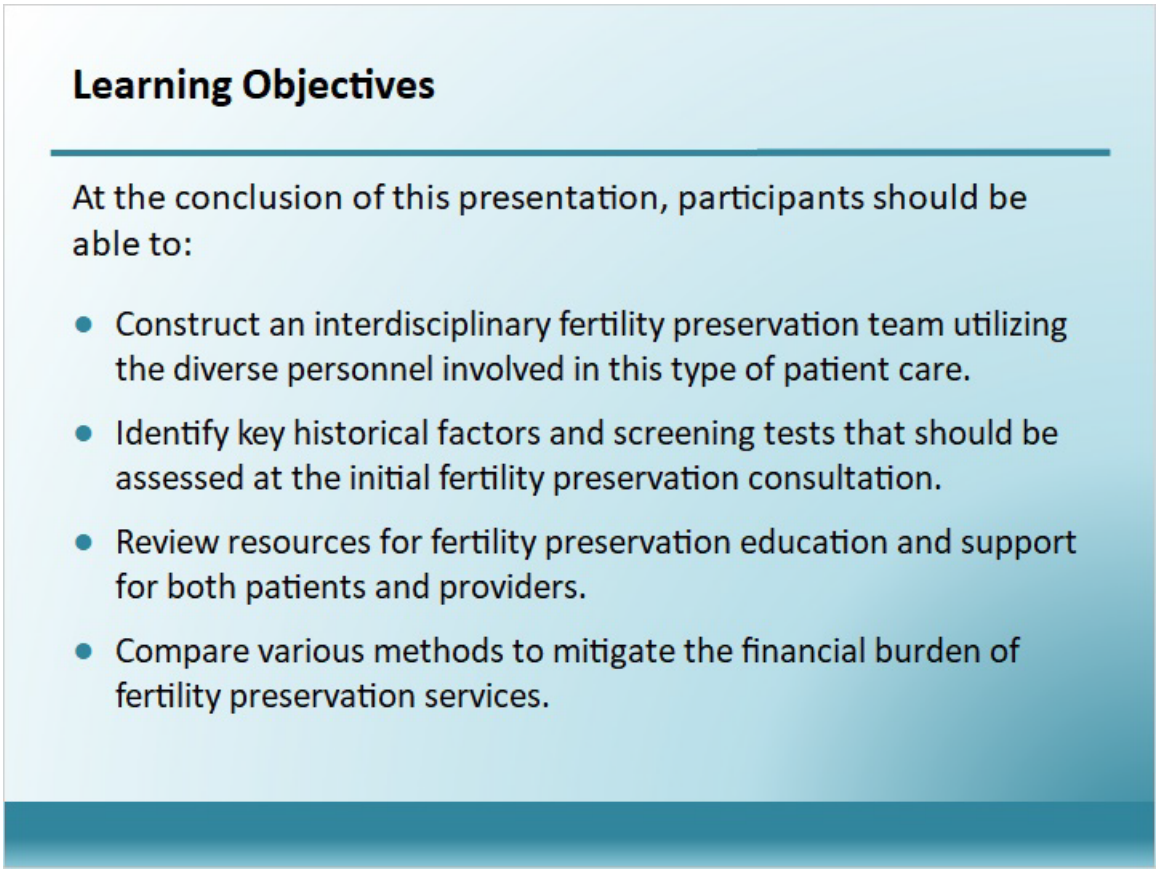
1. MD120_L1

1.1 Overview of the Initial Fertility Preservation Consultation

Notes:

Welcome to the American Society for Reproductive Medicine's eLearning modules. The subject of this presentation is "An overview of the initial fertility preservation consultation."

1.2 Learning Objectives

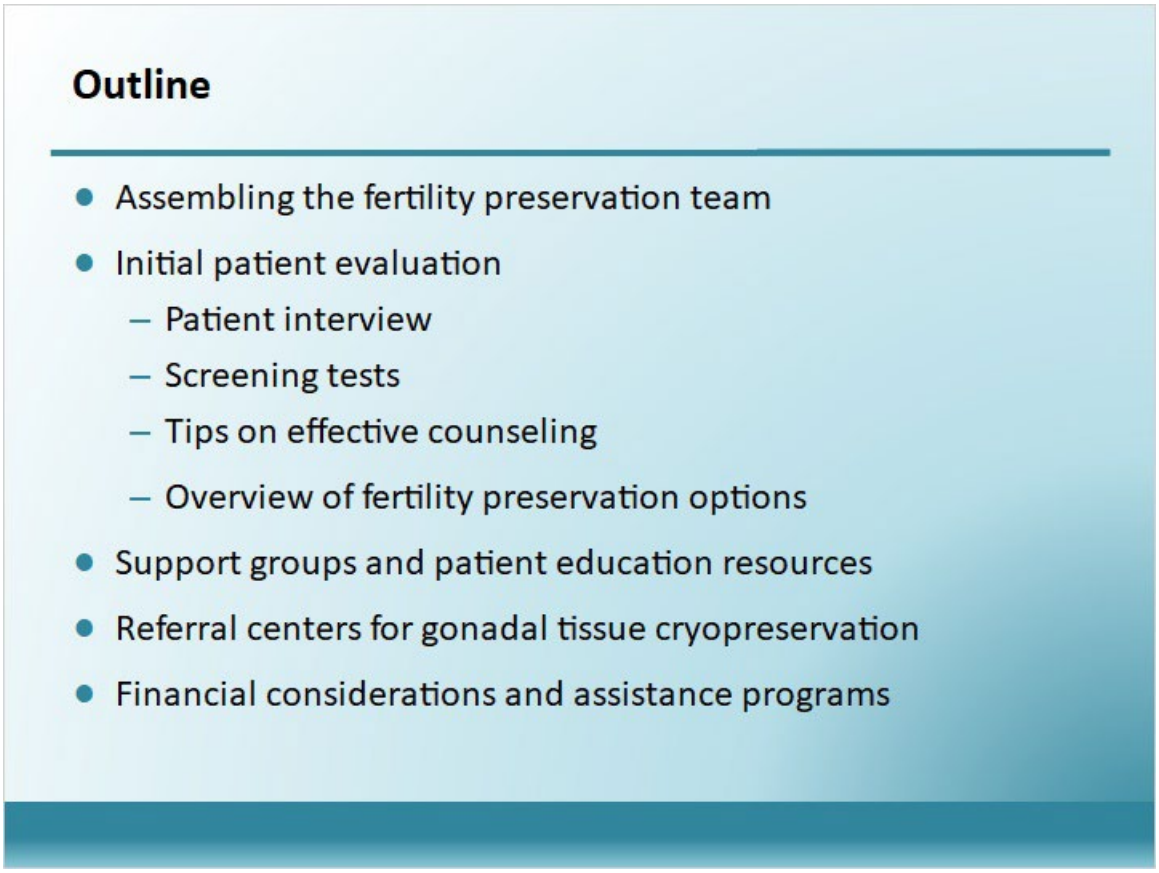


Notes:

At the conclusion of this presentation, participants should be able to:

Construct an interdisciplinary fertility preservation team utilizing the diverse personnel involved in this type of patient care.
Identify key historical factors and screening tests that should be assessed at the initial fertility preservation consultation.
Review resources for fertility preservation education and support for both patients and providers.
Compare various methods to mitigate the financial burden of fertility preservation services.

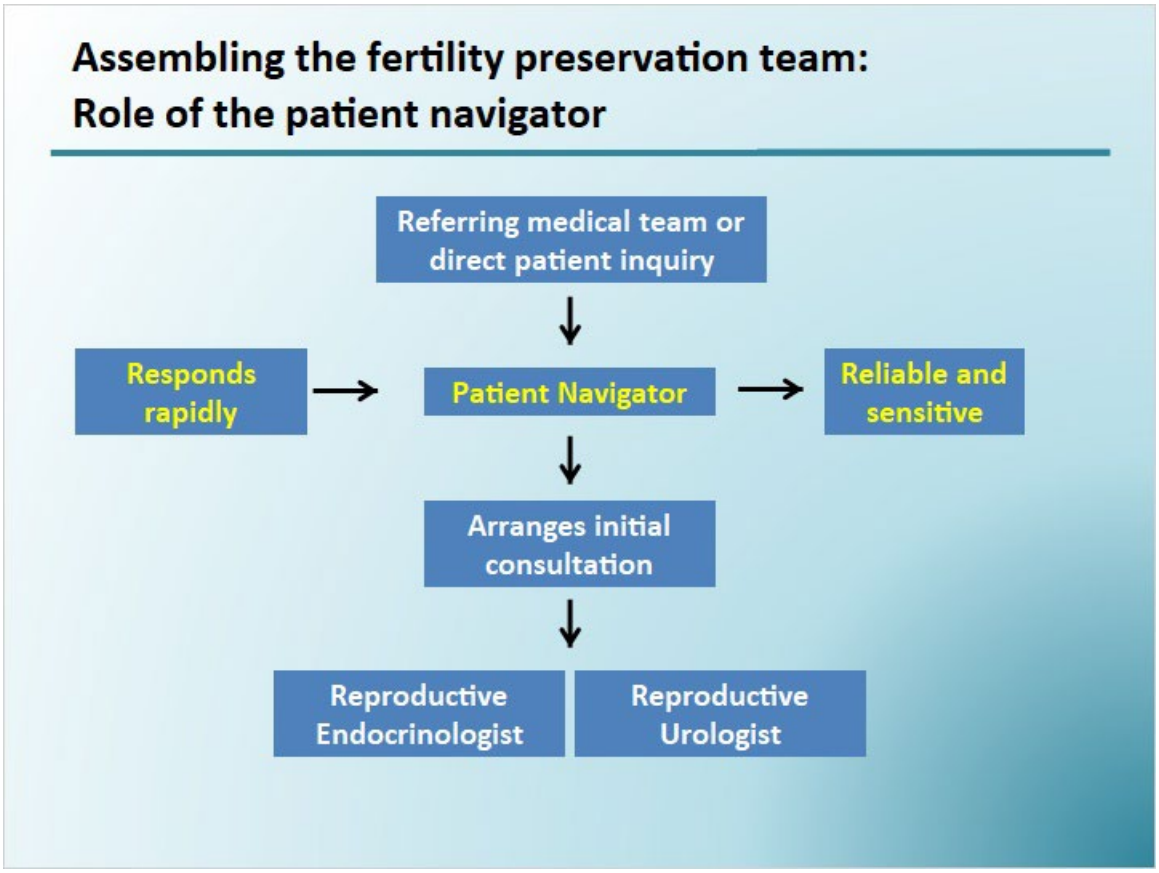
1.3 Outline



Notes:

This introductory presentation will begin by providing a clear framework for assembling an interdisciplinary fertility preservation team. The presentation will then review the initial evaluation of a patient seeking fertility preservation, focusing on key components of the patient interview, preliminary screening tests, and tips on effective patient counseling. The presentation will provide educational resources for patients and health care professionals seeking further information or fertility preservation services. Finally, the presentation will describe the financial hurdles faced by fertility preservation patients and review some potential means by which these can be mitigated.

1.4 Assembling the fertility preservation team:



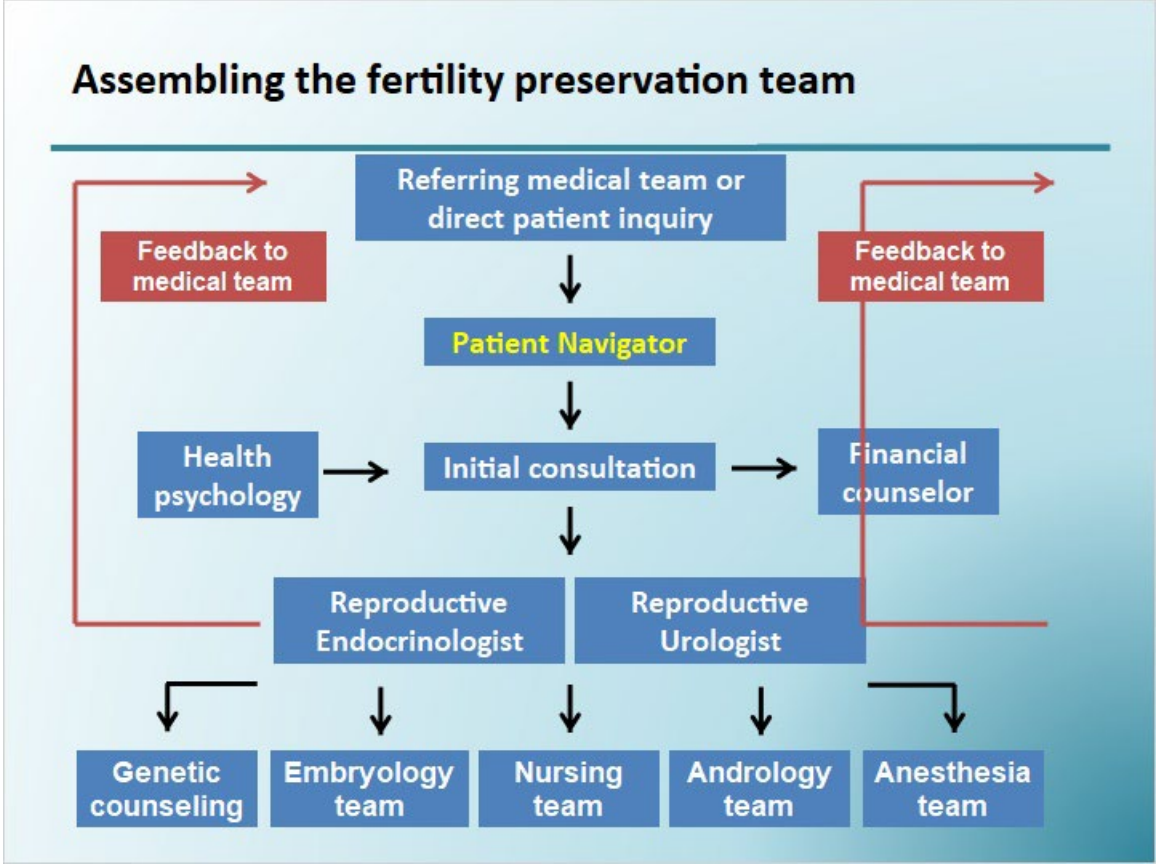
Notes:

It is ideal if patients and referring medical providers seeking fertility preservation services can identify a single person with whom to establish initial contact. Sometimes referred to as a "patient navigator," this individual takes responsibility for coordinating the various logistic, medical, and administrative aspects of fertility preservation care. While high volume fertility preservation programs may have a dedicated full-time patient navigator, smaller or developing programs may use an administrative assistant or call center employee who has been specially trained for this purpose. Regardless, it is helpful to have a dedicated phone number and email address for fertility preservation inquiries. An ideal patient navigator is easy to reach, reliable, and has the ability to arrange fertility preservation consultations with a reproductive endocrinologist or urologist in a rapid fashion due to the time sensitive nature of the care. The individual should also be sensitive to the unique needs and stressors of the population of patients seeking fertility preservation. When the patient navigator is away, it is important that a fertility preservation program have a clearly defined system in place for another individual to assume these responsibilities.

Communication with the patient navigator can be facilitated by marketing and outreach

efforts that help educate referring medical providers and the local community about the availability of fertility preservation programs and available services.

1.5 Assembling the fertility preservation team



Notes:

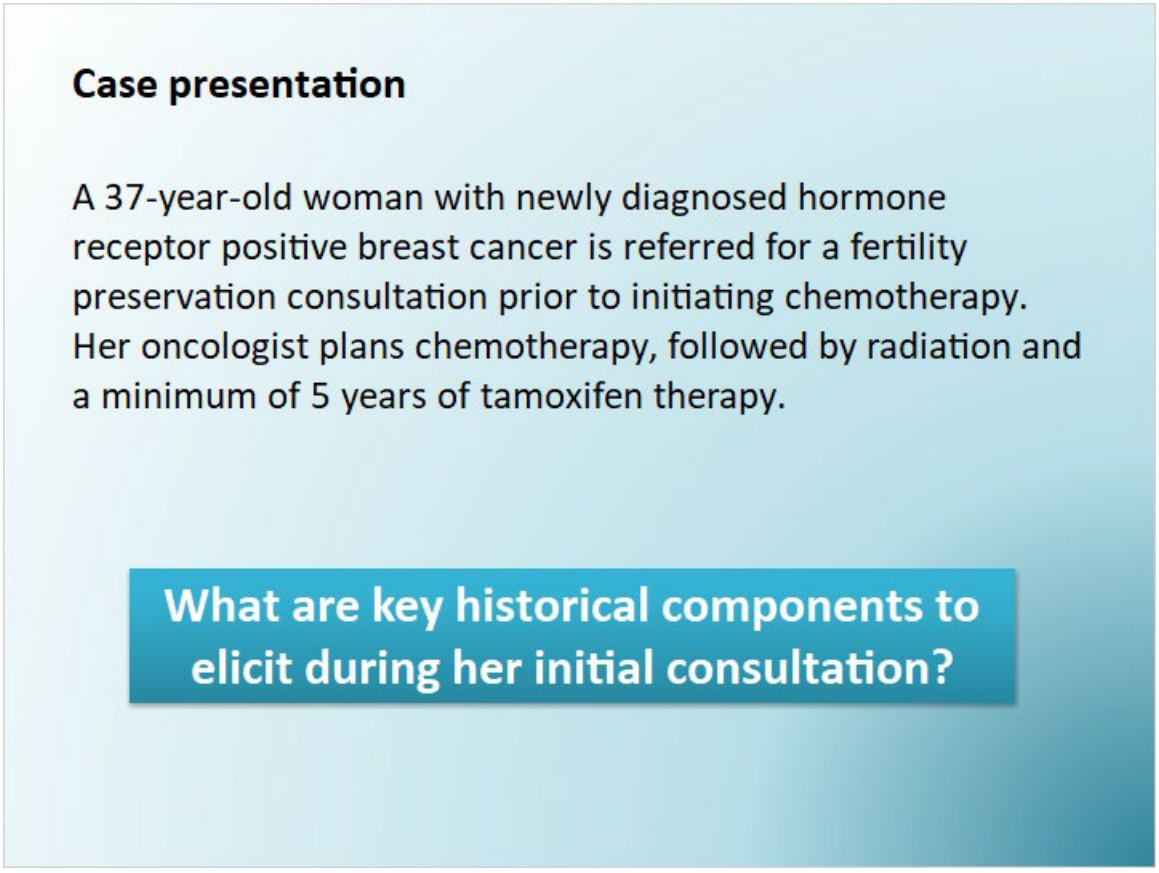
A coordinated and interdisciplinary team is essential to provide comprehensive care for patients seeking fertility preservation. The initial consultation is typically led by either a reproductive endocrinologist or reproductive urologist. These physicians will direct fertility preservation treatments in coordination with the relevant embryology, nursing, and andrology teams.

Equally vital to the initial consultation is a financial counselor, who can assist with insurance benefits, delineate out-of-pocket costs, advocate on behalf of the patient for insurance coverage based on medical necessity, and help with applications to financial assistance programs. Health psychology or social work services should also be offered at this time given the unique stressors involved in the fertility preservation decision making process. These individuals may provide emotional support and/or discuss the

psychology of reproducing in the setting of chronic illness. Depending on the clinical scenario and anticipated treatment, anesthesia providers and genetic counselors may also play a role.

The reproductive endocrinologist or urologist is ultimately responsible for maintaining communication with the patient's medical teams to ensure that all providers are comfortable with any planned fertility preservation treatments.

1.6 Case presentation



Notes:

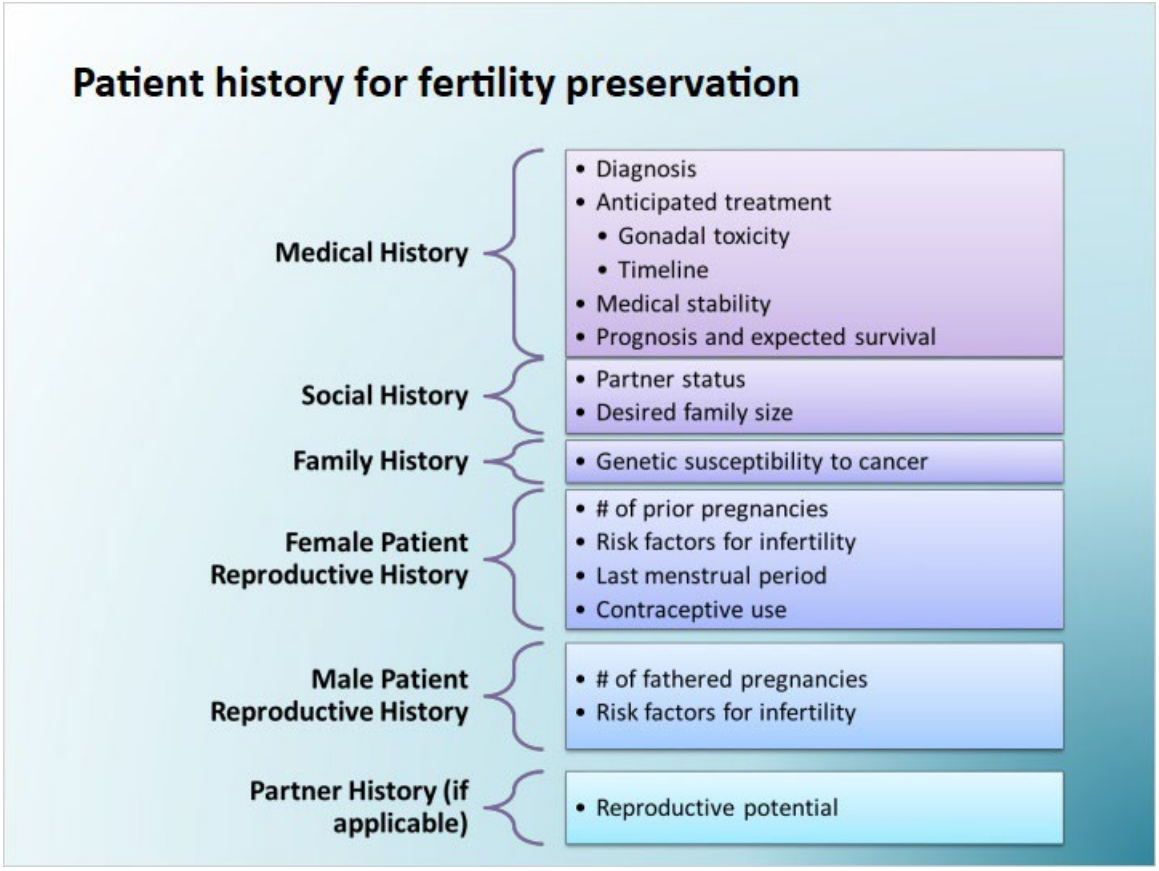
To illustrate the key components of the initial fertility preservation interview, we will begin with a fairly common clinical scenario.

A 37-year-old nulligravid woman with newly diagnosed estrogen and progesterone

receptor-positive breast cancer presents for a fertility preservation consultation prior to initiating chemotherapy. Her oncologist has told her that she will undergo chemotherapy, followed by radiation and a minimum of 5 years of tamoxifen therapy.

What are key historical components to elicit during her initial consultation?

1.7 Patient history for fertility preservation



Notes:

A detailed medical history is central to the first fertility preservation consultation. Practitioners typically begin by exploring the medical diagnosis prompting the consultation and the gonadotoxic potential of any proposed treatment. One must also be aware of the anticipated timeline for treatment to determine if any flexibility exists to allow time for a fertility preservation procedure. Finally, appropriate counseling requires an in-depth understanding of a patient's anticipated prognosis and survival to determine if he or she is healthy enough to pursue various fertility preservation treatments.

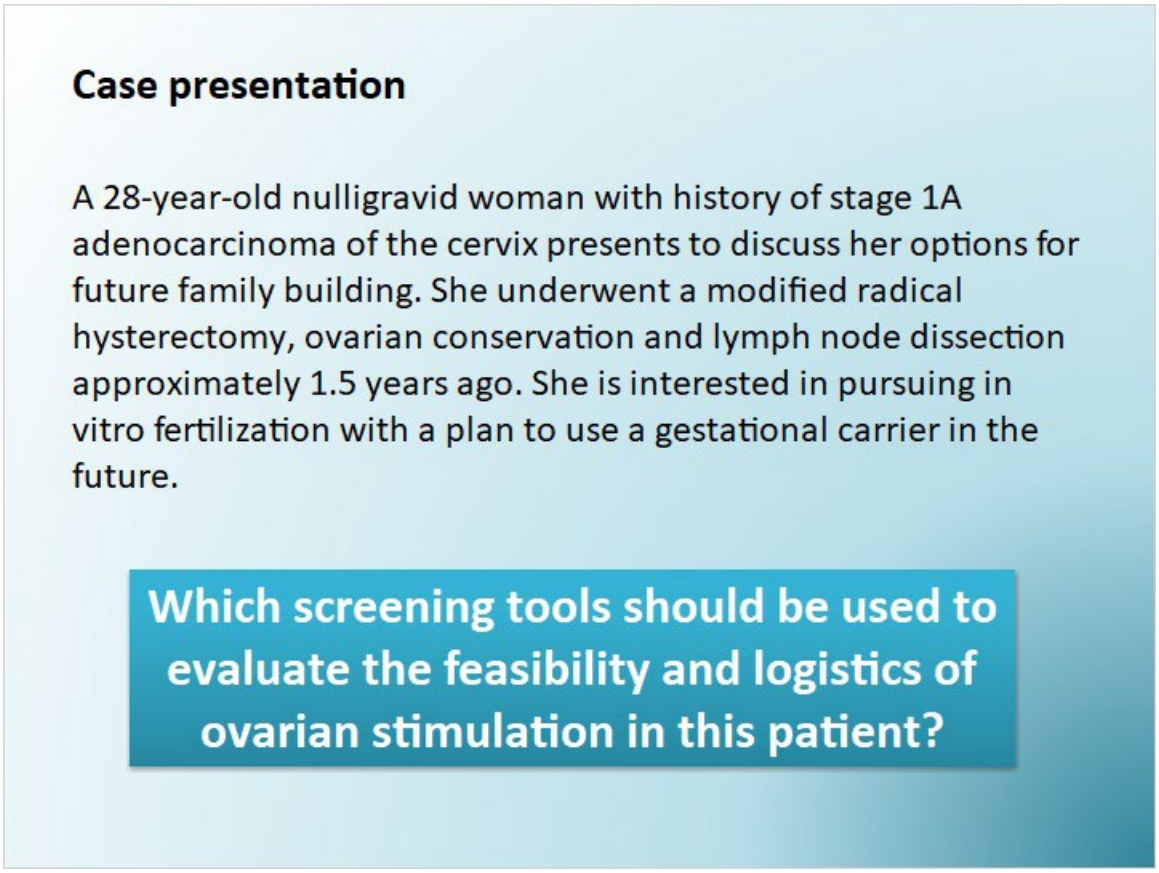
A patient's partner status or willingness to use donor gametes as well as desired family size are

key components of the social history. A family history suggestive of a genetic predisposition to cancer may impact the desire to undergo preimplantation genetic diagnosis as part of fertility preservation treatment.

The reproductive histories focus on the patient's prior reproductive history and fertility potential as well as the current menstrual status of a female patient. In female patients, it is also important to elicit any history that may be indicative of reproductive disorders that could impact the process or efficacy of ovarian stimulation. Male patients should similarly be assessed for any risk factors for infertility that may impact the quality or quantity of sperm available for preservation.

While post-pubertal male patients may cryopreserve sperm regardless of whether they are partnered, the partner status of a female patient is important to consider when deciding between oocyte and embryo cryopreservation. If a female patient presents for fertility preservation with a male partner with whom she desires to co-parent, an assessment of the partner's reproductive potential should be made. If a female patient presents for fertility preservation with a female partner or without a partner, the use of donor sperm should be discussed.

1.8 Case presentation



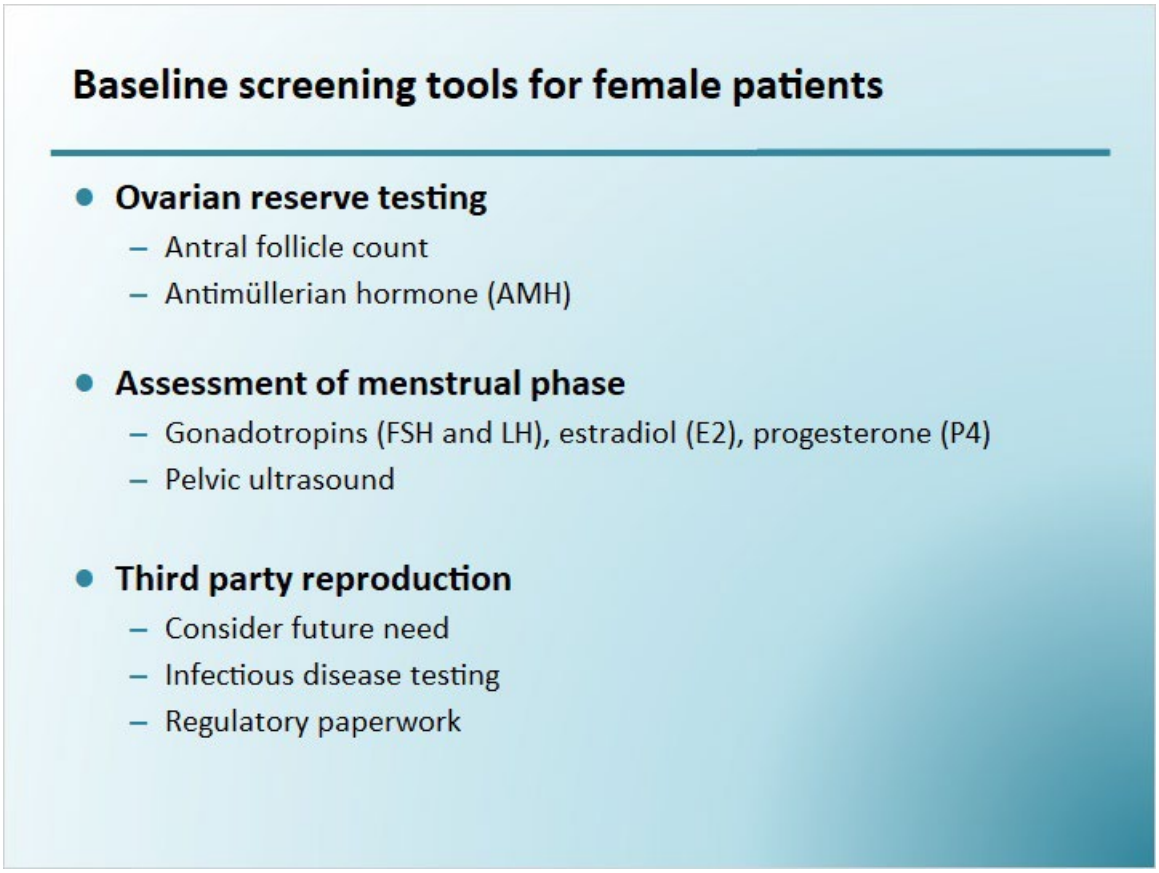
Notes:

In addition to the patient interview, the initial fertility preservation consultation typically involves baseline screening to establish an individual's current reproductive potential. Consider the following case presentation to determine how initial screening may be helpful for treatment planning.

A 28-year-old nulligravid woman with history of stage 1A adenocarcinoma of the cervix presents to discuss her options for future family building. She underwent a modified radical hysterectomy, ovarian conservation and lymph node dissection approximately 1.5 years ago. She is interested in pursuing in vitro fertilization with a plan to use a gestational carrier in the future.

Which screening tools should be used to evaluate the feasibility and logistics of ovarian stimulation in this patient?

1.9 Baseline screening tools for female patients



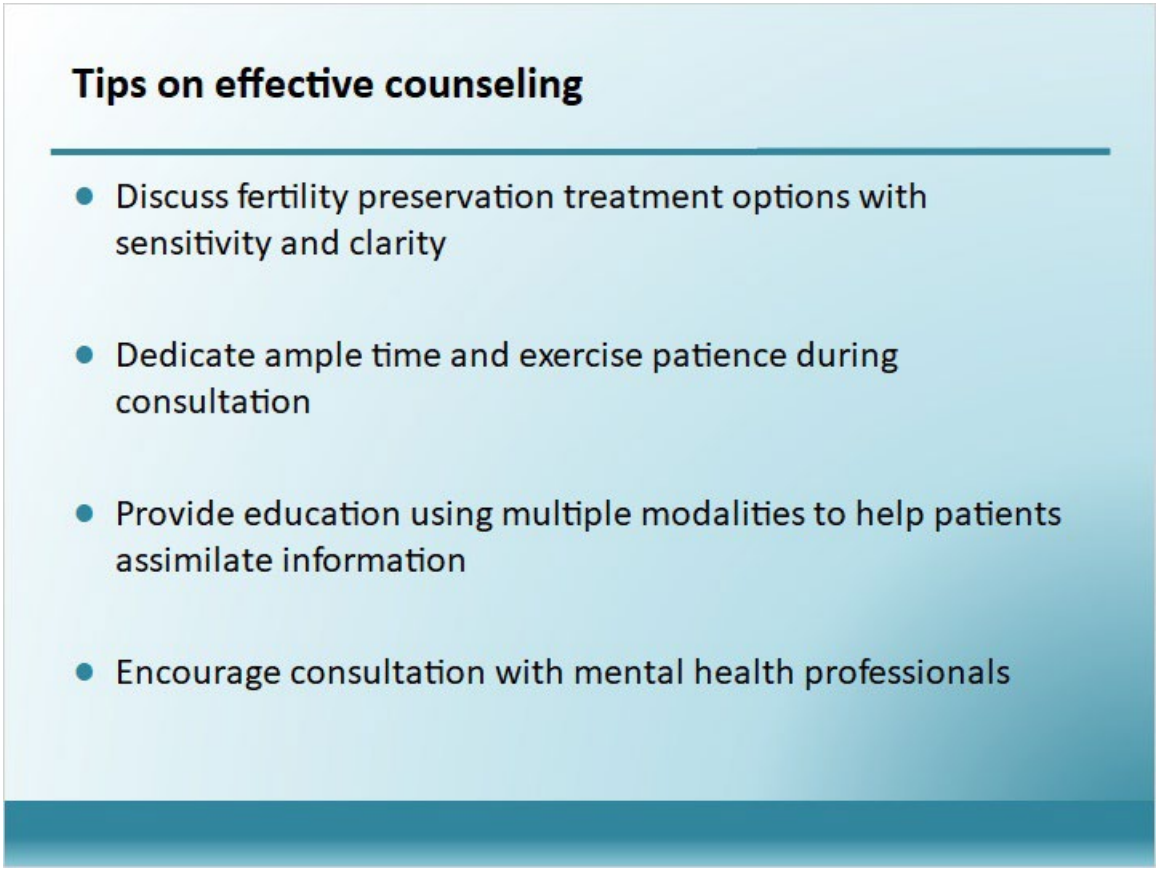
Notes:

In female patients, this typically entails an assessment of ovarian reserve with an antral follicle count and/or serum antimüllerian hormone (AMH). Since an antral follicle count can be performed during the initial fertility preservation consultation, it may be the preferred screening test in time sensitive clinical scenarios where ovarian stimulation must start immediately.

Assessment of the menstrual phase is another important consideration when planning ovarian stimulation. In patients with irregular or infrequent menses, laboratory studies including gonadotropins, estradiol, and progesterone in conjunction with a pelvic ultrasound to assess endometrial stripe thickness and follicular growth, are typically sufficient for this purpose.

Finally, the possibility of a patient requiring third party reproduction in the future should always be considered. Use of donor gametes and/or gestational carriers is tightly regulated in the United States by the Food and Drug Administration and is typically associated with high out-of-pocket costs. Requisite testing and documentation should be obtained prior to the time of gamete retrieval.

1.10 Tips on effective counseling

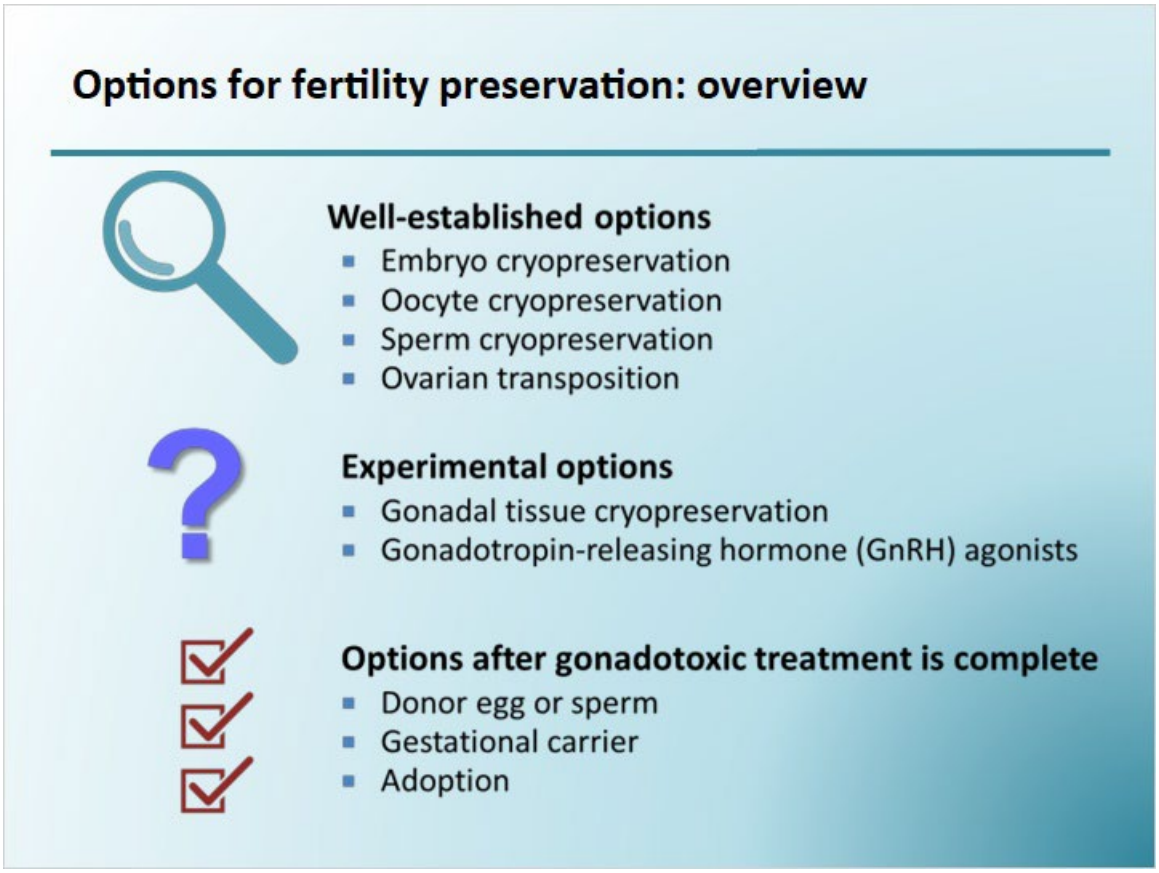


Notes:

Since the initial fertility preservation consultation frequently follows a recent diagnosis of cancer or chronic disease, patients may have had minimal time to process their medical diagnosis, let alone its impact on their future fertility. Effective counseling is therefore imperative.

It is important that the fertility preservation provider use sensitivity and clarity when describing options for treatment or lack thereof. Dedicating ample time to perform this counseling is essential, as many questions are likely to arise through the course of the discussion. It is important to exercise patience when speaking with a patient who may have difficulty assimilating the detailed information necessary to communicate options for fertility preservation. Providing patients with this information using multiple modalities including oral and written descriptions as well as web-based resources, can also be helpful in increasing retention. Finally, working closely with mental health professionals and encouraging patients to utilize counseling services is an integral part of the interdisciplinary care of the fertility preservation patient.

1.11 Options for fertility preservation: overview



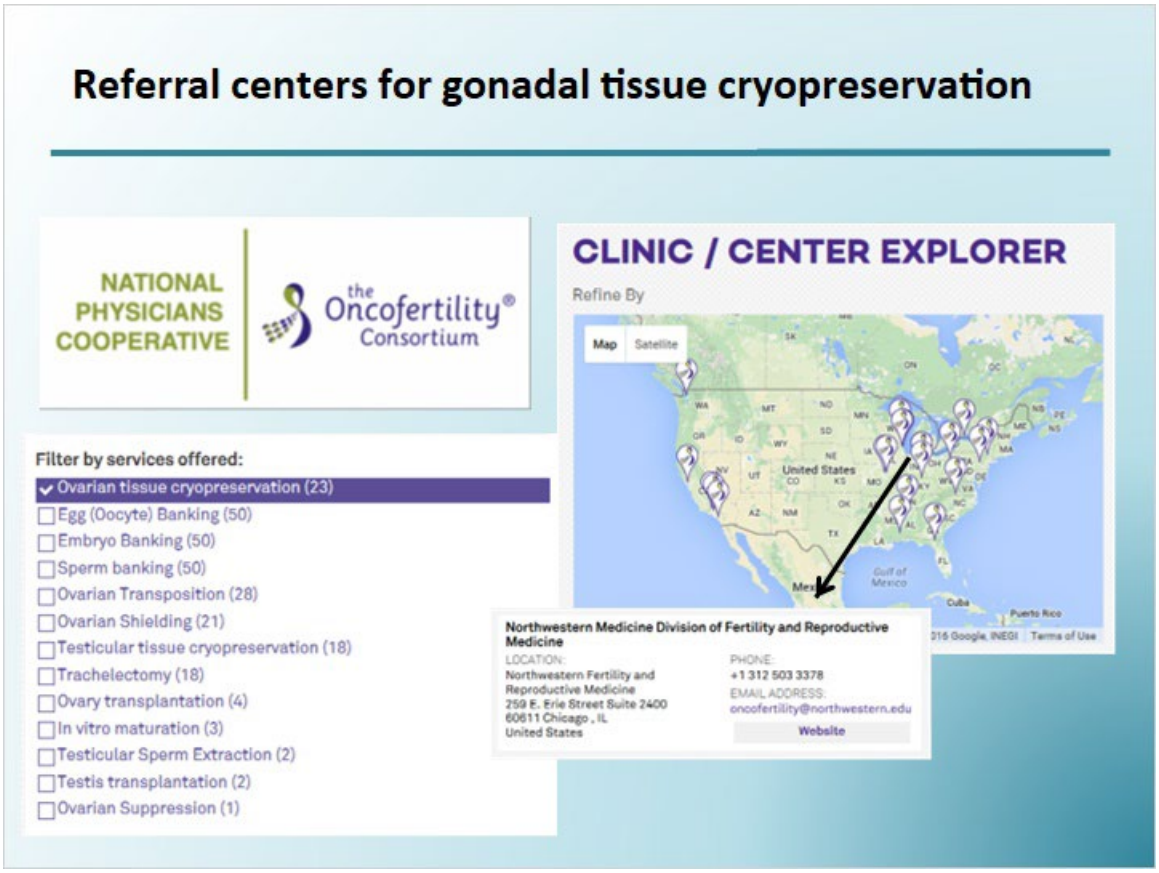
Notes:

Patients should leave the initial consultation familiar with the available treatment options for fertility preservation, as well as the range of options for family building after gonadotoxic treatment is complete. The well-established options include cryopreservation of oocytes, sperm, or embryos, in advance of any planned gonadotoxic therapy. The benefit of surgical transposition of the ovaries out of a planned radiation field is also well-established. The experimental cryopreservation of ovarian tissue may be among the only options available to pre-pubertal females or those who cannot delay gonadotoxic cancer treatment for an ovarian stimulation cycle. The use of GnRH agonists for ovarian protection prior to gonadotoxic therapy is also experimental at this time.

It is equally important for patients to be aware that options for family building do not cease once gonadal toxicity has been established. Third party reproduction with use of donor eggs, donor sperm, or gestational carriers can be considered, as can adoption.

These various treatment options for fertility preservation will be covered in greater detail throughout the modules that comprise this course.

1.12 Referral centers for gonadal tissue cryopreservation



Notes:

The National Physicians Cooperative (NPC) is a federation of fertility programs that work together to share practice plans and ensure that patients receive the most authoritative and timely care. Select NPC centers agree to offer experimental ovarian and/or testicular cryopreservation under an institutional review board (IRB) approved research protocols. A comprehensive list of these centers with relevant contact information is

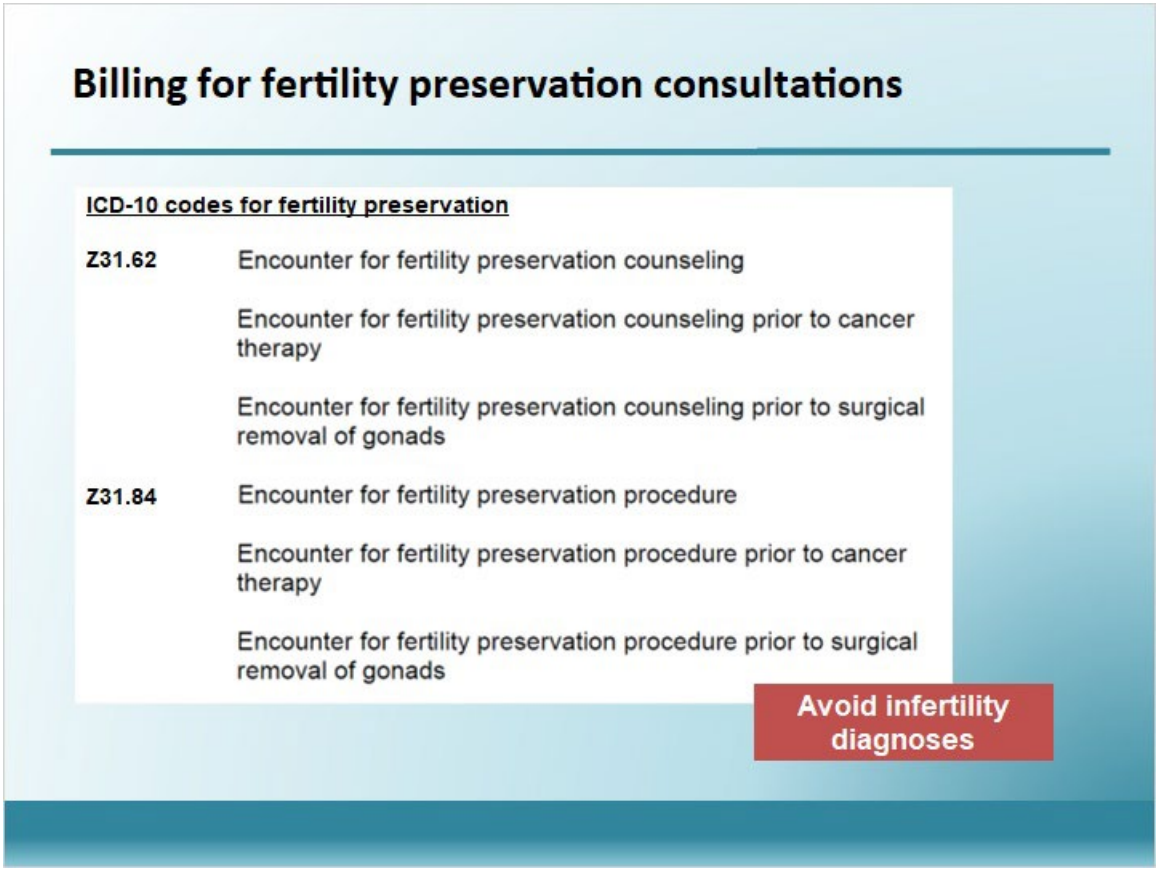
available through the Oncofertility Consortium website and can be searched by location and/or services offered. This resource may be valuable in counseling patients about experimental options that are not universally available at all centers.

1.13 Online fertility preservation resources

Notes:

A variety of resources are available online to assist both patients and health care professionals involved in fertility preservation. Several prominent websites are listed here. These sites can help patients identify fertility preservation providers or support and advocacy groups, and also provide detailed educational materials directed towards particular diagnoses and/or treatments that may be damaging to fertility. Many of the same organizations have separate sections for health care professionals involved in fertility preservation. These provide fertility risk assessment tools that can estimate the gonadal toxicity of various chemotherapies or radiation exposure and also review various options for financial assistance, insurance appeals, and referrals for experimental treatment. Health care providers involved in fertility preservation should familiarize themselves and their teams with the most up to date online resources.

1.14 Billing for fertility preservation consultations

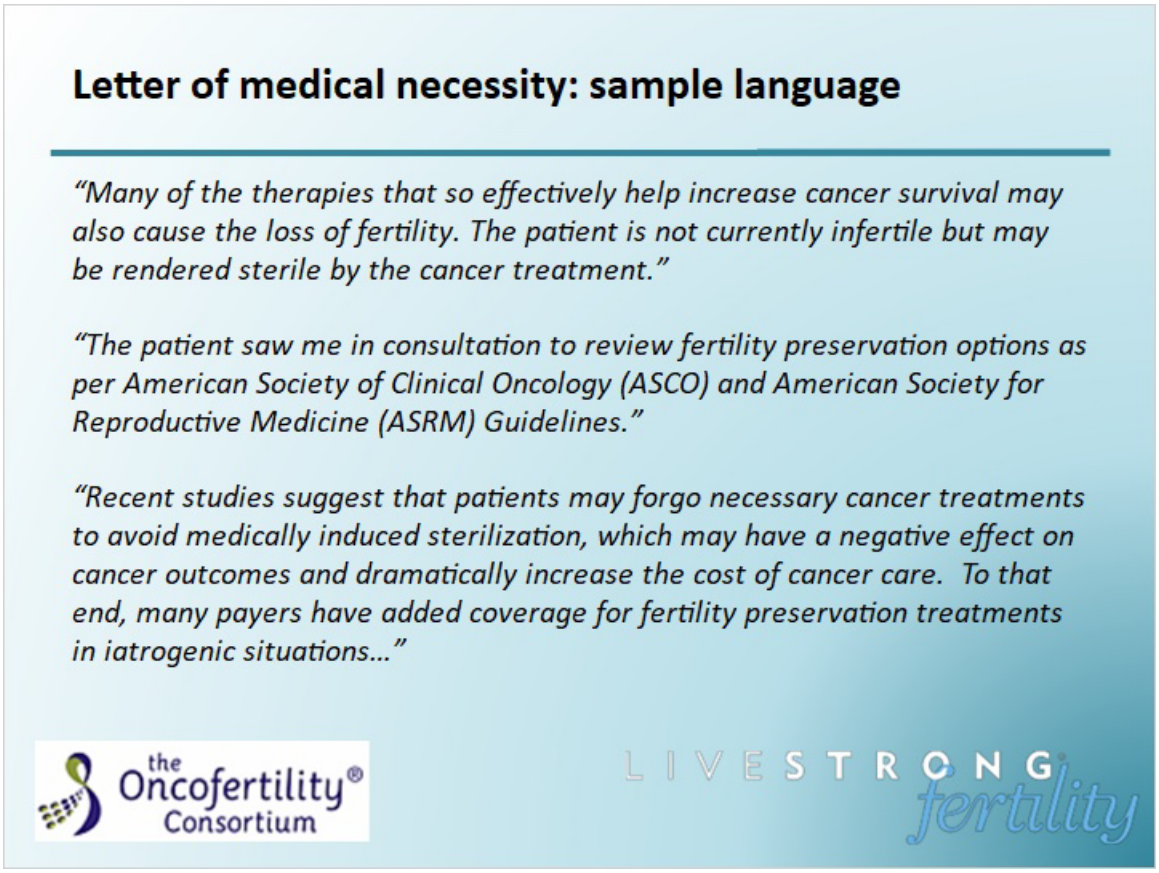


Notes:

Unfortunately, insurance coverage for fertility treatments is both limited and inconsistent even among individuals who have become infertile as a result of cancer or medical treatments. Patients undergoing potential fertility preservation treatment are often not financially prepared for the excessive costs that may be involved. Prohibitive costs can limit access to fertility preservation services for many patients.

Fertility preservation programs should familiarize themselves with the coverage patterns and pre-authorization requirements for the major insurers in their local and regional community. Fertility preservation programs can also impact the likelihood of coverage through a few simple billing measures. It is essential to use the cancer diagnosis, rather than infertility, be used as the primary diagnosis code for the consultation. Additionally, medical procedural codes specific to fertility preservation have been developed and should be used when processing reimbursement claims.

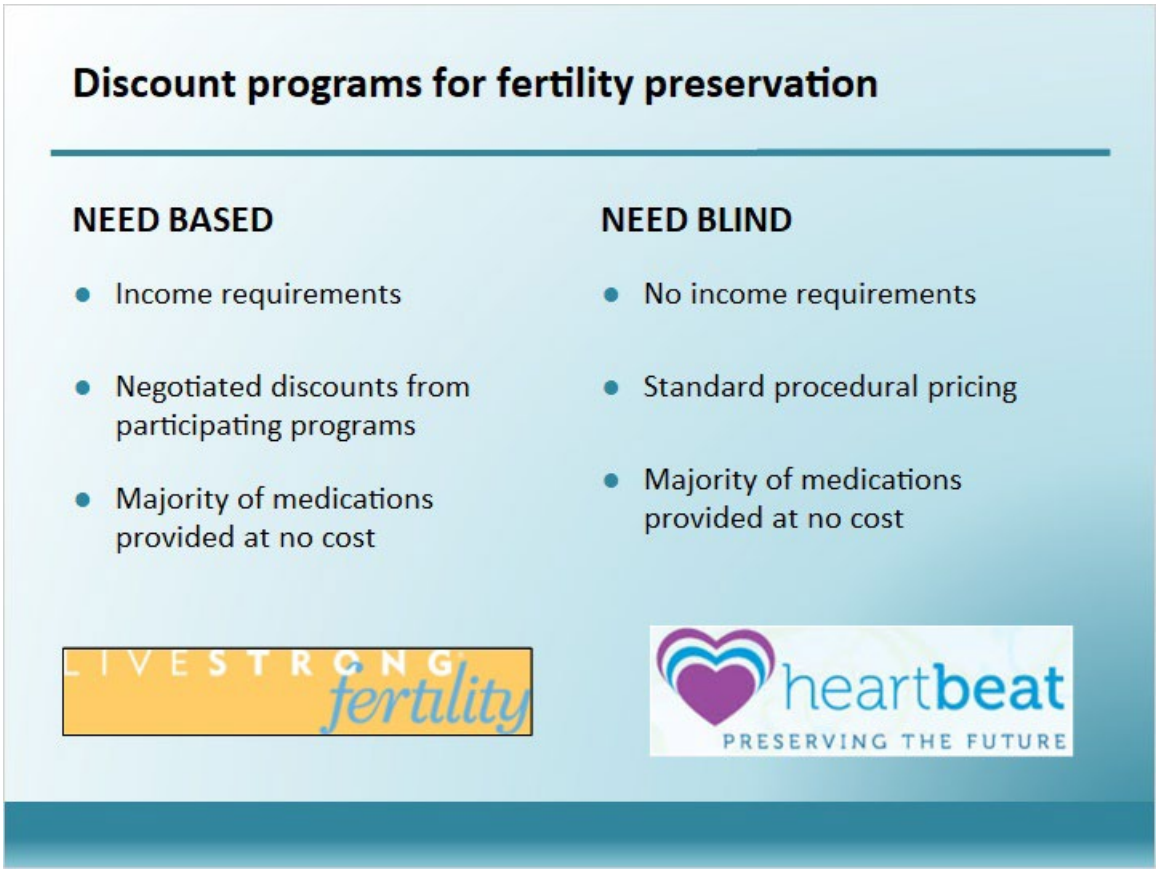
1.15 Letter of medical necessity: sample language



Notes:

Often, these billing measures are combined with letters of appeal or medical necessity written on the behalf of patients by fertility preservation providers. Several fertility preservation advocacy groups including LIVESTRONG Fertility and the Oncofertility Consortium have sample letters on their websites that are available for download and use.

1.16 Discount programs for fertility preservation

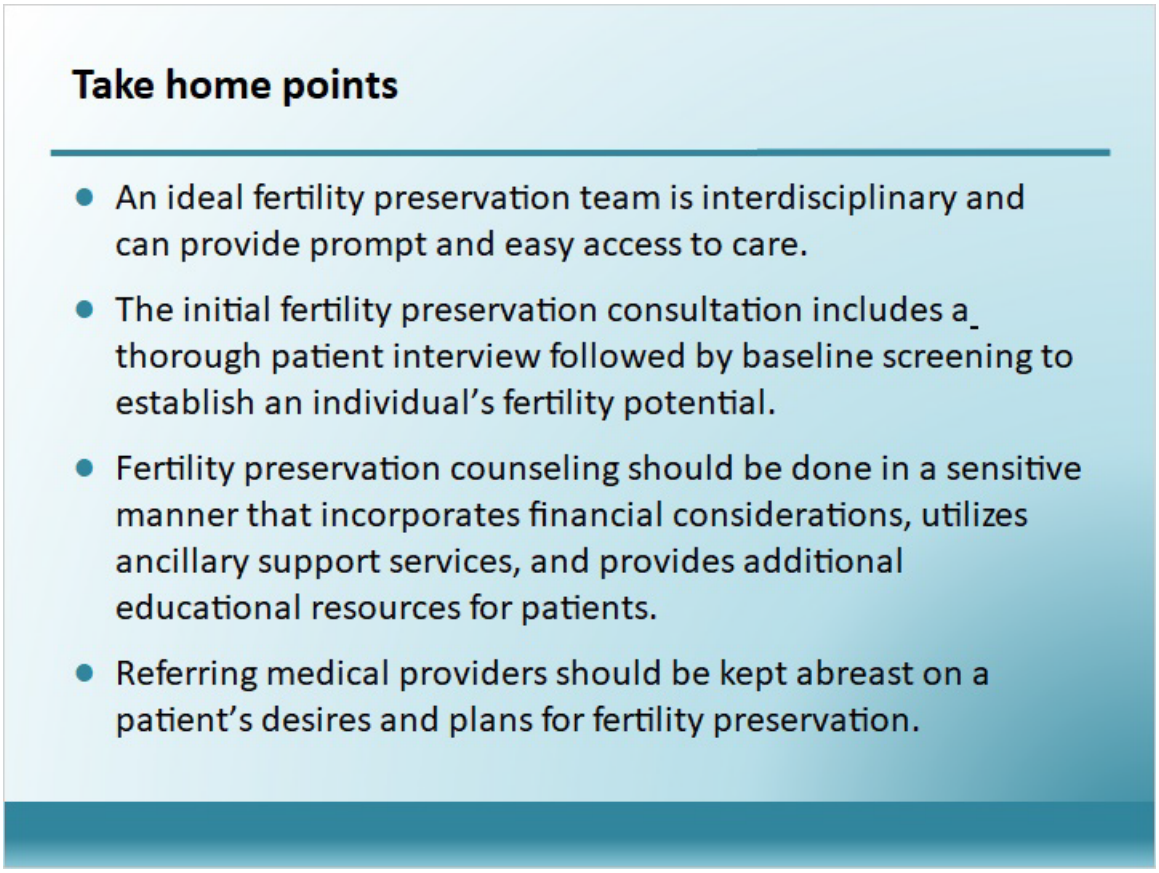


Notes:

Several national programs exist to help mitigate the costs involved in fertility preservation, two examples of which are shown here. The LIVESTRONG Fertility Discount Program is run by a non-profit organization that helps connect cancer patients seeking fertility preservation services with fertility centers and sperm banks who have agreed to provide these services at a discounted rate. The program provides the majority of medications at no cost, but has income requirements for participation. The Heartbeat Program, run by a pharmaceutical company in partnership with a national pharmacy, has no income requirements for participation. Though there are no discounts for fertility preservation procedures or services through the Heartbeat Program, a majority of the fertility preservation medications are provided at no cost.

Fertility preservation providers should familiarize themselves with up to date information about these and similar programs in order to improve access to fertility preservation care for their patients.

1.17 Take home points



Notes:

In summary, the ideal fertility preservation team is one that is interdisciplinary and easily accessible by patients and referring providers to initiate consultation requests in a prompt and efficient manner. The initial consultation must include a thorough patient interview followed by baseline evaluation of a patient's fertility potential in order to best determine appropriate treatment options. The discussion of fertility preservation services is not complete without sensitive counseling that incorporates financial considerations, utilizes ancillary support services, and provides additional educational resources for patients. Referring medical providers should be kept abreast on a patient's desires and plans and timeline for fertility preservation to ensure that all parties are comfortable with the plan of care.

1.18 Thank you!

Notes:

Thank you for your participation. We hope you enjoyed the course.