American Society of Clinical Oncology Clinical Practice Survivorship Guidelines and Adaptations:

Summary of Recommendations Tables
# Table of Contents

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention and Management of Chemotherapy-Induced and Peripheral Neuropathy in Survivors of Adult Cancers</td>
<td>3</td>
</tr>
<tr>
<td>Screening, Assessment, and Management of Fatigue in Adult Survivors of Cancer</td>
<td>7</td>
</tr>
<tr>
<td>Screening, Assessment, and Care of Anxiety and Depressive Symptoms in Adults with Cancer</td>
<td>10</td>
</tr>
<tr>
<td>Follow-Up Care, Surveillance Protocol, and Secondary Prevention Measures for Survivors of Colorectal Cancer</td>
<td>20</td>
</tr>
<tr>
<td>Fertility Preservation in Patients with Cancer</td>
<td>22</td>
</tr>
<tr>
<td>Breast Cancer Follow-Up and Management after Primary Treatment</td>
<td>26</td>
</tr>
</tbody>
</table>
### PREVENTION AND MANAGEMENT OF CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY IN SURVIVORS OF ADULT CANCERS: AMERICAN SOCIETY OF CLINICAL ONCOLOGY CLINICAL PRACTICE GUIDELINE

<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What are the optimum prevention approaches in the management of chemotherapy-induced neuropathies in adult cancer survivors?</strong></td>
<td>There are no established agents recommended for the prevention of CIPN in cancer patients undergoing treatment with neurotoxic agents. This is based on the paucity of high-quality, consistent evidence and a balance of benefits versus harms.</td>
<td>Type: Evidence-based Harms outweigh benefits Evidence quality: Ranges from low to high Strength of Recommendation: Ranges from inconclusive to strong against</td>
</tr>
</tbody>
</table>

Clinicians should not offer the following agents for the prevention of CIPN to cancer patients undergoing treatment with neurotoxic agents:
- acetyl-L-carnitine (ALC)
- amifostine
- amitriptyline
- CaMg for patients receiving oxaliplatin-based chemotherapy
- diethylldithio-carbamate (DDTC)
- glutathione (GSH) for patients receiving paclitaxel/carboplatin chemotherapy
- nimodipine
- Org 2766
- all-*trans* retinoic acid
- rhuLIF
- vitamin E
### Prevention and Management of Chemotherapy-Induced Peripheral Neuropathy in Survivors of Adult Cancers: American Society of Clinical Oncology Clinical Practice Guideline

<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
<th>Evidence Rating</th>
</tr>
</thead>
</table>
| Continued, What are the optimum prevention approaches in the management of chemotherapy-induced neuropathies in adult cancer survivors? | Venlafaxine is not recommended for routine use in clinical practice. While the venlafaxine data supports its potential utility, the data were not strong enough to recommend its use in clinical practice, until additional supporting data become available. | Type: Evidence-based  
Balance of benefits and harms  
Evidence quality: Intermediate  
Strength of Recommendation: Inconclusive |
|                                                            | No recommendations can be made on the use of N-acetylcysteine, carbamazepine, glutamate, glutathione for patients receiving cisplatin or oxaliplatin-based chemotherapy, goshajinkigan (GJG), omega-3 fatty acids, or oxycarbazepine for the prevention of CIPN at this time. | Type: Evidence-based  
Balance of benefits and harms  
Evidence quality: Low  
Strength of recommendation: Inconclusive |
| Continued, What are the optimum treatment approaches in the management of chemotherapy-induced neuropathies in adult cancer survivors? | For cancer patients experiencing CIPN, clinicians may offer duloxetine. | Type: Evidence-based  
Benefits outweigh harms  
Evidence quality: Intermediate  
Strength of Recommendation: Moderate |
|                                                            | No recommendations can be made on the use of acetyl-L-carnitine, noting that a positive phase III abstract supported its value, but this work has not yet been published in a peer-reviewed journal and a prevention trial suggested that this agent was associated with worse outcomes. | Type: Evidence-based  
Harms outweigh benefits  
Evidence quality: Low  
Strength of Recommendation: Inconclusive |
<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
<th>Evidence Rating</th>
</tr>
</thead>
</table>
| Continued, What are the optimum treatment approaches in the management of chemotherapy-induced neuropathies in adult cancer survivors? | No recommendations can be made on the use of tricyclic antidepressants. However, based on the limited options that are available for this prominent clinical problem and the demonstrated efficacy of these drugs for other neuropathic pain conditions, it is reasonable to try a tricyclic antidepressant (e.g., nortriptyline or desipramine) in patients suffering from CIPN following a discussion with the patients about the limited scientific evidence for CIPN, potential harms, benefits, cost, and patient preferences. | Type: Evidence-based  
Balance of benefits and harms  
Evidence quality: Intermediate  
Strength of Recommendation: Inconclusive |
|                                                                                  | No recommendations can be made on the use of gabapentin, noting that the available data were limited regarding its efficacy for treating CIPN. However, the panel felt that this agent is reasonable to try for selected patients with CIPN pain given that only a single negative randomized trial for this agent was completed, given the established efficacy of gabapentin and pregabalin for other forms of neuropathic pain, and given the limited CIPN treatment options. Patients should be informed about the limited scientific evidence for CIPN, potential harms, benefits, and costs. | Type: Evidence-based  
Balance of benefits and harms  
Evidence quality: Intermediate  
Strength of Recommendation: Inconclusive |
**PREVENTION AND MANAGEMENT OF CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY IN SURVIVORS OF ADULT CANCERS: AMERICAN SOCIETY OF CLINICAL ONCOLOGY CLINICAL PRACTICE GUIDELINE**

<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
<th>Evidence Rating</th>
</tr>
</thead>
</table>
|                   | No recommendations can be made on the use of a topical gel treatment containing baclofen (10 mg), amitriptyline HCL (40 mg), and ketamine (20 mg), noting that a single trial supported that this product did decrease CIPN symptoms. Given the available data, the panel felt that this agent is reasonable to try for selected patients with CIPN pain. Patients should be informed about the limited scientific evidence for the treatment of CIPN, potential harms, benefits, and costs. | Type: Evidence-based  
Benefits outweigh harms  
Evidence quality: Intermediate  
Strength of Recommendation: Inconclusive |
Clinical Question: What are the optimal screening, assessment, and treatment approaches in the management of adult cancer survivors who are experiencing symptoms of fatigue after completion of primary treatment?

### Recommendations: Screening

All health care providers should routinely screen for the presence of fatigue from the point of diagnosis onward, including following completion of primary treatment.

All patients should be screened for fatigue as clinically indicated and at least annually.

Screening should be performed and documented using a quantitative or semi-quantitative assessment.

### Recommendations: Comprehensive and Focused Assessment

#### History and Physical

1. Perform a focused fatigue history
2. Evaluate disease status
3. Assess treatable contributing factors

As a shared responsibility, the clinical team must decide when referral to an appropriately trained professional (e.g., cardiologist, endocrinologist, mental health professional, internist, etc.) is needed.

#### Laboratory Evaluation

Consider performing laboratory evaluation based on presence of other symptoms, onset, and severity of fatigue
**Recommendations: Treatment and Care Options**

**Education and Counseling**

All patients should be offered specific education about fatigue following treatment (e.g. information about the difference between normal and cancer-related fatigue, persistence of fatigue post treatment, and causes and contributing factors).

Patients should be offered advice on general strategies that help manage fatigue.

If treated for fatigue, patients should be followed and re-evaluated on a regular basis to determine whether treatment is effective or needs to be reassessed.

**Contributing Factors**

Address all medical and treatable contributing factors first (e.g., pain, depression, anxiety, emotional distress, sleep disturbance, nutritional deficit, activity level, anemia, medication side-effects, and comorbidities).

**Physical Activity**

Initiating/maintaining adequate levels of physical activity can reduce cancer-related fatigue in post-treatment survivors.

Actively encourage all patients to engage in a moderate level of physical activity after cancer treatment (e.g., 150 minutes of moderate aerobic exercise such as fast walking, cycling, or swimming) per week with an additional 2 to 3 strength training (such as weight lifting) sessions per week, unless contraindicated.

Walking programs are generally safe for most cancer survivors; the American College of Sports Medicine recommends that cancer survivors can begin this type of program after consulting with their doctors but without any formal exercise testing (such as a stress test).

Survivors at higher risk of injury (e.g., those living with neuropathy, cardiomyopathy, or other long-term effects of therapy) and patients with severe fatigue interfering with function should be referred to a physical therapist or exercise specialist. Breast cancer survivors with lymphedema should also consider meeting with an exercise specialist before initiating upper body strength-training exercise.
## Psychosocial Interventions

Cognitive behavioral therapy/behavioral therapy can reduce cancer related fatigue in post-treatment survivors.

Psycho-educational therapies/educational therapies can reduce cancer related fatigue in post-treatment survivors.

Survivors should be referred to psychosocial service providers who specialize in cancer and are trained to deliver empirically-based interventions. Psychosocial resources that address fatigue may also be available through the National Cancer Institute and other organizations.

## Mind-Body Interventions

There is some evidence that mindfulness-based approaches, yoga, and acupuncture can reduce fatigue in cancer survivors.

Additional research, particularly in the post-treatment population, is needed for biofield therapies (touch therapy), massage, music therapy, relaxation, reiki, and qigong.

Survivors should be referred to practitioners who specialize in cancer and who use protocols that have been empirically validated in cancer survivors.

## Pharmacological Interventions

Evidence suggests that psychostimulants (e.g., methylphenidate) and other wakefulness agents (e.g., modafinil) can be effectively used to manage fatigue in patients with advanced disease or those on active treatment. However there is very limited evidence of their effectiveness in reducing fatigue in patients following active treatment who are currently disease-free.

Small pilot studies have evaluated the impact of supplements, such as ginseng, vitamin D, and others for cancer-related fatigue. However, there is no consistent evidence of their effectiveness.
SCREENING, ASSESSMENT, AND CARE OF ANXIETY AND DEPRESSIVE SYMPTOMS IN ADULTS WITH CANCER: AN AMERICAN SOCIETY OF CLINICAL ONCOLOGY GUIDELINE ADAPTATION

Clinical Question: What are the optimum screening, assessment and psychosocial-supportive care interventions for adults with cancer who are identified as experiencing symptoms of depression and/or anxiety?

Recommendations: Screening for Depressive Symptoms

All patients should be screened for depressive symptoms at their initial visit, at appropriate intervals, and as clinically indicated, especially with changes in disease or treatment status (i.e., post-treatment, recurrence, progression) and transition to palliative and end-of-life care.

Screening suggested at initial diagnosis, start of treatment, regular intervals during treatment, end of treatment, post-treatment or at transition to survivorship, at recurrence or progression, advanced disease, when dying, and during times of personal transition or re-appraisal such as family crisis, during post-treatment survivorship and when approaching death.

Screening should be done using a valid and reliable measure that features reportable scores (dimensions) that are clinically meaningful (established cut-offs).
When assessing a person who may have depressive symptoms, a phased screening and assessment is recommended that does not rely simply on a symptom count.

- As a first step for all patients, identification of the presence or absence of pertinent history or risk factors (See Depression Algorithm.) is important for subsequent assessment and treatment decision making.

- As a second step, two items from the PHQ-9 can be used to assess for the classic depressive symptoms of low mood and anhedonia. For individuals endorsing either item (or both) as occurring for more than half of the time or nearly every day within the last two weeks (i.e., a score of > 2), a third step is suggested in which the patient completes the remaining items of the PHQ-9. It is estimated that 25-30% of patients would need to complete the remaining items.

- The traditional cutoff for the PHQ—9 is > 10. The Panel’s recommended cutoff score of > 8 is based on a study of the diagnostic accuracy of the PHQ-9 with cancer outpatients. A meta-analysis by Manea et al also supports the > 8 cutoff score.

- For patients completing the latter step it is important to determine the associated sociodemographic, psychiatric or health comorbidities, or social impairments, if any, and the duration that depressive symptoms have been present.

- Of special note, one of remaining seven items of the PHQ-9 assesses thoughts of self harm, i.e., “Thoughts that you would be better off dead or hurting yourself in some way.” Among patients with moderate to severe or severe depression, such thoughts are not rare. Having noted that, it is the frequency and/or specificity of the thoughts that are most important vis-a-vis risk. Some clinicians/practices may choose to omit the item from the PHQ-9 and administer 8-items. It should be noted, however, that doing may artificially lower the score, with the risk of some patients appearing to have fewer symptoms than they actually do. Such changes also weaken the predictive validity of the score and the clarity of the cutoff scores. It is important to note that individuals do not typically endorse a self-harm item exclusively or independent of other symptom; rather, it occurs with several other symptom endorsements. Thus, it is the patient’s endorsement of multiple symptoms that will define the need for services for moderate/severe to severe symptomatology.

Consider special circumstances in the assessment of depressive symptoms. These include but are not limited to the following: (a) use culturally sensitive assessments and treatments as is possible, (b) tailor assessment or treatment for those with learning disabilities or cognitive impairments, (c) be aware of the difficulty of detecting depression in the older adult.
**Recommendations: Assessment of Depressive Symptoms**

Specific concerns such as risk of harm to self and/or others, severe depression or agitation, or the presence of psychosis or confusion (delirium) require immediate referral to a psychiatrist, psychologist, physician, or equivalently trained professional.

Assessments should be a shared responsibility of the clinical team, with designation of those who are expected to conduct assessments as per scope of practice.

The assessment should identify signs and symptoms of depression, the severity of cancer symptoms (e.g., fatigue), possible stressors, risk factors, and times of vulnerability. A range of problem checklists is available to guide the assessment of possible stressors. Examples of these are accessible at [www.asco.org/adaptations/depression](http://www.asco.org/adaptations/depression). Clinicians can amend checklists to include areas not represented or ones unique to their patient populations.

Patients should first be assessed for depressive symptoms using the Patient Health Questionnaire 9 (PHQ-9). Table 2 in the guideline adaptation publication provides a list of other depressive symptom assessment measures, which can be used in follow up to the PHQ-98 or as alternatives.

If moderate to severe or severe symptomatology is detected through screening, individuals should have further diagnostic assessment to identify the nature and extent of the depressive symptoms and the presence or absence of a mood disorder.

Medical or substance-induced causes of significant depressive symptoms (e.g., Interferon administration) should be determined and treated.

As a shared responsibility, the clinical team must decide when referral to a psychiatrist, psychologist, or equivalently trained professional is needed. This includes, for example, all patients with a PHQ-9 score in the severe range or patients in moderate range but with pertinent history/risk factors. Such would be determined using measures with established reliability, validity, and utility (e.g., cut-off or normative data available) or standardized diagnostic interviews for assessment and diagnosis of depression.
For any patient who is identified as at risk of harm to self and/or others, refer to appropriate services for emergency evaluation. Facilitate a safe environment and one-to-one observation, and initiate appropriate harm-reduction interventions to reduce risk of harm to self and/or others.

First treat medical causes of depressive symptoms (e.g., unrelieved symptoms such as pain and fatigue) and delirium (e.g., infection or electrolyte imbalance).

For optimal management of depressive symptoms or diagnosed mood disorder use pharmacological and/or non-pharmacological interventions (e.g., psychotherapy, psycho-educational therapy, cognitive-behavioral therapy, and exercise) delivered by appropriately trained individuals.

These guidelines make no recommendations about specific antidepressant pharmacological regimens being better than another. The choice of an antidepressant should be informed by the side effect profiles of the medications, tolerability of treatment, including the potential for interaction with other current medications, response to prior treatment, and patient preference. Patients should be warned of any potential harm or adverse effects.

Offer support and provide education and information about depression and its management to all patients and their families, including what specific symptoms and what degree of symptom worsening warrants a call to the physician or nurse.

Special characteristics of depressive disorders are relevant for diagnosis and treatment, including the following:

- Many individuals (50-60%) with a diagnosed depressive disorder will have a comorbid anxiety disorder, with generalized anxiety being the most prevalent.
- If an individual has comorbid anxiety symptoms or disorder(s), the route is usually to treat the depression first.
- Some people have depression that does not respond to an initial course of treatment.
### SCREENING, ASSESSMENT, AND CARE OF ANXIETY AND DEPRESSIVE SYMPTOMS IN ADULTS WITH CANCER: AN AMERICAN SOCIETY OF CLINICAL ONCOLOGY GUIDELINE ADAPTATION

It is recommended to use a stepped care model and tailor intervention recommendations based on variables such as the following:

- Current symptomatology level and presence/absence of DSM-V diagnosis
- Level of functional impairment in major life areas
- Presence/absence of risk factors
- History of and response to previous treatments for depression
- Patient preference
- Persistence of symptoms following receipt of an initial course of depression treatment

Psychological and psychosocial interventions should derive from relevant treatment manuals for empirically supported treatments specifying the content and guiding the structure, delivery mode, and duration of the intervention.

Use of outcome measures should be routine (minimally pre and post treatment) to a) gauge the efficacy of treatment for the individual patient; b) monitor treatment adherence; and, c) evaluate practitioner competence.

### Recommendations: Treatment and Care Options for Depressive Symptoms

It is common for persons with depressive symptoms to lack the motivation necessary to follow through on referrals and/or to comply with treatment recommendations. With this in mind, on a bi-weekly or monthly basis, until symptoms have remitted:

- Assess follow-through and compliance with individual or group psychological/psychosocial referrals, as well as satisfaction with these services.
- Assess compliance with pharmacologic treatment, patient’s concerns about side effects, and satisfaction with the symptom relief provided by the treatment.
- If compliance is poor, assess and construct a plan to circumvent obstacles to compliance, or discuss alternative interventions that present fewer obstacles.
- After 8 weeks of treatment, if symptom reduction and satisfaction with treatment are poor, despite good compliance, alter the treatment course (e.g., add a psychological or pharmacological intervention; change the specific medication; refer to individual psychotherapy if group therapy has not proved helpful).
# Screening, Assessment, and Care of Anxiety and Depressive Symptoms in Adults with Cancer: An American Society of Clinical Oncology Guideline Adaptation

## Recommendations: Screening for Anxiety

<table>
<thead>
<tr>
<th>All health care providers should routinely screen for the presence of emotional distress and specifically symptoms of anxiety from the point of diagnosis onward.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients should be screened for distress at their initial visit, at appropriate intervals and as clinically indicated, especially with changes in disease status (i.e., post-treatment, recurrence, progression) and when there is a transition to palliative and end-of-life care.</td>
</tr>
<tr>
<td>Screening is suggested at initial diagnosis, start of treatment, regular intervals during treatment, end of treatment, post-treatment or at transition to survivorship, at recurrence or progression, advanced disease, when dying, and during times of personal transition or re-appraisal such as family crisis, during post-treatment survivorship and when approaching death.</td>
</tr>
<tr>
<td>Screening should identify the level and nature (problems and concerns) of the distress as a red flag indicator.</td>
</tr>
<tr>
<td>Screening should be done using a valid and reliable tool that features reportable scores (dimensions) that are clinically meaningful (established cut-offs).</td>
</tr>
<tr>
<td>Anxiety disorders include specific phobias and social phobia, panic and agoraphobia, generalized anxiety disorder (GAD), obsessive compulsive disorder, and post-traumatic stress disorder (PTSD).</td>
</tr>
<tr>
<td>It is recommended that patients be assessed for generalized anxiety disorder, as it is the most prevalent of all anxiety disorders and it is commonly comorbid with others, primarily mood disorders or other anxiety disorders (e.g., social anxiety disorder).</td>
</tr>
<tr>
<td>Use of the Generalized Anxiety Disorder (GAD)-7 scale (Table 1 in manuscript) is recommended. Table 2 (in the manuscript) provides a list of other assessment measures for symptoms of anxiety, nervousness, and GAD.</td>
</tr>
<tr>
<td>Patients with GAD do not necessarily present with symptoms of anxiety, per se. The pathognomic GAD symptom, i.e., multiple excessive worries, may present as ‘concerns’ or ‘fears.’ Whereas cancer worries may be common for many, GAD worry or fear may be disproportionate to actual cancer-related risk (e.g., excessive fear of recurrence, worry about multiple symptoms or symptoms not associated with current disease or treatments). Importantly, an individual with GAG has worries about a range of other, non-cancer topics and areas of his/her life.</td>
</tr>
</tbody>
</table>


[www.asco.org/adaptations/depression](http://www.asco.org/adaptations/depression) ©American Society of Clinical Oncology 2014. All rights reserved.
**SCREENING, ASSESSMENT, AND CARE OF ANXIETY AND DEPRESSIVE SYMPTOMS IN ADULTS WITH CANCER: AN AMERICAN SOCIETY OF CLINICAL ONCOLOGY GUIDELINE ADAPTATION**

It is important to determine the associated home, relationship, social, or occupational impairments, if any, and the duration that anxiety related symptoms. As noted above, problem checklists can be used. Examples of these are accessible at [www.asco.org/adaptations/depression](http://www.asco.org/adaptations/depression). Clinicians can amend the checklists to include additional key problem areas or ones unique to their patient populations.

As with depressive symptoms, consider special circumstances in screening/assessment of anxiety including using culturally sensitive assessments and treatments and tailoring assessment or treatment for those with learning disabilities or cognitive impairments.

**Recommendations: Assessment of Anxiety**

- Specific concerns such as risk of harm to self and/or others, severe anxiety or agitation, or the presence of psychosis or confusion (delirium) requires referral to a psychiatrist, psychologist, physician, or equivalently trained professional.

- When moderate to severe or severe symptomatology is detected through screening, individuals should have a diagnostic assessment to identify the nature and extent of the anxiety symptoms and the presence or absence of an anxiety disorder or disorders.

- Medical and substance-induced causes of anxiety should be diagnosed and treated.

- As a shared responsibility, the clinical team must decide when referral to a psychiatrist, psychologist or equivalently trained professional is needed (i.e., all patients with a score in the moderate to severe or severe range, with certain accompanying factors and/or symptoms, identified using valid and reliable measures for assessment of symptoms of anxiety).

- Assessments should be a shared responsibility of the clinical team, with designation of those who are expected to conduct assessments as per scope of practice.

- The assessment should identify signs and symptoms of anxiety (e.g., panic attacks, trembling, sweating, tachypnea, tachycardia, palpitations, and sweaty palms), severity of symptoms, possible stressors (e.g., impaired daily living), risk factors and times of vulnerability, and should also explore underlying problems/causes.

- A patient considered to have severe symptoms of anxiety following the further assessment should, where possible, have confirmation of an anxiety disorder diagnosis before any treatment options are initiated (e.g., DSM-V, which may require making a referral).
**Recommendations: Treatment and Care Options for Anxiety Symptoms**

For any patient who is identified as at risk of harm to self and/or others, clinicians should refer to appropriately trained professionals for emergency evaluation. Facilitate a safe environment and one-to-one observation, and initiate appropriate harm-reduction interventions to reduce risk of harm to self and/or others.

It is suggested that the clinical team making a patient referral for the treatment of anxiety review with the patient in a shared decision process, the reason(s) for and potential benefits from the referral. Further, it is suggested that the clinical team subsequently assess the patient’s compliance with the referral and treatment progress or outcomes.

First treat medical causes of anxiety (e.g., unrelieved symptoms such as pain and fatigue) and delirium (e.g., infection or electrolyte imbalance).

For optimal management of moderate to severe or severe anxiety, consider pharmacological and/or non-pharmacological interventions delivered by appropriately trained individuals. Management must be tailored to individual patients, who should be fully informed of their options.

For a patient with mild to moderate anxiety, the primary oncology team may choose to manage the concerns by usual supportive care management.

The choice of an anxiolytic should be informed by the side effect profiles of the medications, tolerability of treatment, including the potential for interaction with other current medications, response to prior treatment and patient preference. Patients should be warned of any potential harm or adverse effects. Caution is warranted with respect to the use of benzodiazepines in the treatment of anxiety, specifically over the longer term. These medications carry an increased risk of abuse and dependence and are associated with side effects that include cognitive impairment. As a consequence, use of these medications should be time limited in accordance with established psychiatric guidelines.

Offer support and provide education and information about anxiety and its management to all patients and their families and what specific symptoms or symptom worsening warrant a call to the physician or nurse.
It is recommended to use a stepped care model to tailor intervention recommendations based on variables such as the following:

- Current symptomatology level and presence/absence of DSM-V diagnoses
- Level of functional impairment in major life areas
- Presence/absence of risk factors
- Chronicity of GAD and response to previous treatments, if any
- Patient preference
- Persistence of symptoms following receipt of the current anxiety treatment

Psychological and psychosocial interventions should derive from relevant treatment manuals of empirically supported treatments specifying the content and guiding the structure, delivery mode, and duration of the intervention. Use of outcome measures should be routine (minimally pre and post treatment) to a) gauge the efficacy of treatment for the individual patient; b) monitor treatment adherence; and c) evaluate practitioner competence.
As cautiousness and a tendency to avoid threatening stimuli are cardinal features of anxiety pathology, it is common for persons with symptoms of anxiety to not to follow through on potentially helpful referrals or treatment recommendations. With this in mind, it is recommended that the mental health professional or other member of the clinical team managing the patient’s anxiety, on a monthly basis or until symptoms have subsided:

- Assess follow-through and compliance with individual or group psychological or psychosocial referrals, as well as satisfaction with the treatment.
- Assess compliance with pharmacologic treatment, patient’s concerns about side effects, and satisfaction with the symptom relief provided by the treatment.
- Consider tapering the patient from medications prescribed for anxiety if symptoms are under control and if the primary environmental sources of anxiety are no longer present. Longer periods of tapering are often necessary with benzodiazepines, particularly with potent or rapidly eliminated medications.
- If compliance is poor, assess and construct a plan to circumvent obstacles to compliance, or discuss alternative interventions that present fewer obstacles.
- After 8 weeks of treatment, if symptom reduction and satisfaction with treatment are poor, despite good compliance, alter the treatment course (e.g., add a psychological or pharmacological intervention; change the specific medication; refer to individual psychotherapy if group therapy has not proved helpful).
<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which evaluations (eg, colonoscopy, computed tomography [CT], carcinoembryonic antigen [CEA], liver function, complete blood count [CBC], chest x-ray, history, and physical examination) should be performed for surveillance for recurrence of cancer?</td>
<td>Surveillance should be guided by presumed risk of recurrence and functional status of patient where early detection would lead to aggressive treatment including surgery. It is especially important in the first 2 to 4 years, when the risk of recurrence is the greatest. A medical history, physical examination, and CEA testing, should be performed every 3 to 6 months for 5 years. The frequency of visits and testing should consider the data showing that 80% of recurrences occur in the first 2 to 2.5 years from date of surgery and 95% occur by 5 years. Patients at a higher risk of recurrence should be considered for testing in the more frequent end of the range. Abdominal and chest imaging using a CT scan is recommended annually for 3 years. For high-risk patients, it is reasonable to consider imaging every 6 to 12 months for the first 3 years. Outside of a clinical trial, PET scans are not recommended for surveillance. For patients with rectal cancer, a pelvic CT is also recommended. Clinician judgment, considering risk status, should be used to determine the frequency of pelvic scans (eg, annually for 3 to 5 years). For those patients who have not received pelvic radiation, a rectosigmoidoscopy should be performed every 6 months for 2 to 5 years. A surveillance colonoscopy should be performed approximately 1 year after the initial surgery. The frequency of subsequent surveillance colonoscopies should be dictated by the findings of the previous one, but they generally should be performed every 5 years if the findings of the previous one are normal. If a complete colonoscopy was not performed before diagnosis, a colonoscopy should be done as soon as reasonable after completion of adjuvant therapy and not necessarily at the 1-year time point. If a patient is not a surgical candidate or a candidate for systemic therapy because of severe comorbid conditions, surveillance tests should not be performed.</td>
</tr>
<tr>
<td>What is a reasonable frequency of these evaluations for surveillance?</td>
<td></td>
</tr>
<tr>
<td>Clinical Question</td>
<td>Recommendation</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Which symptoms and/or signs potentially signify a recurrence of CRC and warrant investigation?</td>
<td>Any new and persistent or worsening symptoms warrant the consideration of a recurrence.</td>
</tr>
<tr>
<td>On what secondary prevention measures should CRC survivors be counseled?</td>
<td>Despite the lack of high-quality evidence on secondary prevention in CRC survivors, it is reasonable to counsel patients on maintaining a healthy body weight, being physically active, and eating a healthy diet.</td>
</tr>
<tr>
<td></td>
<td>A treatment plan from the specialist should be sent to the patient’s other providers, particularly the primary care physician, and it should have clear directions on appropriate follow-up.</td>
</tr>
</tbody>
</table>
# Fertility Preservation in Patients with Cancer: American Society of Clinical Oncology Guideline Update

<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are patients with cancer interested in interventions to preserve fertility?</td>
<td>1.1 People with cancer are interested in discussing fertility preservation. Health care providers caring for adult and pediatric patients with cancer (including medical oncologists, radiation oncologists, gynecologic oncologists, urologists, hematologists, pediatric oncologists, surgeons, and others) should address the possibility of infertility as early as possible before treatment starts.</td>
</tr>
<tr>
<td></td>
<td>1.2 Health care providers should refer patients who express an interest in fertility preservation (and patients who are ambivalent) to reproductive specialists.</td>
</tr>
<tr>
<td></td>
<td>1.3 Fertility preservation is often possible, but to preserve the full range of options, fertility preservation approaches should be discussed as early as possible, before treatment starts. The discussion can ultimately reduce distress and improve quality of life. Another discussion and/or referral may be necessary when the patient returns for follow-up and if pregnancy is being considered. The discussions should be documented in the medical record.</td>
</tr>
<tr>
<td>2. What is the quality of evidence supporting current and forthcoming options for preservation of fertility in males?</td>
<td>2.1 Sperm cryopreservation: Sperm cryopreservation is effective, and health care providers should discuss sperm banking with post pubertal males receiving cancer treatment.</td>
</tr>
<tr>
<td></td>
<td>2.2 Hormonal gonadoprotection: Hormonal therapy in men is not successful in preserving fertility. It is not recommended.</td>
</tr>
<tr>
<td></td>
<td>2.3 Other methods to preserve male fertility: Other methods, such as testicular tissue cryopreservation and reimplantation or grafting of human testicular tissue, should be performed only as part of clinical trials or approved experimental protocols.</td>
</tr>
<tr>
<td></td>
<td>2.4 Postchemotherapy: Men should be advised of a potentially higher risk of genetic damage in sperm collected after initiation of therapy.</td>
</tr>
</tbody>
</table>
### Clinical Question

3. What is the quality of evidence supporting current and forthcoming options for preservation of fertility in females?

### Recommendation

- **3.1 Embryo cryopreservation:** Embryo cryopreservation is an established fertility preservation method, and it has routinely been used for storing surplus embryos after in vitro fertilization.

- **3.2 Cryopreservation of unfertilized oocytes:** Cryopreservation of unfertilized oocytes is an option, particularly for patients who do not have a male partner, do not wish to use donor sperm, or have religious or ethical objections to embryo freezing. Oocyte cryopreservation should be performed in centers with the necessary expertise. As of October 2012, the American Society for Reproductive Medicine no longer deems this procedure experimental. More flexible ovarian stimulation protocols for oocyte collection are now available. Timing of this procedure no longer depends on the menstrual cycle in most cases, and stimulation can be initiated with less delay compared with old protocols. Thus, oocyte harvesting for the purpose of oocyte or embryo cryopreservation is now possible on a cycle day–independent schedule.

- **3.3 Ovarian transposition:** Ovarian transposition (oophoropexy) can be offered when pelvic irradiation is performed as cancer treatment. However, because of radiation scatter, ovaries are not always protected, and patients should be aware that this technique is not always successful. Because of the risk of remigration of the ovaries, this procedure should be performed as close to the time of radiation treatment as possible.

- **3.4 Conservative gynecologic surgery:** It has been suggested that radical trachelectomy (surgical removal of the uterine cervix) should be restricted to stage IA2 to IB cervical cancer with diameter < 2 cm and invasion < 10 mm. In the treatment of other gynecologic malignancies, interventions to spare fertility have generally centered on doing less radical surgery with the intent of sparing the reproductive organs as much as possible. Ovarian cystectomy can be performed for early-stage ovarian cancer.
# Fertility Preservation in Patients with Cancer: American Society of Clinical Oncology Guideline Update

<table>
<thead>
<tr>
<th>Clinical Question</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.5 Ovarian suppression:</strong> Currently, there is insufficient evidence regarding the effectiveness of GnRHa and other means of ovarian suppression in fertility preservation. GnRHa should not be relied upon as a fertility preservation method. However, GnRHa may have other medical benefits such as a reduction of vaginal bleeding when patients have low platelet counts as a result of chemotherapy. This benefit must be weighed against other possible risks such as bone loss, hot flashes, and potential interference with response to chemotherapy in estrogen-sensitive cancers. Women interested in this method should participate in clinical trials, because current data do not support it. In a true emergency or rare or extreme circumstances where proven options are not available, providers may consider GnRHa an option, preferably as part of a clinical trial.</td>
<td></td>
</tr>
<tr>
<td><strong>3.6 Ovarian tissue cryopreservation and transplantation:</strong> Ovarian tissue cryopreservation for the purpose of future transplantation does not require ovarian stimulation or sexual maturity and hence may be the only method available in children. It is considered experimental and should be performed only in centers with the necessary expertise, under IRB-approved protocols that include follow-up for recurrent cancer. A theoretic concern with reimplanting ovarian tissue is the potential for reintroducing cancer cells depending on the type and stage of cancer, although so far there have been no reports of cancer recurrence.</td>
<td></td>
</tr>
<tr>
<td><strong>3.7 Other considerations:</strong> Of special concern in estrogen-sensitive breast and gynecologic malignancies is the possibility that fertility preservation interventions (eg, ovarian stimulation regimens that increase estrogen levels) and/or subsequent pregnancy may increase the risk of cancer recurrence. Ovarian stimulation protocols using the aromatase inhibitor letrozole have been developed and may ameliorate this concern. Studies do not indicate increased cancer recurrence risk as a result of subsequent pregnancy.</td>
<td></td>
</tr>
<tr>
<td><strong>4. What is the role of health care providers in advising patients about fertility preservation options?</strong></td>
<td><strong>4.1</strong> All oncologic health care providers should be prepared to discuss infertility as a potential risk of therapy. This discussion should take place as soon as possible once a cancer diagnosis is made and before a treatment plan is formulated. There are benefits for patients in discussing fertility information with providers at every step of the cancer journey.</td>
</tr>
<tr>
<td><strong>What should providers discuss with patients about fertility preservation?</strong></td>
<td><strong>4.2</strong> Encourage patients to participate in registries and clinical studies, as available, to define further the safety and efficacy of these interventions and strategies</td>
</tr>
<tr>
<td>Clinical Question</td>
<td>Recommendation</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4.3 Refer patients who express an interest in fertility, as well as those who are ambivalent or uncertain, to reproductive specialists as soon as possible.</td>
<td></td>
</tr>
<tr>
<td>4.4 Refer patients to psychosocial providers when they are distressed about potential infertility.</td>
<td></td>
</tr>
<tr>
<td>5. Special considerations: Fertility preservation in children</td>
<td>5.1 Suggest established methods of fertility preservation (eg, semen or oocyte cryopreservation) for postpubertal minor children, with patient assent and parent or guardian consent. For prepubertal minor children, the only fertility preservation options are ovarian and testicular cryopreservation, which are investigational.</td>
</tr>
</tbody>
</table>
# Surveillance Mode

<table>
<thead>
<tr>
<th>Surveillance Mode</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>History/physical examination</td>
<td>All women should have a careful history and physical examination every 3 to 6 months for the first 3 years after primary therapy, then every 6 to 12 months for the next 2 years, and then annually. The history and physical examination should be performed by a physician† experienced in the surveillance of patients with cancer and in breast examination.</td>
</tr>
</tbody>
</table>
| Patient education regarding symptoms of recurrence | Physicians should counsel patients about the symptoms of recurrence including:  
  - New lumps  
  - Bone pain  
  - Chest pain  
  - Dyspnea  
  - Abdominal pain  
  - Persistent headaches  
<table>
<thead>
<tr>
<th>Surveillance Mode</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| Referral for genetic counseling | Women at high risk for familial breast cancer syndromes should be referred for genetic counseling in accordance with clinical guidelines recommended by the US Preventive Services Task Force. Criteria to recommend referral include the following:  
- Ashkenazi Jewish heritage  
- History of ovarian cancer at any age in the patient or any first- or second-degree relatives  
- Any first-degree relative with a history of breast cancer diagnosed before the age of 50 years  
- Two or more first- or second-degree relatives diagnosed with breast cancer at any age  
- Patient or relative with diagnosis of bilateral breast cancer  
- History of breast cancer in a male relative.‡                                                                                                                                 |
| Breast self-examination        | All women should be counseled to perform monthly breast self-examination.                                                                                                                                              |
| Mammography                    | Women treated with breast-conserving therapy should have their first post-treatment mammogram no earlier than 6 months after definitive radiation therapy. Subsequent mammograms should be obtained every 6 to 12 months for surveillance of abnormalities. Mammography should be performed yearly if stability of mammographic findings is achieved after completion of locoregional therapy. |
| Pelvic examination             | Regular gynecologic follow-up is recommended for all women. Patients who receive tamoxifen are at increased risk for developing endometrial cancer and should be advised to report any vaginal bleeding to their physicians. Longer follow-up intervals may be appropriate for women who have had a total hysterectomy and oophorectomy. |
| Coordination of care           | The risk of breast cancer recurrence continues through 15 years after primary treatment and beyond. Continuity of care for patients with breast cancer is recommended and should be performed by a physician experienced in the surveillance of patients with cancer and in breast examination, including the examination of irradiated breasts. Follow-up by a PCP seems to lead to the same health outcomes as specialist follow-up with good patient satisfaction. |
**Surveillance Mode** | **Recommendation**
---|---
| If a patient with early-stage breast cancer (tumor < 5 cm and < 4 positive nodes) desires follow-up exclusively by a PCP, care may be transferred to the PCP approximately 1 year after diagnosis. If care is transferred to a PCP, both the PCP and the patient should be informed of the appropriate follow-up and management strategy. Re-referral for further oncology assessment may be considered, as needed, especially for patients who are receiving adjuvant endocrine therapy.

Abbreviations: PCP, primary care physician.

All recommendations remain the same as those published in 2006. The Panel concluded that there was no new evidence that warranted changing any of the recommendations. The 2006 guideline provides a detailed discussion and rationale for the recommendations.

†Although the evidence is lacking, it seems likely that history as well as physical and breast exams may also be conducted by experienced non-physician providers (eg, Nurse Practitioners, Physician Assistants) under the supervision of an experienced physician.

‡Expert consensus-based recommendations are available with criteria specific to patients with cancer (eg, from the National Comprehensive Cancer Network www.nccn.org). These recommendations include similar criteria as those from the USPSTF as well as other criteria such as diagnosis of triple negative breast cancer, or a combination of breast cancer and other specific cancers.