



**NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines™)**

# **Palliative Care**

Version 2.2011

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## Palliative Care

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[Discussion](#)

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‡ Hematology/Hematology oncology  
† Medical Oncology  
ρ Internal medicine  
£ Supportive Care including Palliative  
and Pain Management  
θ Psychiatry, psychology, including  
health behavior  
Ψ Neurology/neuro-oncology  
φ Anesthesiology  
ρ Geriatric medicine  
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**Clinical Trials:** The NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.

To find clinical trials online at NCCN member institutions, [click here: nccn.org/clinical\\_trials/physician.html](#)

**NCCN Categories of Evidence and Consensus:** All recommendations are Category 2A unless otherwise specified.

See [NCCN Categories of Evidence and Consensus](#)

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Updates in Version 2.2011 of the NCCN Palliative Care Guidelines from Version 1.2011 include:

- The Discussion section to correspond with algorithm.

### [PAL-29](#)

- Practical intervention:

- 2nd subbullet, “Ensure that patient’s advance directive is documented and implemented” was added.
- Under 3rd subbullet, “Ensure that patient’s wishes for resuscitation and/or do-not-resuscitate (DNR) are documented and followed”, an additional subbullet, “If patient/family have not yet accepted a DNR order, intensify patient/family education and counseling” was added.

Updates in Version 1.2011 of the NCCN Palliative Care Guidelines from Version 1.2010 include:

### New algorithm

#### [PAL-19](#)

- Sleep/wake disturbances including insomnia and sedation

#### [PAL-2](#)

- Footnote “b” was modified from “...palliative care specialist/hospice team is recommended for patients with more complex issues” to “...palliative care specialist/hospice team *may improve quality of life and survival.*” (Also for PAL-3)

#### [PAL-3](#)

- Screening, not present: the following bullet “Inform patients and families of role and benefits of palliative care services” and subbullets “Discuss anticipation and prevention of symptoms” and “rescreen at next visit” were added to the page.

#### [PAL-4](#)

- Psychosocial distress: “depression/anxiety” were added as examples to “psychosocial/psychiatric” assessment.

#### [PAL-7](#)

- Criteria for early consultation with palliative care specialist:
  - Footnote a, “Management of any patient with positive screening requires a care plan developed by an interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains” is new to the page.
  - Footnote b, “Oncologists should integrate palliative care into general oncology care for all patients who meet screening criteria. Early consultation/collaboration with a palliative care specialist/hospice team may improve quality of life and survival” is new to the page.

#### [PAL-9](#)

- Pain intervention:

- Weeks to days (dying patient): “Consult with pain management/palliative care specialist” was added.

#### [PAL-11](#)

- Dyspnea intervention:

- Opioids for cough/dyspnea/air hunger, if opioid naive: the morphine dose was modified as “5-10 mg PO every 4 hr prn; 1-5 mg IV every 4 hr prn”
- Reduce excessive secretions: SC and patch doses for scopolamine “0.4 mg SC every 4 hr prn; 1.5 mg patches, 1-6 patches every 3 d” and “atropine 1% ophthalmic solution 1-2 drops SL every 4 h prn” were added and examples “hyoscyamine, and glycopyrrolate” were removed.

#### [PAL-12](#)

- Anorexia/cachexia intervention:

- 5th bullet, consider appetite stimulant, a dose range of “400-800 mg/d” was added to the example megestrol acetate.
- 6th bullet, “Assess economic factors” was modified by adding “social”.

#### [PAL-14](#)

- Non-specific nausea and vomiting (NV): 2nd subbullet, “If anxiety contributes to NV, consider adding a benzodiazepine” was modified by replacing benzodiazepine with a specific example, “lorazepam, 0.5-1 mg every 4 hr prn”.



Updates in Version 1.2011 of the NCCN Palliative Care Guidelines from Version 1.2010 include:

#### **PAL-15**

- Persistent nausea and vomiting intervention:
  - “Consider adding alternative therapies” was modified by adding examples “hypnosis, cognitive behavioral therapy” and removing “palliative sedation”.
- After interventions, if unsatisfactory: “Consider palliative sedation (See PAL-30)” was added.

#### **PAL-16**

- Preventive measures: “Stimulant laxative + stool softener” was changed to “± stool softener”.
- Constipation intervention:
  - Consider methylnaltrexone, “for opioid-induced constipation” was added for clarification.

#### **PAL-18**

- Malignant bowel obstruction intervention:
  - “Interventional radiology management” with a subbullet “Ultrasound guided venting tube” was added.
  - Pharmacologic management, octreotide dose was modified as “100-300 mcg SC BID-TID or 10-40 mcg/hr continuous SC/IV infusion”.

#### **PAL-20**

- Delirium, “agitation” was added to “severe delirium” and “moderate” was added to “mild delirium”.
- Severe delirium (agitation) intervention:
  - Dose for haloperidol was modified as “0.5-10 mg IV every 1-4 h prn”.
  - Alternative agents:
    - ◊ Dose for olanzapine was modified as “2.5-7.5 mg/d IM every 2-4 h prn (maximum = 30 mg/d)”.
    - ◊ “Chlorpromazine, 25-100 mg IM/IV every 4 h prn” was added.
    - ◊ Risperidone and quetiapine fumarate were removed.
- Mild/moderate delirium intervention:
  - Dose for haloperidol was modified as “0.5-2 mg PO BID/TID”.
  - Alternative agents:
    - ◊ Dose for olanzapine was modified as “5-20 mg PO daily”.
    - ◊ Dose for quetiapine fumarate was modified as “25-200 mg PO/SL BID”
    - ◊ “Titrate starting dose to optimal effect” was added as a bullet.

#### **PAL-21**

- Delirium, reassessment unsatisfactory, “consider palliative sedation (See PAL-30)” was added.

#### **PAL-28**

- “Special palliative care interventions” was removed from the title. Also for PAL-29. A new title, “Response to requests for hastened death (physician-assisted suicide, active euthanasia)” was added.
- 9th bullet was modified by adding to the sentence, “Hastened death is legal only in Oregon, Montana, and Washington”.

#### **PAL-29**

- Physical intervention:
  - A new subbullet “Increase doses of medications to optimal comfort” was added.
  - 7th subbullet, “Treat unclearable terminal secretions (death rattle) by changing the patient’s positioning, reducing parenteral and enteral fluids” was modified by removing “reducing excessive secretions with medications such as scopolamine, hyoscyamine, atropine, or glycopyrrolate” and adding a tertiary bullet, “For refractory secretions, consider medications such as atropine 1% ophthalmic solution 1-2 drops SL every 4 h prn”.
- Practical intervention, a new bullet “facilitate funeral planning” was added.

#### **PAL-31**

- For family and caregivers:
  - 1st subbullet “remove implanted device” was modified by adding “unless autopsy planned”.
  - A new bullet, “Identify family at risk for complicated bereavement” was added.
- For healthcare professionals
  - A new bullet, “Identify healthcare professionals at risk for complicated bereavement” was added.



## **DEFINITION OF PALLIATIVE CARE**

**Palliative care is both a philosophy of care and an organized, highly structured system for delivering care to persons with life-threatening or debilitating illness. Palliative care is patient and family-centered care that focuses upon effective management of pain and other distressing symptoms, while incorporating psychosocial and spiritual care according to patient/family needs, values, beliefs, and culture(s). The goal of palliative care is to prevent and relieve suffering and to support the best possible quality of life for patients and their families, regardless of the stage of the disease or the need for other therapies. Palliative care can be delivered concurrently with life-prolonging care or as the main focus of care.**

## **STANDARDS OF PALLIATIVE CARE**

- **Institutions should develop a process that ensures all patients have access to palliative care services from the initial visit.**
- **All cancer patients should be screened for palliative care needs at their initial visit, at appropriate intervals, and as clinically indicated.**
- **Patients and families should be informed that palliative care is an integral part of their comprehensive cancer care.**
- **Educational programs should be provided to all healthcare professionals and trainees so that they can develop effective palliative care knowledge, skills, and attitudes.**
- **Skilled, palliative care specialists and interdisciplinary, palliative care teams should be readily available to provide consultative or direct care to patients/families who request or require their expertise.**
- **Clinical health outcomes measurement should include palliative care domains.**
- **Quality of palliative care should be monitored by institutional quality improvement programs.**

**Note: All recommendations are category 2A unless otherwise indicated.**

**Clinical Trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.**

**PALLIATIVE CARE OVERVIEW**

**SCREENING<sup>a,b</sup>**

Uncontrolled symptoms or Moderate to severe distress related to cancer diagnosis and cancer therapy or Serious comorbid physical and psychosocial conditions or Life expectancy ≤ 12 mo or Patient/family concerns about course of disease and decision-making or Patient/family requests palliative care

Present →  
Not present

**ASSESSMENT**

- Benefits/risks of anticancer therapy
- Symptoms
- Psychosocial or spiritual distress
- Personal goals/expectations
- Educational and informational needs
- Cultural factors affecting care
- Criteria for early consultation with palliative care specialist

**ESTIMATED LIFE EXPECTANCY**

Years  
Year to months  
Months to weeks  
Weeks to days (Dying patient)

**PALLIATIVE CARE INTERVENTIONS<sup>b</sup>**

- Anticancer therapy
- Appropriate treatment of comorbid physical and psychosocial conditions
- Promote coordination of care
- Symptom management
- Advance care planning
- Psychosocial and spiritual support
- Culturally appropriate care
- Resource management/ social support
- Consultation with palliative care specialist
- Hospice referral
- Response to request to withdraw or withhold life sustaining treatment
- Response to requests for hastened death (physician-assisted suicide and euthanasia)
- Care of imminently dying patient
- Palliative sedation

**REASSESSMENT**

- Satisfactory:**
- Patient satisfied with response to anticancer therapy
  - Adequate pain and symptom control
  - Reduction of patient/family distress
  - Acceptable sense of control
  - Relief of caregiver burden
  - Strengthened relationships
  - Optimized quality of life
  - Personal growth and enhanced meaning

Unsatisfactory

- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice

**AFTER DEATH INTERVENTIONS**

- For family and caregivers:
- Immediate after-death care
  - Bereavement support
  - Cancer risk assessment and modification
- For healthcare team:
- General support
  - After-death support

Ongoing reassessment ←

Ongoing reassessment ←

→ Death →

- Inform patients and families of role and benefits of palliative care services
  - Discuss anticipation and prevention of symptoms
  - Rescreen at next visit

<sup>a</sup>Management of any patient with positive screening requires a care plan developed by an interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains.

<sup>b</sup>Oncologists should integrate palliative care into general oncology care for all patients who meet screening criteria. Early consultation/collaboration with a palliative care specialist/hospice team may improve quality of life and survival.

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[Palliative Care Assessment \(PAL-3\)](#)

**SCREENING**<sup>a,b</sup>

- Uncontrolled symptoms  
or
- Moderate to severe distress related to cancer diagnosis and/or cancer therapy  
or
- Serious comorbid physical and psychosocial conditions  
or
- Life expectancy ≤ 12 mo
  - Potential indicators include:
    - ◊ Poor performance status  
ECOG ≥ 3 or KPS ≤ 50
    - ◊ Hypercalcemia
    - ◊ Brain or cerebrospinal fluid metastasis
    - ◊ Delirium
    - ◊ Superior vena cava syndrome
    - ◊ Spinal cord compression
    - ◊ Cachexia
    - ◊ Malignant effusions
    - ◊ Bilirubin ≥ 2.5 mg/dL
    - ◊ Creatinine ≥ 3 mg/dL
- or
- Patient/family concerns about course of disease and decision-making  
or
- Patient/family requests palliative care

**ASSESSMENT**

- Benefits/risks of anticancer therapy
  - Symptoms
  - Psychosocial distress
- [See PAL-4](#)
- Personal goals/expectations
  - Educational and informational needs
  - Cultural factors affecting care
- [See PAL-5](#)
- Criteria for early consultation with palliative care specialist
- [See PAL-6](#)

Present →

Not present ↓

- Inform patients and families of role and benefits of palliative care services
  - Discuss anticipation and prevention of symptoms
  - Rescreen at next visit

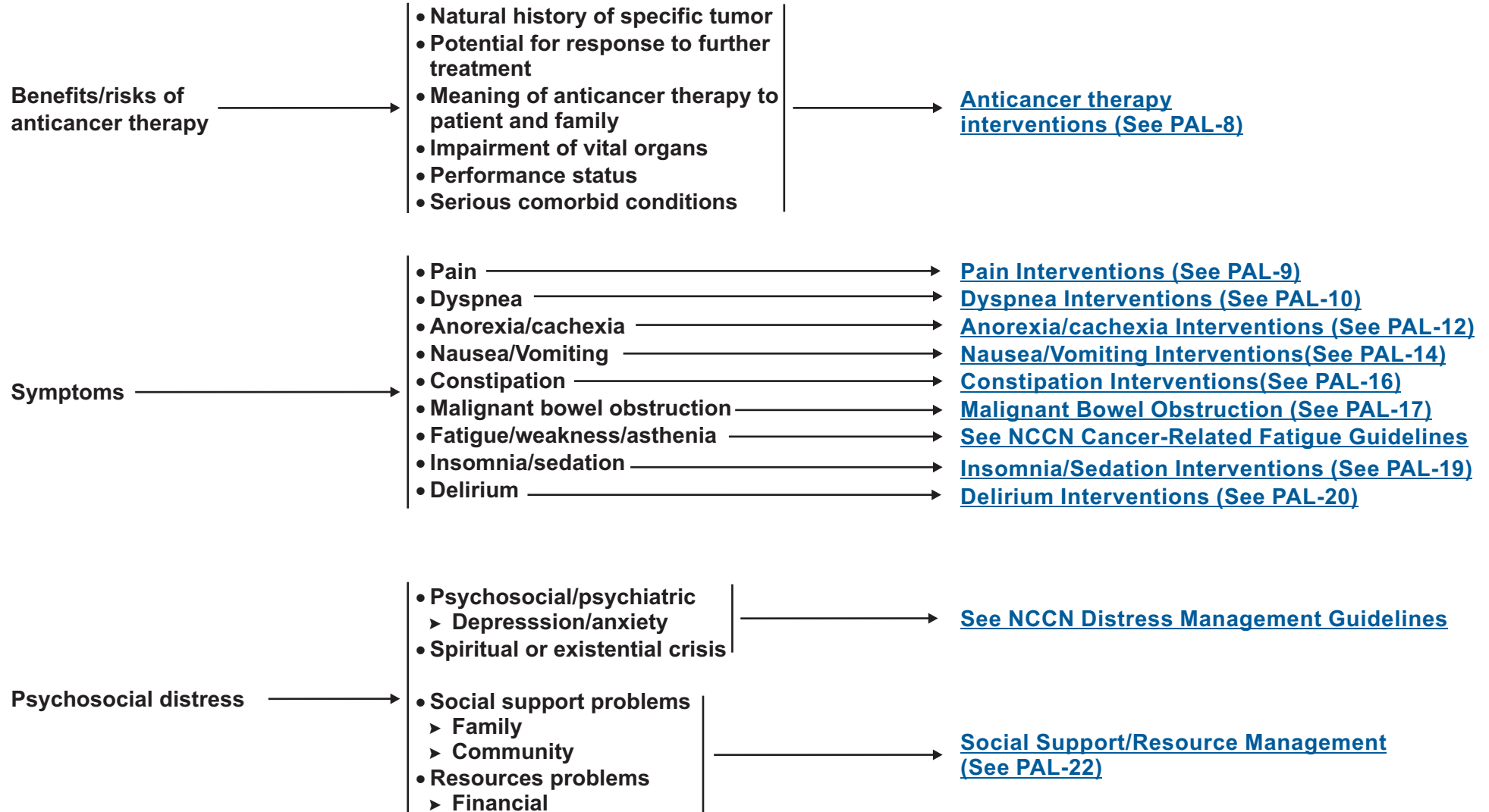
Rescreen at next visit

<sup>a</sup>Management of any patient with positive screening requires a care plan developed by an interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains.

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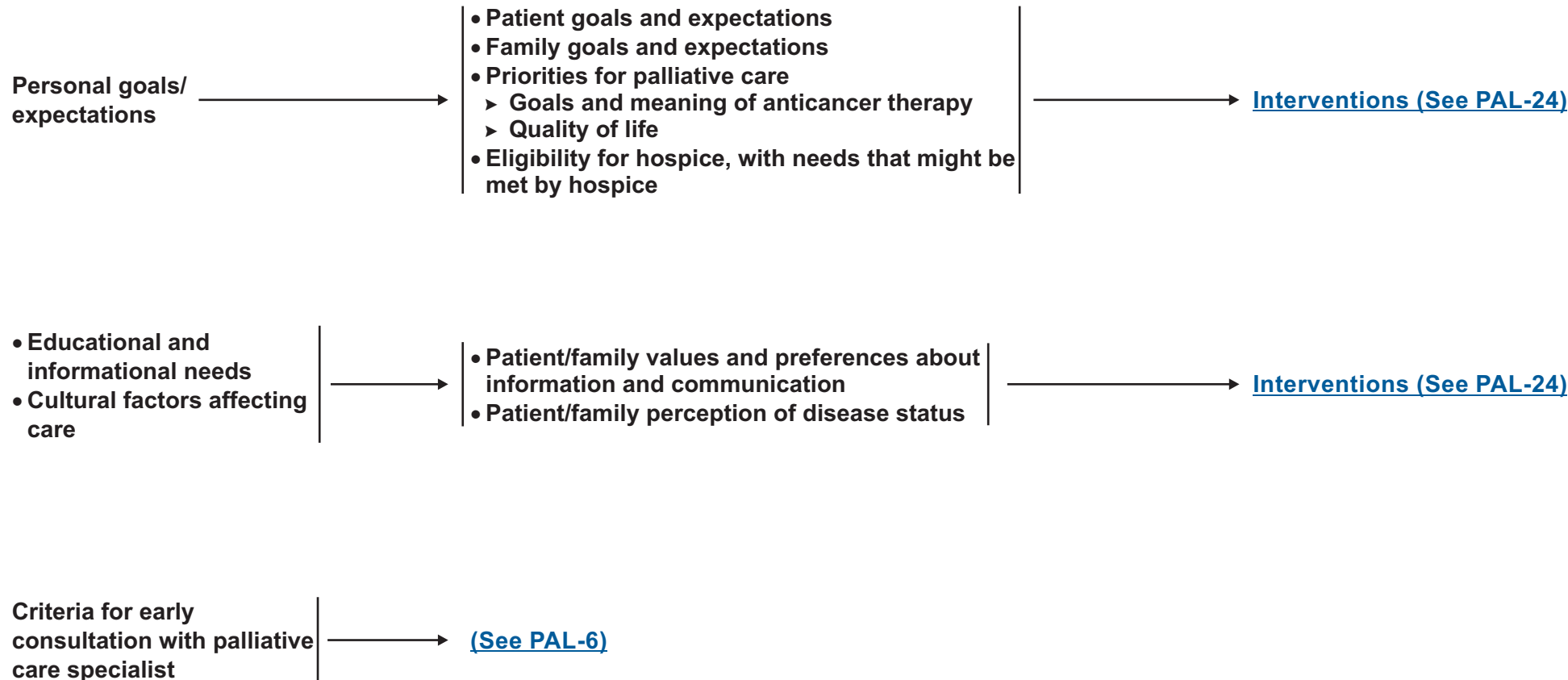
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**PALLIATIVE CARE ASSESSMENT**



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### PALLIATIVE CARE ASSESSMENT



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**CRITERIA FOR EARLY CONSULTATION WITH PALLIATIVE CARE SPECIALIST**

**ASSESSMENT**

**Patient  
Characteristics**



- Limited treatment options (especially patients receiving Phase 1 therapy or anticancer therapy with a palliative intent)
- High risk of poor pain control or pain that remains resistant to conventional interventions, eg:
  - ▶ Neuropathic pain
  - ▶ Incident or breakthrough pain
  - ▶ Associated psychosocial and family distress
  - ▶ Rapid escalation of opioid dose
  - ▶ History of drug or alcohol abuse
  - ▶ Impaired cognitive function
- History of significant psychiatric disorder
- Non-pain physical symptoms refractory to conventional management  
([See PAL-4 for symptoms](#))
- Multiple “allergies” or a history of multiple adverse reactions to pain and symptom management interventions
- Unexpected ICU admissions (especially those with multiple complications or those requiring lengthy ventilator support)
- High distress score (> 4) ([See NCCN Distress Management Guidelines](#))
- Cognitive impairment
- Severe comorbid conditions
- Communication barriers<sup>c</sup>
- Repeated requests for hastened death

→ [See  
Intervention  
\(PAL-7\)](#)

**Social  
circumstances  
or  
Anticipatory  
bereavement  
issues**



- Family/caregiver limitations
- Inadequate social support
- Intensely dependent relationship(s)
- Financial limitations
- Limited access to care
- Family discord
- Patient’s concerns regarding care of dependents
- Spiritual or existential crisis
- Unresolved or multiple prior losses

<sup>c</sup>Communication barriers include language, literacy, and physical barriers.

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### CRITERIA FOR EARLY CONSULTATION WITH PALLIATIVE CARE SPECIALIST<sup>a,b</sup>

#### INTERVENTION

- Early consultation with palliative care specialist/team
- Collaborate with other physicians treating the patient
- Refer to appropriate health care professionals
  - ▶ Mental health and social services
  - ▶ Health care interpreters
  - ▶ Others
- Mobilize community support
  - ▶ Religious
  - ▶ School
  - ▶ Community agencies
- Expedite referral to hospice team when appropriate

#### REASSESSMENT

##### Satisfactory:

- Patient satisfied with response to anticancer therapy
- Adequate pain and symptom control
- Reduction of patient/family distress
- Acceptable sense of control
- Relief of caregiver burden
- Strengthened relationships
- Optimized quality of life
- Personal growth and enhanced meaning

Ongoing reevaluation and communication between the patient and the health care team

##### Unsatisfactory

- Intensify efforts to communicate palliative care options
- Consult with a psychiatrist to evaluate and treat pre-existing psychiatric disorders, substance abuse, and dysfunctional adjustment reactions
- [See NCCN Distress Management Guidelines](#)

Ongoing reassessment

<sup>a</sup>Management of any patient with positive screening requires a care plan developed by an interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains.

<sup>b</sup>Oncologists should integrate palliative care into general oncology care for all patients who meet screening criteria. Early consultation/collaboration with a palliative care specialist/hospice team may improve quality of life and survival.

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### BENEFITS/RISKS OF ANTICANCER THERAPY

#### ESTIMATED LIFE EXPECTANCY

#### INTERVENTION

#### REASSESSMENT

Years

Year to  
months

Months  
to  
weeks

Weeks to  
days  
(Dying  
patient)

- Provide appropriate anticancer therapy as outlined in [NCCN disease-specific guidelines](#)
- Discuss goals, benefits, and risks of anticancer therapy including possible effects on quality of life
- Clarify intent of anticancer therapy
- Provide evidence-based conventional anticancer therapy
- Offer clinical trials
- Provide appropriate prevention and management of symptoms caused by anticancer therapy
- Provide appropriate palliative care

- See above interventions
- Offer best supportive care including referral to palliative care or hospice
- Redirect goals and hopes to those that are achievable
- Provide guidance regarding anticipated course of disease

- Discontinue anticancer therapy
- Intensify palliative care in preparation for death
- Provide guidance regarding anticipated dying process
- Focus on symptom control and comfort
- Foster patient participation in preparing loved ones
- Refer to palliative care/hospice team

- Satisfactory:**
- Adequate pain and symptom control
  - Reduction of patient/family distress
  - Acceptable sense of control
  - Relief of caregiver burden
  - Strengthened relationships
  - Optimized quality of life
  - Personal growth and enhanced meaning

**Unsatisfactory**

Continue  
anticancer therapy  
and palliative care



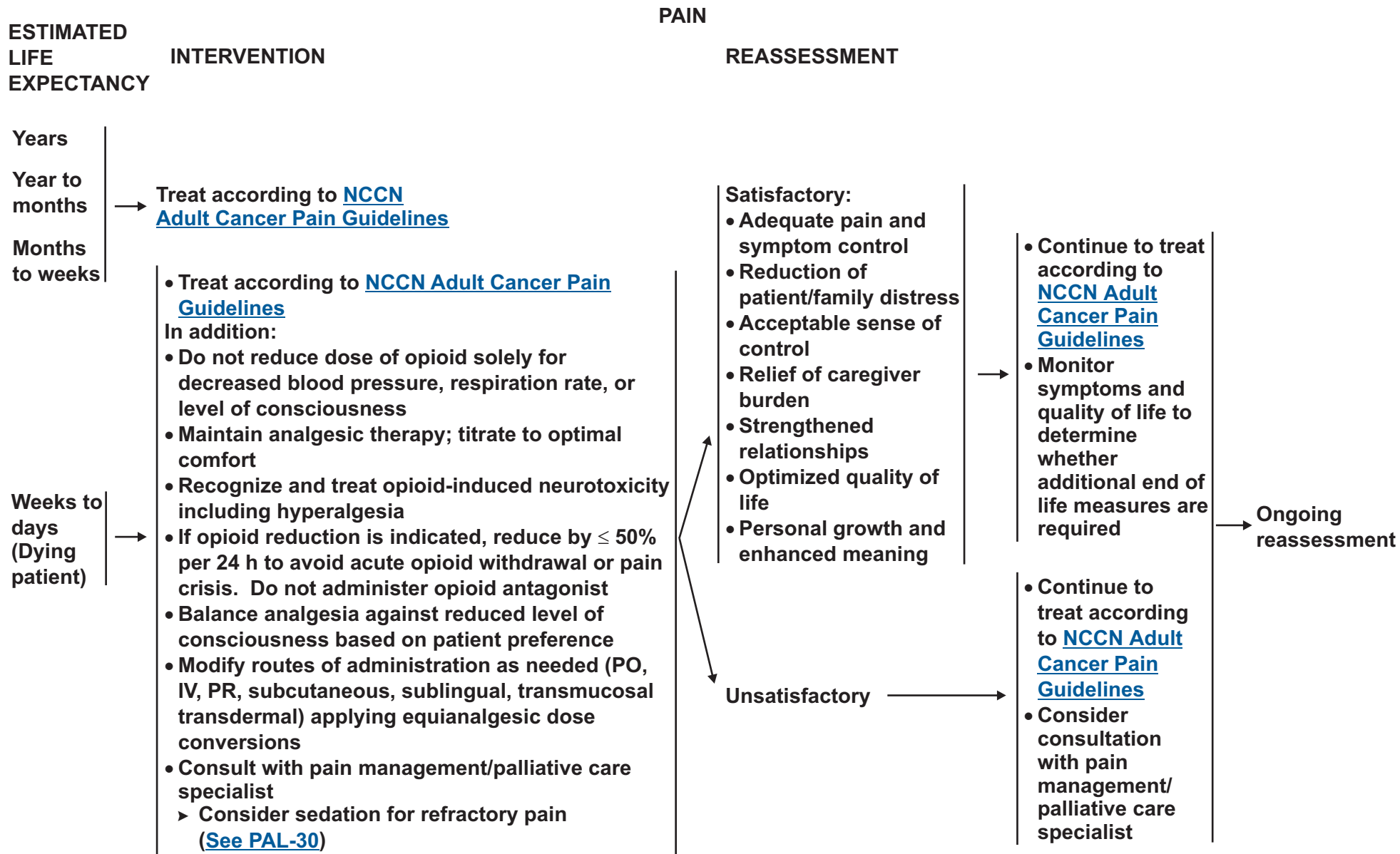
Ongoing  
reassessment



- Change or discontinue anticancer therapy
- Review patient hopes about and meaning of anticancer therapy
- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice

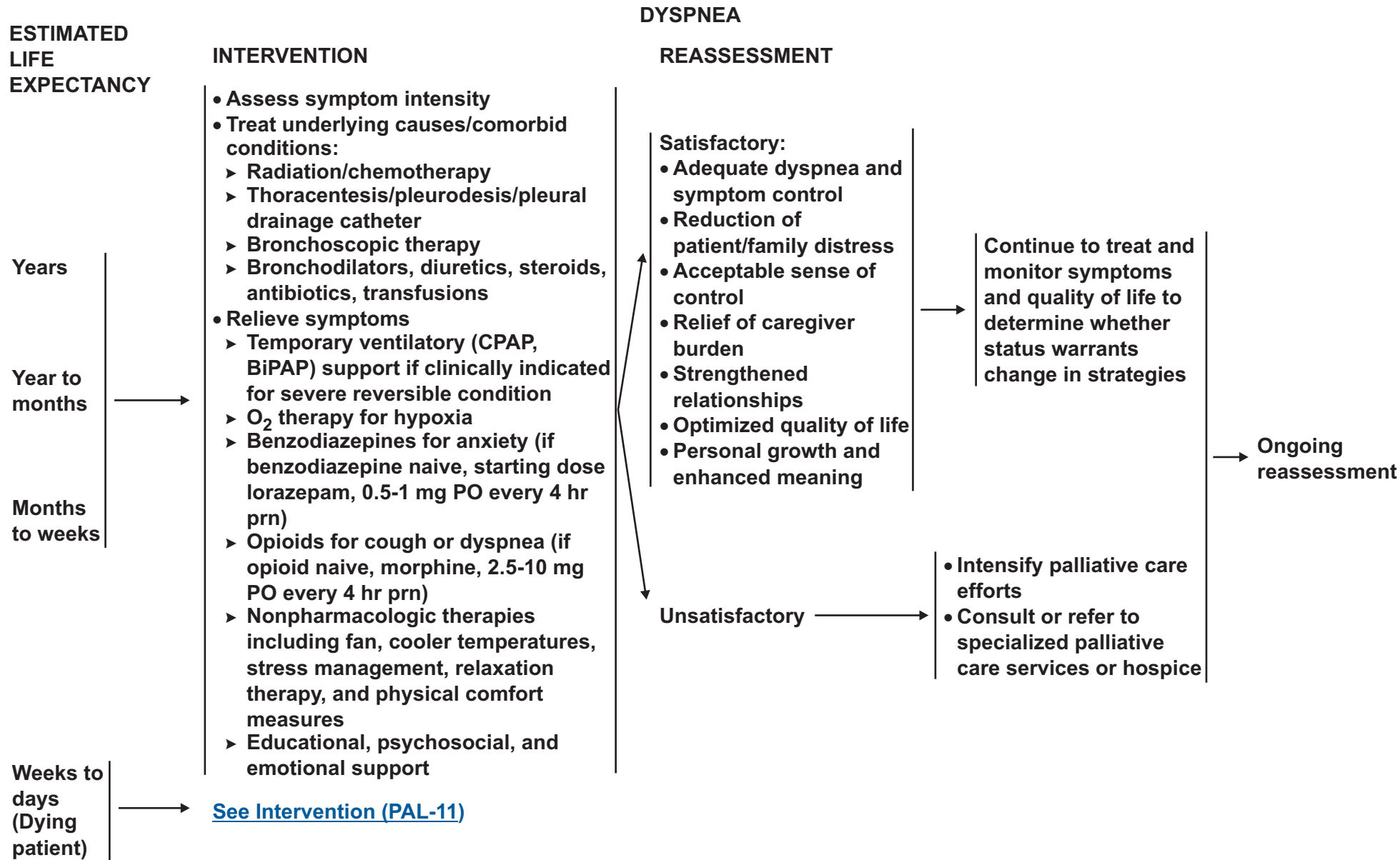
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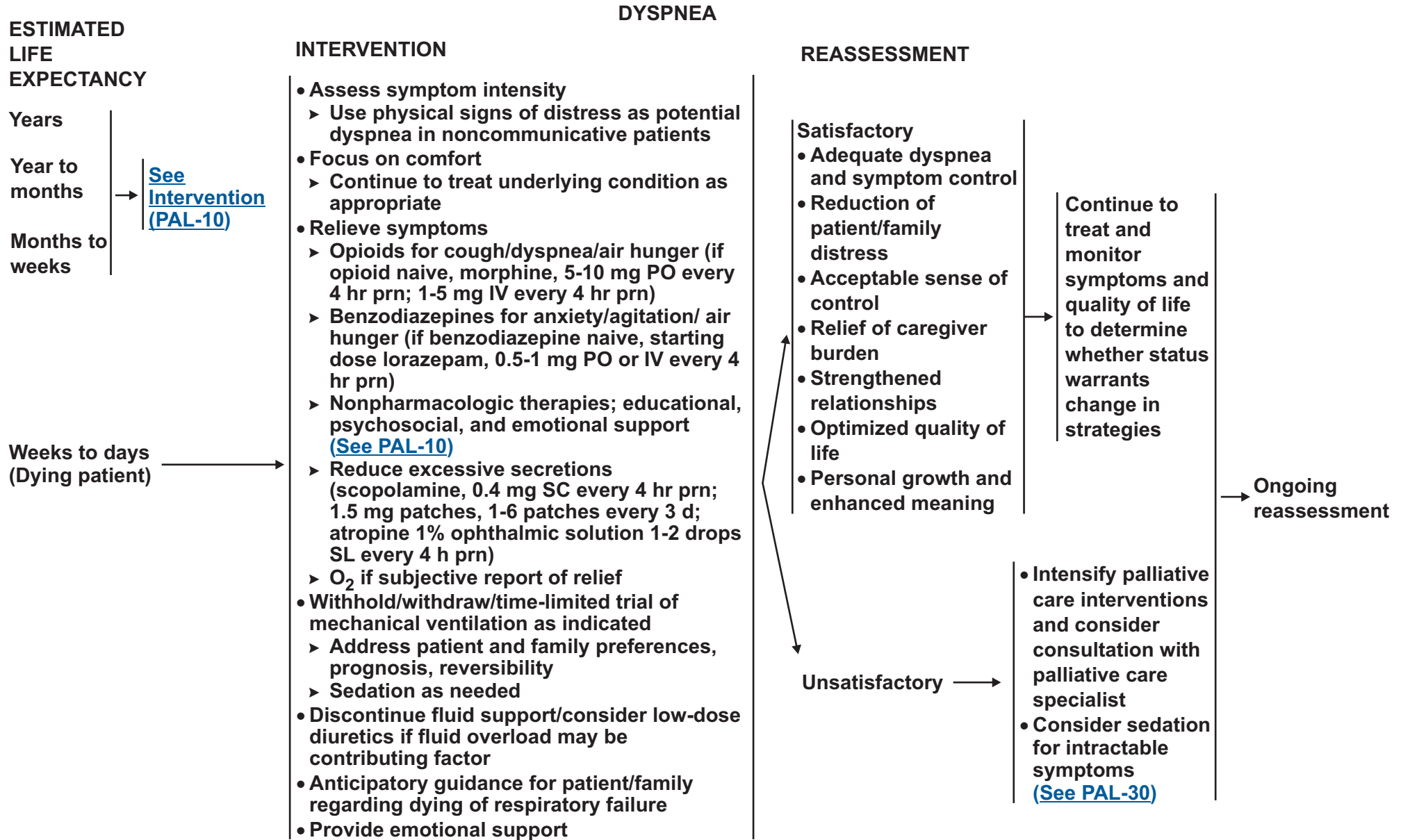
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**ANOREXIA/CACHEXIA**

**ESTIMATED  
LIFE  
EXPECTANCY**

**INTERVENTION**

**REASSESSMENT**

Years

Year to  
months

Months to  
weeks

Weeks to  
days  
(Dying  
patient)

- Evaluate rate/severity of weight loss
- Treat readily reversible cause of anorexia:
  - ▶ Early satiety
    - ◊ Metoclopramide
  - ▶ Symptoms that interfere with intake
    - ◊ Depression
    - ◊ Eating disorders/body image
    - ◊ Constipation
    - ◊ Pain
    - ◊ Xerostomia
    - ◊ Mucositis
    - ◊ Nausea/vomiting
    - ◊ Fatigue
- Review/modify medications that interfere with intake
- Evaluate for endocrine abnormalities:
  - ▶ Hypogonadism
  - ▶ Thyroid dysfunction
  - ▶ Metabolic abnormalities (eg, increased calcium)
- Consider appetite stimulant (eg, megestrol acetate, 400-800 mg/d)
- Exercise program
- Assess social and economic factors
- Consider nutrition consult
- Consider nutrition support clinical trials

- Satisfactory:**
- Weight stabilization or gain
  - Improvement in symptoms that interfere with intake
  - Improved energy
  - Resolution of metabolic or endocrine abnormalities

Continue to treat and monitor symptoms and quality of life to determine whether status warrants change in strategies

Unsatisfactory →

- Intensify palliative care interventions
- Dietary consultation
- Consider clinical trial

Ongoing reassessment

→ [See Interventions \(PAL-13\)](#)

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### ANOREXIA/CACHEXIA

**ESTIMATED  
LIFE  
EXPECTANCY**

**INTERVENTION**

**REASSESSMENT**

Years

Year to  
months

→ [See Interventions \(PAL-12\)](#)

Months  
to weeks

Weeks to  
days  
(Dying  
patient)

- Assess importance of symptoms of anorexia and cachexia to patient and family
  - ▶ If important, consider short course of corticosteroids
- Treat for depression, if appropriate
- Recognize that discontinuation of nutrition is a value-laden issue. Consider consultation with bioethicist or spiritual counselor.
- Inform patient and family of natural history of disease, including the following points:
  - ▶ Absence of hunger and thirst is normal in the dying patient
  - ▶ Nutritional support may not be metabolized in patients with advanced cancer
  - ▶ There are risks associated with artificial nutrition and hydration, including fluid overload, infection, and hastened death
  - ▶ IV hydration may increase excretion of drug metabolites providing benefit to the patient
  - ▶ Symptoms like dry mouth can be treated with local measures, eg, mouthcare, small amounts of liquids
  - ▶ Withdrawal of IV or nasogastric (NG) tube feeding is ethically permissible in this setting. It will not cause exacerbation of symptoms and may improve some symptoms
- Focus on patient goals and preferences
- Provide family with alternate ways of caring for the patient
- Provide emotional support

**Satisfactory:**

- Adequate anorexia/cachexia symptom control
- Reduction of patient/family distress
- Acceptable sense of control
- Relief of caregiver burden
- Strengthened relationships
- Optimized quality of life
- Personal growth and enhanced meaning

Continue to treat and monitor symptoms and quality of life to determine whether status warrants change in strategies

**Unsatisfactory**

- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice

→ Ongoing reassessment

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**NAUSEA AND VOMITING**

**ESTIMATED  
LIFE  
EXPECTANCY**

**INTERVENTION<sup>e,f</sup>**

Years	→	<ul style="list-style-type: none"> <li>• <b>Chemotherapy/radiation therapy-induced</b> <a href="#">See NCCN Antiemesis Guidelines</a></li> <li>• <b>Severe constipation/fecal impaction.</b> <a href="#">(See PAL-16)</a></li> <li>• <b>Gastroparesis</b> (metoclopramide, 10-20 mg every 6 hr)</li> <li>• <b>Bowel obstruction</b> <a href="#">(See PAL-17)</a></li> <li>• <b>CNS involvement</b> (brain, meninges)                             <ul style="list-style-type: none"> <li>▶ Corticosteroids (dexamethasone, 4-8 mg tid-qid)</li> <li>▶ Palliative radiation therapy</li> </ul> </li> <li>• <b>Gastric outlet obstruction</b> (squashed stomach syndrome) from intra-abdominal tumor and liver metastasis                             <ul style="list-style-type: none"> <li>▶ If not contraindicated by comorbid conditions, treat with corticosteroids, proton pump inhibitor, metoclopramide, and consider stenting</li> </ul> </li> <li>• <b>Metabolic abnormalities</b> <ul style="list-style-type: none"> <li>▶ Correct hypercalcemia</li> <li>▶ Treat dehydration</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Medication-induced</b> <ul style="list-style-type: none"> <li>▶ Discontinue any unnecessary medications</li> <li>▶ Check available blood levels of necessary medications (digoxin, phenytoin, carbamazepine, tricyclic antidepressants)</li> <li>▶ Treat medication-induced gastropathy (proton pump inhibitor, metoclopramide)</li> <li>▶ If due to opioids, initiate opioid rotation and/or consider reducing opioid requirement with non-nauseating coanalgesics or anesthesiologic/neurosurgical procedures</li> </ul> </li> <li>• <b>Psychogenic</b> <ul style="list-style-type: none"> <li>▶ Consider psychiatric consultation if patient has eating disorder, somatization, phobia, or panic disorder causing nausea and vomiting</li> </ul> </li> <li>• <b>Non-specific Nausea and Vomiting (NV)</b> <ul style="list-style-type: none"> <li>▶ Initiate pharmacological management with dopamine receptor antagonists (eg, haloperidol, metoclopramide, prochlorperazine)</li> <li>▶ If anxiety contributes to NV, consider adding lorazepam, 0.5-1 mg every 4 hr prn</li> <li>▶ If oral route not feasible, consider rectal, subcutaneous, or intravenous administration of anti-nauseant therapy</li> </ul> </li> </ul>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>If NV stops <a href="#">See Reassessment PAL-15</a></p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>If NV persists <a href="#">See Interventions PAL-15</a></p> </div>
Year to months				
Months to weeks <sup>d</sup>				
Weeks to days (Dying patient) <sup>d</sup>				

<sup>d</sup>In patients with advanced cancer, nausea and vomiting may be secondary to the cachexia syndrome (chronic nausea, anorexia, asthenia, changing body image and autonomic failure).

<sup>e</sup>Around-the-clock dosing schedule would likely provide the greatest benefit to the patient.

<sup>f</sup>Continuous intravenous or subcutaneous infusions of different antiemetics may be necessary for the management of intractable NV.

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**Clinical Trials:** NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.



### PERSISTENT NAUSEA AND VOMITING

#### INTERVENTION

Titrate dopamine receptor antagonist (eg, prochlorperazine, haloperidol, metoclopramide) to maximum benefit and tolerance

Add a 5-HT<sub>3</sub> antagonist (eg, ondansetron) ± an anticholinergic agent (eg, scopolamine) ± antihistamine (eg, meclizine) ± cannabinoid.  
If NV persists:

Add corticosteroid (eg, dexamethasone).  
If NV persists:

Consider using a continuous IV/SC infusion of antiemetics; consider an opioid rotation if patient on opioids.  
If NV persists:

Consider adding alternative therapies (eg, acupuncture, hypnosis, cognitive behavioral therapy)

#### REASSESSMENT

##### Satisfactory:

- Adequate nausea/vomiting symptom control
- Reduction of patient/family distress
- Acceptable sense of control
- Relief of caregiver burden
- Strengthened relationships
- Optimized quality of life
- Personal growth and enhanced meaning

Continue to treat and monitor symptoms and quality of life to determine whether status warrants change in strategies

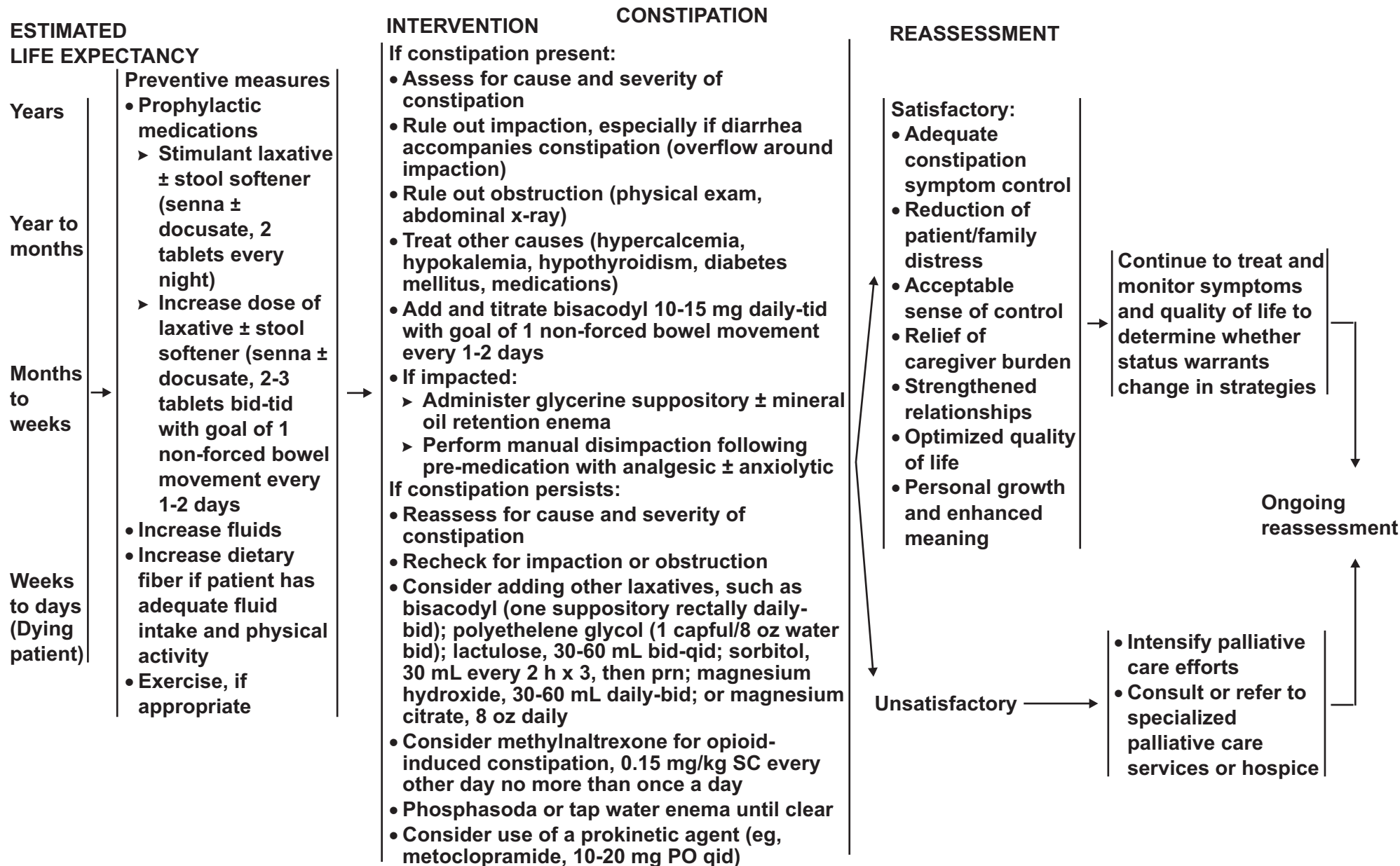
##### Unsatisfactory

- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice
- Consider palliative sedation ([See PAL-30](#))

[Ongoing Reassessment \(See PAL-14\)](#)

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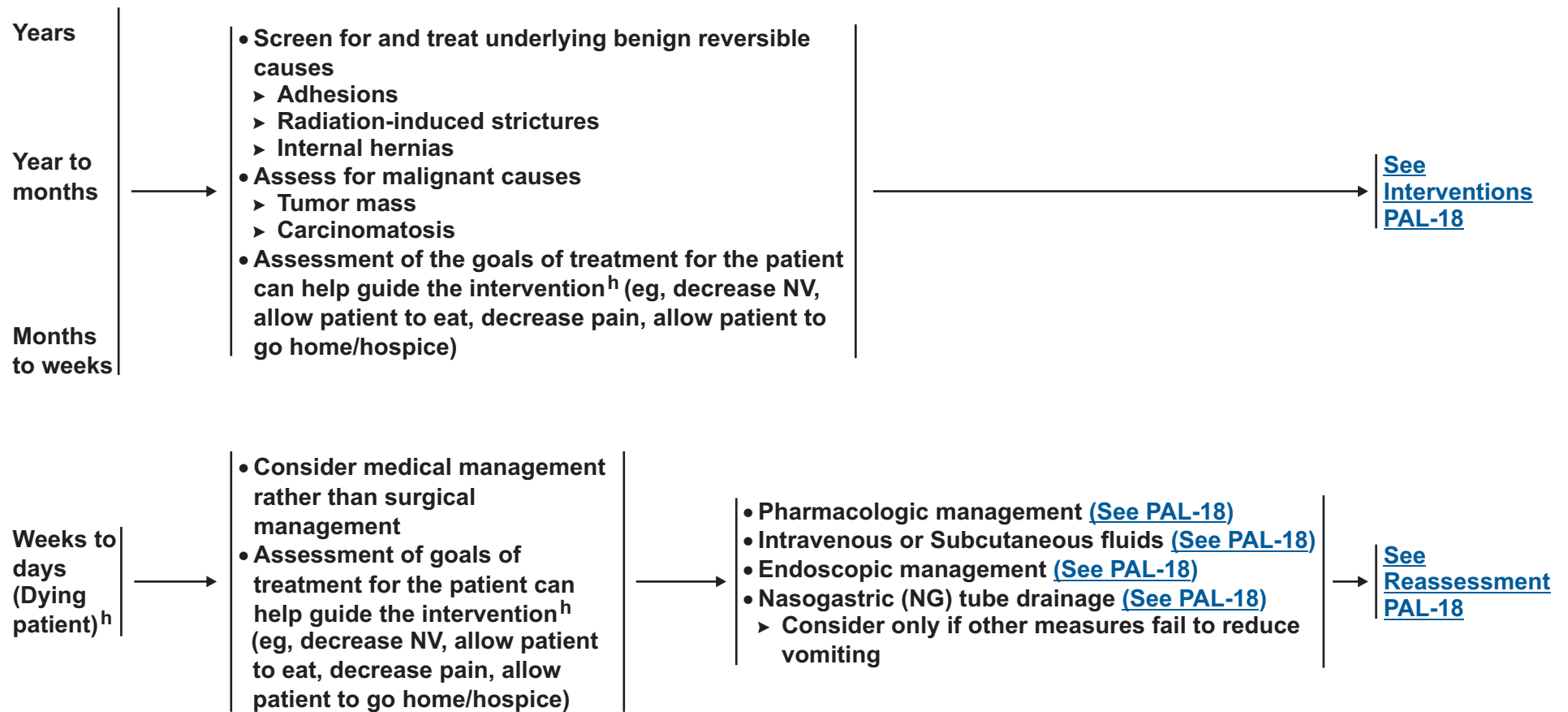
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**MALIGNANT BOWEL OBSTRUCTION<sup>9</sup>**

**ESTIMATED  
LIFE  
EXPECTANCY**

**ASSESSMENT**



<sup>9</sup>Plain film radiography evaluation is usually enough to establish the diagnosis of bowel obstruction. Consider CT scan if surgical intervention is contemplated as it is more sensitive and helps identify the cause of obstruction.

<sup>h</sup>Most malignant bowel obstructions are partial, allowing time to discuss with patient and family appropriate interventions.

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**MALIGNANT BOWEL OBSTRUCTION**

**INTERVENTION**

- **Operative management<sup>i</sup>**
  - Risks must be discussed with patient/family (mortality, morbidity, re-obstruction)
  - Improved quality of life should be the primary goal of surgical treatment
- **Endoscopic management**
  - Percutaneous endoscopic gastrostomy tube for drainage
  - Endoscopic stent placement
- **Interventional radiology management**
  - Ultrasound guided venting tube
- **Pharmacologic management**
  - Use rectal, transdermal, subcutaneous or intravenous routes of administration
  - Consider as an adjunct to invasive procedure when invasive procedures not an option
  - Opioids
  - Antiemetics- do not use antiemetics that increase gastrointestinal mobility such as metoclopramide, but these may be beneficial in incomplete bowel obstruction
  - Octreotide-consider early in the diagnosis due to high efficacy and tolerability (100-300 mcg SC BID-TID or 10-40 mcg/hr continuous SC/IV infusion)
  - Anticholinergics (scopolamine, hyoscyamine, glycopyrrolate)
  - Corticosteroids (discontinue if no improvement noted in 3-5 days; up to 60 mg/day of dexamethasone)
- **Intravenous or subcutaneous fluids**
  - Consider if evidence of dehydration
- **Nasogastric (NG) tube drainage**
  - Usually uncomfortable
  - Increased risk of aspiration
  - Consider on a limited trial basis only if other measures fail to reduce vomiting
- **Total parenteral nutrition (TPN)**
  - Consider only if expected improvement of quality of life with life expectancy of many months to years

**REASSESSMENT**

**Satisfactory:**

- Adequate control of malignant bowel obstruction symptoms
- Reduction of patient/family distress
- Acceptable sense of control
- Relief of caregiver burden
- Strengthened relationships
- Optimized quality of life
- Personal growth and enhanced meaning

Continue to treat and monitor symptoms and quality of life to determine whether status warrants change in strategies

[Ongoing Reassessment \(See PAL-17\)](#)

**Unsatisfactory**

- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice

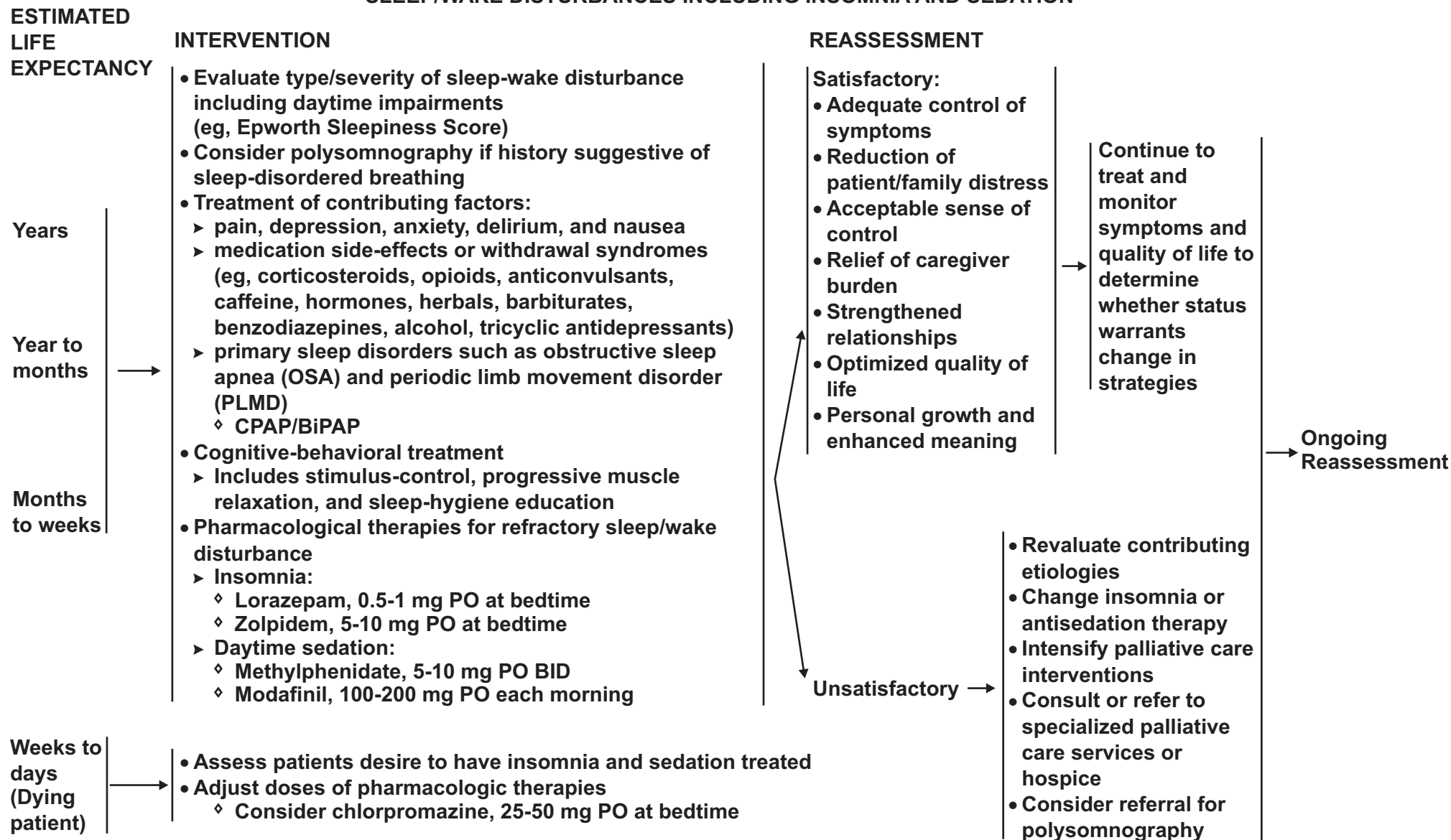
<sup>i</sup>Poor prognosis criteria for surgery include: ascites, carcinomatosis, palpable intraabdominal masses, multiple bowel obstructions, previous abdominal radiation, very advanced disease, and poor overall clinical status.

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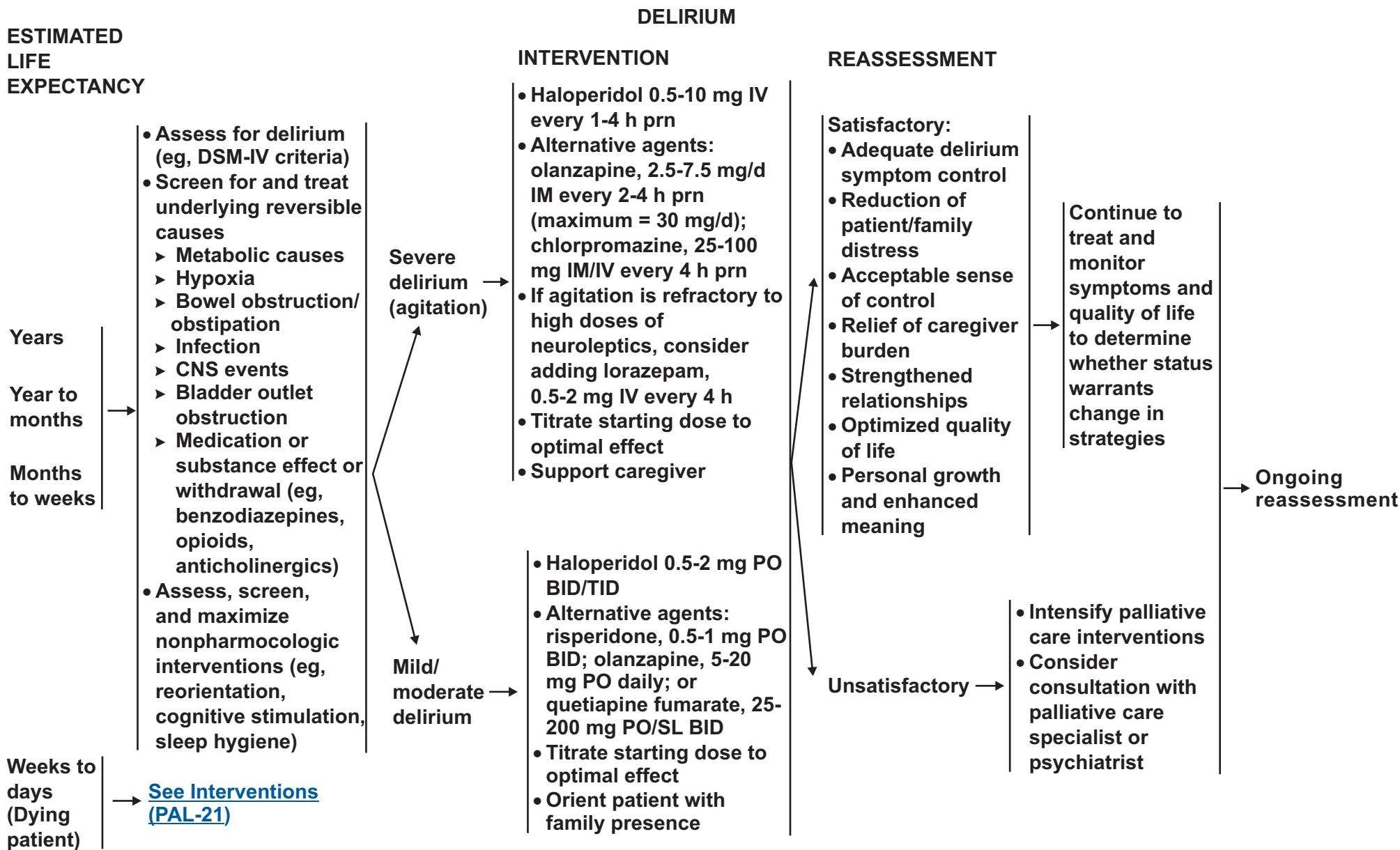


**SLEEP/WAKE DISTURBANCES INCLUDING INSOMNIA AND SEDATION**



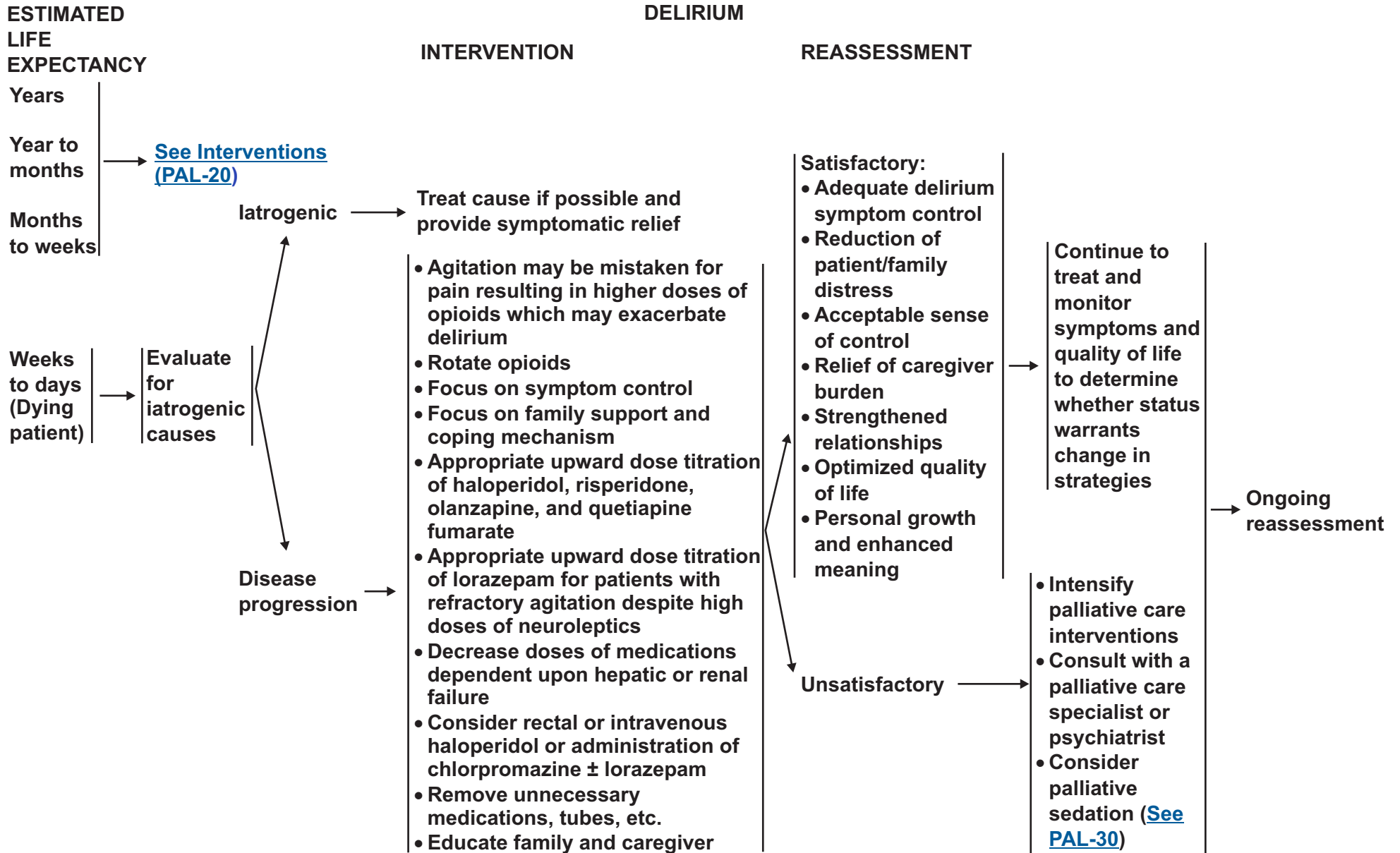
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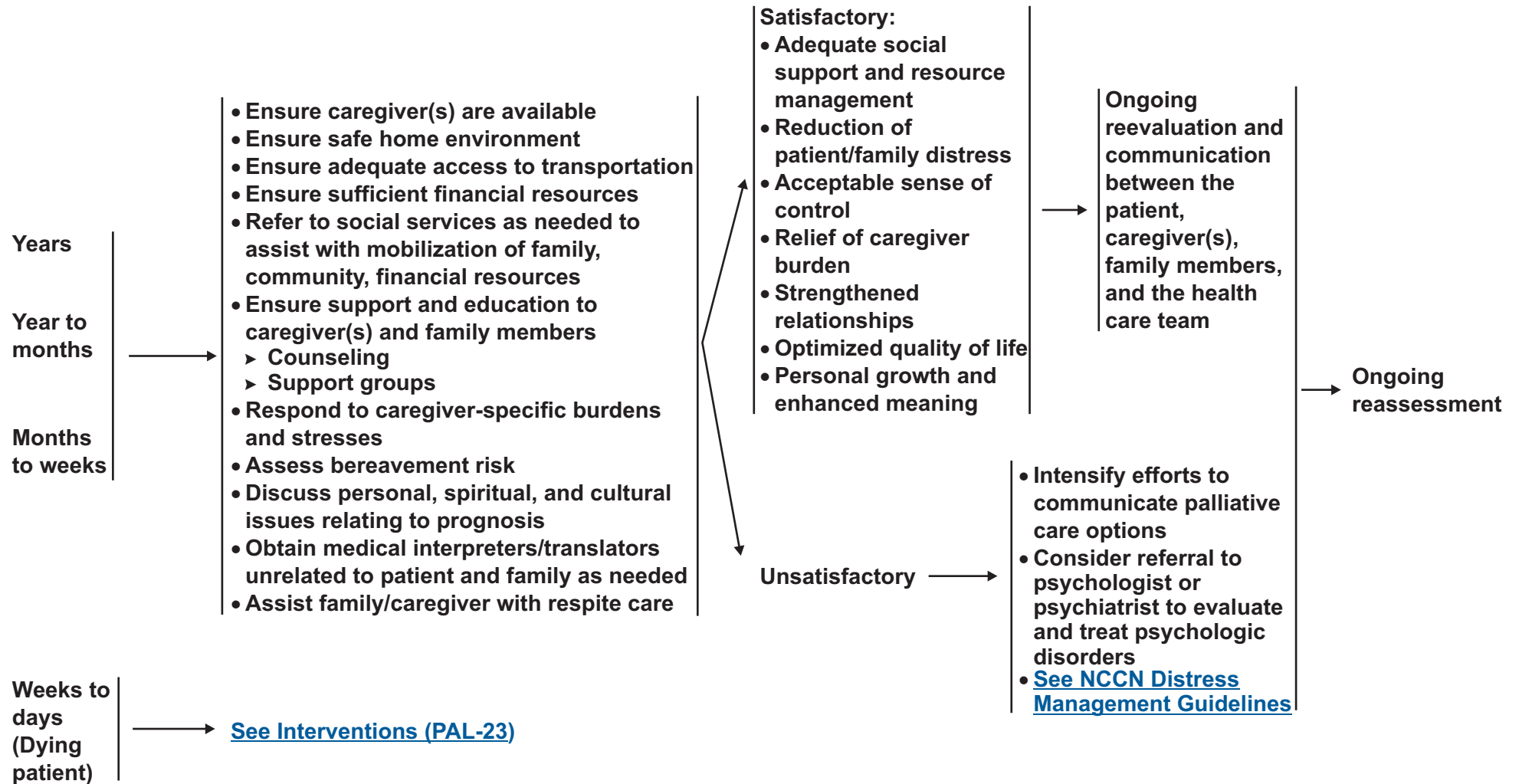


### SOCIAL SUPPORT/RESOURCE MANAGEMENT

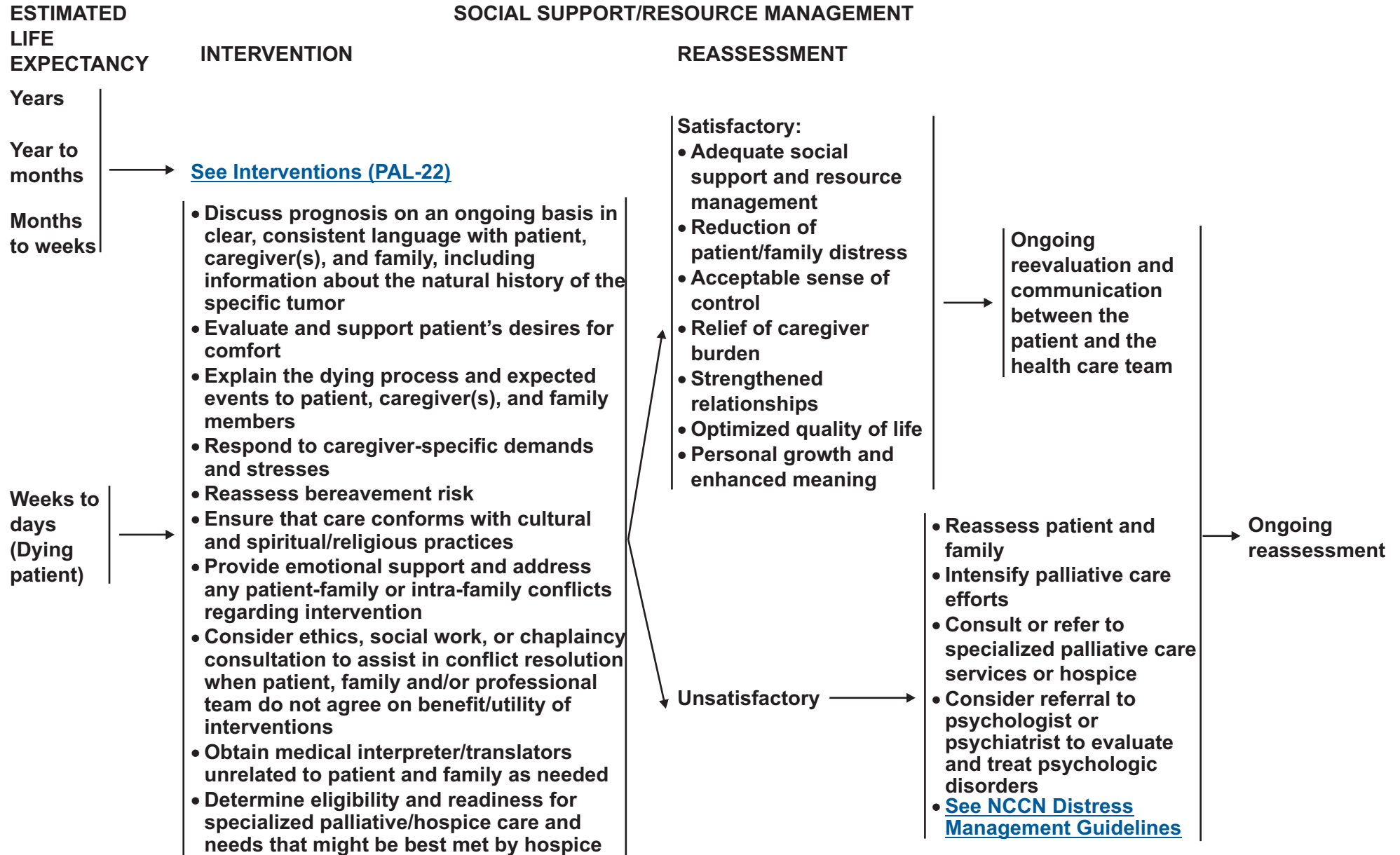
**ESTIMATED  
LIFE  
EXPECTANCY**

**INTERVENTION**

**REASSESSMENT**



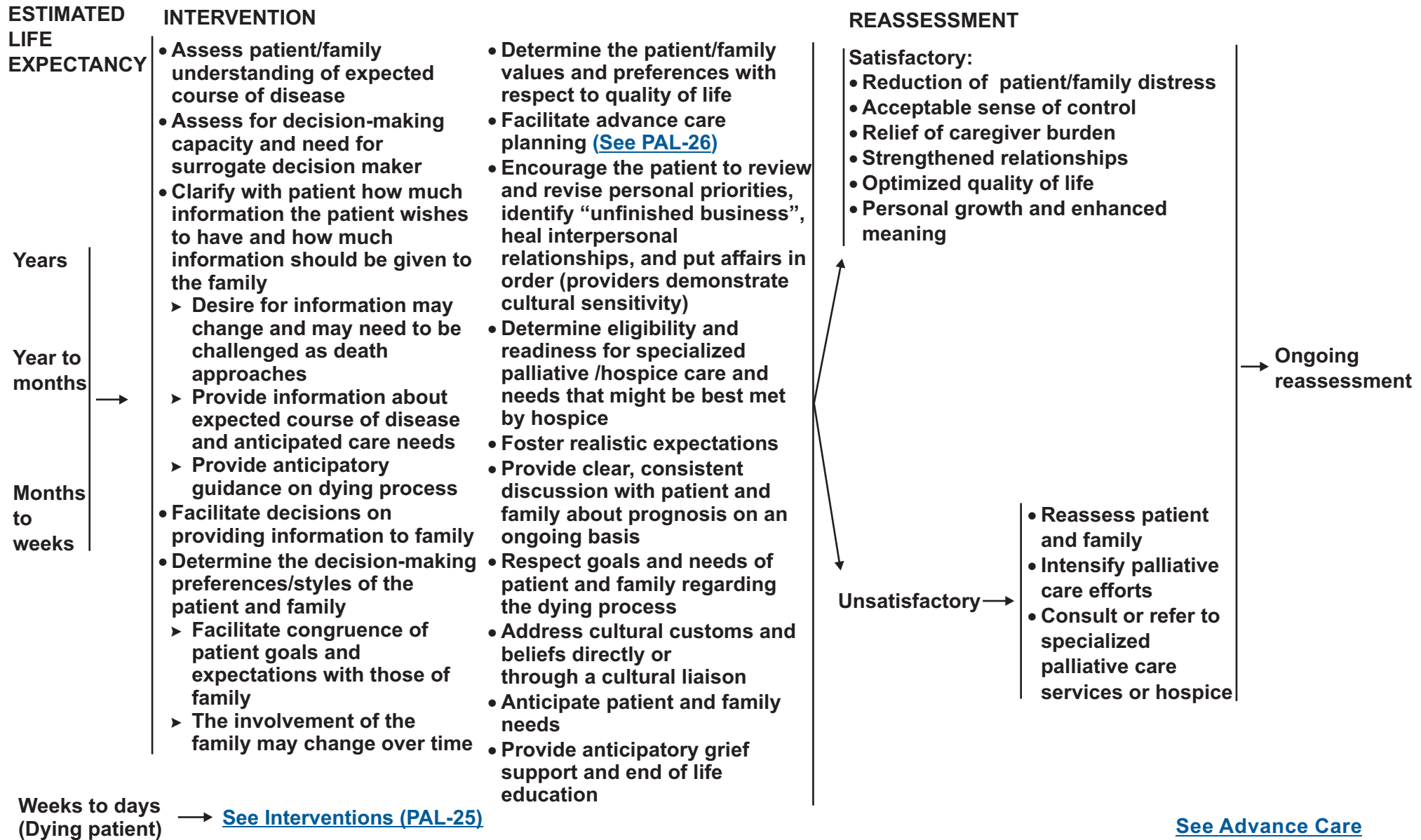
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**GOALS AND EXPECTATIONS, EDUCATIONAL AND INFORMATIONAL NEEDS, AND CULTURAL FACTORS AFFECTING CARE FOR THE PATIENT AND FAMILY**

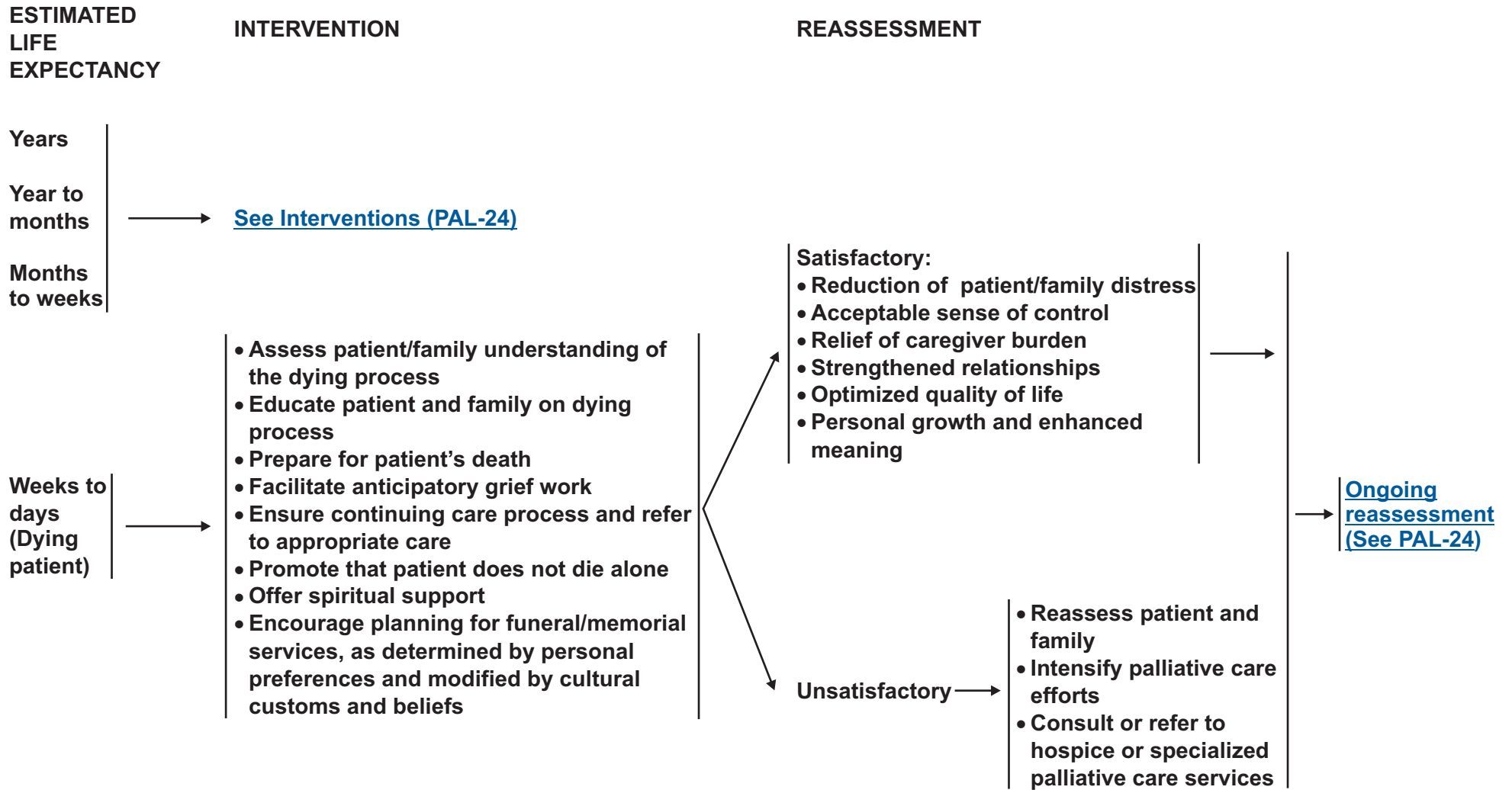


[See Advance Care Planning \(PAL-26\)](#)

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### GOALS AND EXPECTATIONS, EDUCATIONAL AND INFORMATIONAL NEEDS, AND CULTURAL FACTORS AFFECTING CARE FOR THE PATIENT AND FAMILY



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### ADVANCE CARE PLANNING

#### ESTIMATED LIFE EXPECTANCY

#### INTERVENTION

- Discuss palliative care options including hospice
- Consider introducing palliative care team
- Assess for decision-making capacity and need for surrogate decision maker
- Elicit personal values and preferences for end of life care and congruence with values and preferences of family and health care team
- Provide information about advance directive and encourage exploration of DNR option
- Encourage the patient to discuss wishes with family
- Encourage designation of health care proxy, medical power of attorney, durable power of attorney or patient surrogate for healthcare
- Inquire about desire for organ donation and/or autopsy
- Explore fears about dying and address anxiety

#### REASSESSMENT

- Satisfactory:**
- Adequate advance care planning
  - Reduction of patient/family distress
  - Acceptable sense of control
  - Relief of caregiver burden
  - Strengthened relationships
  - Optimized quality of life
  - Personal growth and enhanced meaning

**Unsatisfactory**

Ongoing reevaluation and communication between the patient and the health care team

- Intensify efforts to communicate palliative care options
- Consider referral to psychologist or psychiatrist to evaluate and treat psychologic disorders
- [See NCCN Distress Management Guidelines](#)

Ongoing reassessment

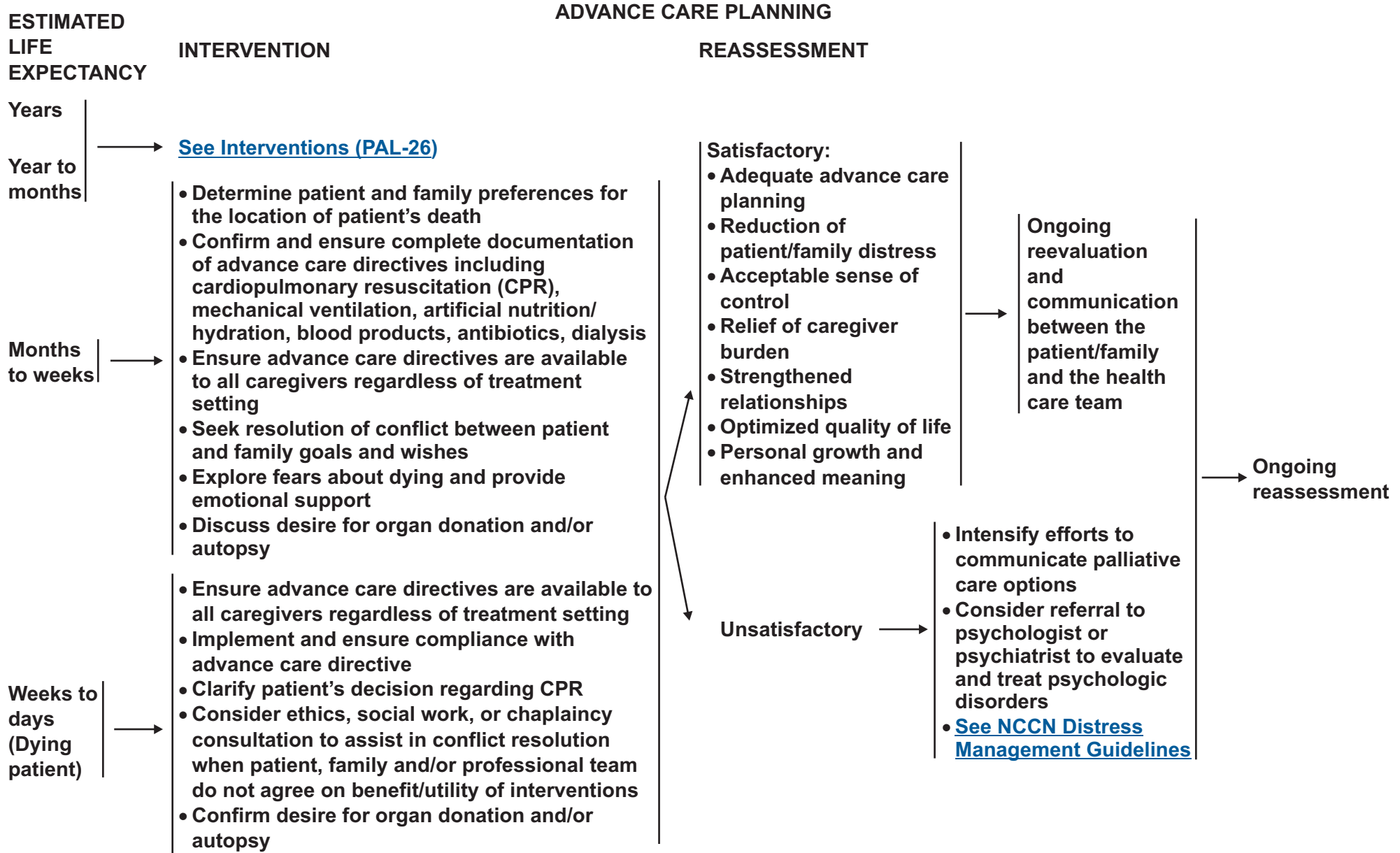
Years

Year to months

Months to weeks

Weeks to days (Dying patient)

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### RESPONSE TO REQUESTS FOR HASTENED DEATH (PHYSICIAN-ASSISTED SUICIDE, ACTIVE EUTHANASIA)

- **The NCCN Palliative Care Panel believes that the most appropriate response to a request for assistance in suicide is to intensify palliative care. However, evaluating a patient's request for physician-assisted suicide is an important skill, even for clinicians who feel this practice is never morally acceptable. A request for hastened death often has important meanings that require exploration. Clarifying these meanings can sometimes enlarge the range of useful therapeutic options instead of providing a lethal prescription.**
- **Address the request explicitly. If a patient uses a euphemism for death or refers to it indirectly, ask for clarification. Do not assume that a wish for death to come soon is a wish for a lethal prescription.**
- **Distinguish wishing not to live in their current state from wishing for a hastened death including euthanasia and physician-assisted suicide.**
- **Explore the reasons for the request for a hastened death, and find out "why now?"**
  - **Reassess symptom control.**
  - **Reassess psychological/psychiatric issues, especially depression, anxiety, grief, psychosis, and delirium.**
  - **Ask about the patient's relationship to family or other important people.**
  - **Ask about individual values and personal views of spiritual/existential suffering.**
  - **Assess for fears of caregiver burden, abandonment and lack of control.**
- **Offer information about natural history of the disease and explain the process of dying.**
- **Address the role of medical caregivers, including hospice if appropriate.**
- **Discuss alternatives to physician-assisted suicide such as, treatment withdrawal, voluntary cessation of eating or drinking, and/or sedation for refractory symptoms.**
- **Request consult with mental health professional to diagnose and treat reversible causes of psychological suffering.**
  
- **Know the local legal status of hastened death. Some patients may be confused about legal/ethical distinctions; treatment withdrawal and aggressive treatments for symptoms, such as pain, are not physician-assisted suicide. Hastened death is legal only in Oregon, Montana, and Washington and have specific guidelines. Euthanasia is not legal in any state in the USA.**
- **Examine your own response as a clinician to this particular patient's request. Requests for hastened death can force clinicians to confront their own personal, professional, moral, and legal responsibilities. Dealing with an individual patient can be quite different from thinking about the issue in abstract circumstances. Consider consultation with an Ethics Committee, Palliative Care Service, or experienced colleague. These cases are usually complex and often benefit from consideration of multiple perspectives.**
- **Clarify the care plan. Requests for hastened death should prompt ongoing discussion and active attempts to ameliorate physical, psychological, and spiritual distress. Reemphasize your own commitment to providing continuing care for the patient. Maintain medications for symptom control.**

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**IMMINENTLY DYING PATIENT**

For an imminently dying patient, consider using an End-of-Life Care order set which may contain physical, psychosocial, and practical interventions such as:

**• Physical**

- ▶ **Intensify comfort measures:**
  - ◊ Implement skin safety protocol according to risk assessment including pressure-relieving mattress and regular repositioning for comfort as indicated; keep skin moist; reassess wound care for comfort and premedicate for wound care as needed
  - ◊ Provide mouth care to keep mouth/lips moist
  - ◊ Treat for urinary retention and fecal impaction
- ▶ Ensure deactivation of implanted defibrillator and consider deactivation of implanted pacemaker
- ▶ Discontinue unnecessary diagnostic tests and interventions such as transfusions, needle sticks, I & O, blood glucose monitoring, oxygen saturation monitoring, and suctioning
- ▶ Replace check of vital signs with regular (eg, every 4 h) symptom control assessments
- ▶ Switch routes of medication administration when oral route is no longer feasible
- ▶ Increase doses of medications to optimal comfort
- ▶ Treat unclearable terminal secretions (death rattle) by changing the patient's positioning, reducing parenteral and enteral fluids.
  - ◊ For refractory secretions, consider medications such as atropine 1% ophthalmic solution 1-2 drops SL every 4 h prn
- ▶ Treat refractory restlessness and agitation with palliative sedation ([See PAL-30](#))
- ▶ Prepare to meet request for organ donation and autopsy

**• Psychosocial**

- ▶ Support patient and family to accept discontinuation of TPN and transfusions, dialysis, IV hydration, and medications that will not add to patient's comfort
- ▶ Consider social work and chaplain consults
- ▶ Allow patient and family uninterrupted time together
- ▶ Ensure the patient and family understand the signs and symptoms of imminent death and are supported through the dying process
- ▶ Offer anticipatory bereavement support
- ▶ Provide support to children and grandchildren
- ▶ Encourage visits by children if consistent with family values
- ▶ Support culturally meaningful rituals
- ▶ Ensure that caregivers understand and will honor advance directives
- ▶ Facilitate closure

**• Practical**

- ▶ Mobilize in hospital end-of-life care policy and procedures
- ▶ Ensure that patient's advance directive is documented and implemented
- ▶ Ensure that patient's wishes for resuscitation and/or do-not-resuscitate (DNR) are documented and followed
  - ◊ If patient/family have not yet accepted a DNR order, intensify patient/family education and counseling
- ▶ Ensure privacy for patient and family; if not at home, arrange for a private room if possible
- ▶ Facilitate around-the-clock family presence
- ▶ Provide patient and family with respectful space and uninterrupted time together
- ▶ Facilitate funeral planning

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[See After Death Interventions \(PAL-31\)](#)



## PALLIATIVE SEDATION

- **Confirm that the patient has refractory symptoms and is imminently dying**
  - ▶ **Refractory symptoms: symptoms that cannot be adequately controlled despite aggressive, skilled, palliative care that does not compromise consciousness**
  - ▶ **Imminently dying: prognosis of hours to days confirmed by two physicians**
  
- **Obtain informed consent for sedation from patient and/or surrogate/family**
  - ▶ **Discuss the patient's disease status, treatment goals, prognosis, and expected outcomes with the patient and/or surrogate**
  - ▶ **Clarify that sedation will consist of the continuous administration of medications that will render the patient unconscious**
  - ▶ **Review the ethical justification of the use of sedation with the patient/surrogate/family and members of the health care team**
    - ◊ **An ethics consult may be considered in accordance with institutional guidelines and state regulations.**
  - ▶ **Explain that consent for sedation must be accompanied by consent for:**
    - ◊ **Discontinuation of life-prolonging therapies**
    - ◊ **Withholding of cardiopulmonary resuscitation**
  
- **Permit reassignment of healthcare professionals who cannot provide sedation due to personal or professional values and beliefs as long as patient care can be safely transferred to the care of another healthcare professional.**
  
- **Select appropriate sedative treatment plan based upon the patient's response to recent and current medications.**

**Typical sedatives used for palliative sedation parenteral infusions include:**

  - ▶ **Thiopental: Initial infusion rate 20-80 mg/h; range 160-440 mg/h**
  - ▶ **Midazolam: Initial infusion rate 0.4-0.8 mg/h; range 20-102 mg/h**
  
- **Continue current pain and symptom management control interventions**
  
- **Monitor patient symptoms regularly and titrate sedatives and other medications based on response and drug/drug interactions to establish and maintain a level of sedation that relieves the patient's refractory symptoms**
  
- **Provide ongoing psychosocial and spiritual support for the patient's surrogate, family, and health care professionals.**

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**DEATH**

**ASSESSMENT**

**AFTER DEATH INTERVENTIONS**

Death →

**A “good death”:**

- Free from avoidable distress and suffering for patients, families, and caregivers
- In general accord with patient’s and family’s wishes
- Consistent with clinical, cultural, and ethical standards

→

**For family and caregivers**

- **Immediate after death care:**
  - Remove implanted devices unless autopsy planned
  - Ensure culturally sensitive, respectful treatment of the body
  - Provide family time with the body
  - Address survivor concerns about organ donation and/or autopsy
  - File death certificate, complete forms and provide necessary information for funeral director
  - Offer guidance regarding normal bereavement process
  - Inform other health care providers of patient’s death
- **Bereavement support:**
  - Formally express condolences on patient’s death (eg, card, call, or letter)
  - Refer to appropriate bereavement services within the institution or in the community
  - Attend debriefing meeting with family if family desires one
- Discuss cancer risk assessment and modification with family members
- Identify family members at risk for complicated bereavement

**For healthcare professionals**

**General support:**

- Legitimize discussion of personal issues that impact on patient care
- Create climate of safety for discussion of patient deaths
- Provide regular opportunities for reflection and remembering for staff through memorial ritual

**After death support:**

- Review medical issues related to patient death
  - Explore concerns and questions regarding quality of patient care
- Review family emotional responses to patient death
- Review staff emotional responses to patient death
  - Include nurses, nursing assistants, physician team members (including medical students, residents, fellows), social work, chaplaincy as appropriate
  - Consider bereavement ritual for staff (eg, brief reading, moment of quiet, etc.)
- Identify healthcare professionals at risk for complicated bereavement

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## Discussion

### NCCN Categories of Evidence and Consensus

**Category 1:** The recommendation is based on high-level evidence (e.g. randomized controlled trials) and there is uniform NCCN consensus.

**Category 2A:** The recommendation is based on lower-level evidence and there is uniform NCCN consensus.

**Category 2B:** The recommendation is based on lower-level evidence and there is nonuniform NCCN consensus (but no major disagreement).

**Category 3:** The recommendation is based on any level of evidence but reflects major disagreement.

**All recommendations are category 2A unless otherwise noted.**

## Overview

The aim of the NCCN Palliative Care Guidelines is to help assure that each cancer patient experiences the best quality of life that is possible throughout the illness trajectory. The Palliative Care Guidelines panel is an interdisciplinary group of representatives from NCCN member institutions, consisting of medical oncologists, neurologists and neuro-oncologists, anesthesiologists, psychiatrists, internists, palliative care and pain management specialists, and geriatric medicine specialists. The NCCN Palliative Care Guidelines were developed and updated from the collaborative efforts of these experts based on their clinical experience and available scientific evidence.

## Palliative Oncology

More than 1.5 million people were diagnosed with cancer in the United States in 2010, and more than 0.5 million people died of the disease.<sup>1</sup> Global cancer rates are increasing, and there is also a rise in the number of cancer survivors living with symptoms and disabilities as a result of their disease and/or its treatment.<sup>2</sup> The need for comprehensive care for patients with cancer and for their families is great. During the past 20 years, increasing attention has been paid to quality-of-life issues in oncology.<sup>2-7</sup> As the hospice movement has grown in this country, palliative care has developed into an integral part of comprehensive cancer care.<sup>2, 8-12</sup> However, most patients who receive hospice care in this country are referred too late for comprehensive palliative care to exert its full benefit, and many patients are never referred at all. Furthermore, administration of chemotherapy late in the course of cancer care, including in the last days of life, is growing more common,<sup>13, 14</sup> and oncologists have reported that they have found hospice regulations too restrictive.<sup>15</sup>

The need for palliative care among cancer patients is great. Approximately 16% of cancer patients being discharged from a single hospital in Germany were assessed as having palliative care needs, with the greatest need in head and neck cancer, melanoma, and brain tumors.<sup>16</sup> More than one-third of cancer patients in a large observational cohort study reported moderate to severe symptoms in the majority of categories (pain, nausea, anxiety, depression, shortness of breath, drowsiness, well-being, loss of appetite, and tiredness) in the last weeks of life.<sup>17</sup>

While palliative care previously focused on end-of-life care, there is increasing understanding that palliative care needs to be integrated earlier into the continuum of cancer care<sup>18-22</sup>; it needs to exist right from



the time of diagnosis through survivorship and/or end-of-life care. Palliative care should begin with the presentation of symptoms, even before the source of those symptoms has been fully determined. Building on the World Health Organization's recommended model of resource allocation in cancer care,<sup>8</sup> an NCCN task force recommended that palliative, symptom-modifying therapy should be provided simultaneously with disease-modifying therapy from diagnosis.<sup>23</sup> A remarkable recent study showed that early introduction of palliative care can not only improve quality of life for patients with advanced cancer but can also improve survival.<sup>24</sup> As the cancer progresses and anticancer therapy becomes less effective, appropriate and desired palliative care becomes the major focus of the continuing care of the patient and family.<sup>25</sup> Patients with increased risk for cancer should also be provided with supportive care along with risk-reduction therapies. Palliative care should continue even after the patient's death in the form of bereavement support for the patient's survivors.

Educational programs should be provided to all healthcare professionals and trainees so that they can develop effective palliative care knowledge, skills, and attitudes. The number of palliative care programs in the United States is rapidly increasing. The establishment of palliative medicine as a medical subspecialty is receiving an unprecedented level of support from at least ten cosponsoring American Board of Medical Specialties (ABMS; [www.abms.org](http://www.abms.org)) boards including Anesthesiology, Family Medicine, Internal Medicine, Physical Medicine and Rehabilitation, Psychiatry and Neurology, Surgery, and Pediatrics. Support for expansion of palliative medicine education has been offered by the Liaison Committee on Medical Education (LCME; [www.lcme.org](http://www.lcme.org)), which has mandated palliative medicine education for medical schools. In addition, the Accreditation Council for Graduate Medical Education (ACGME; [www.acgme.org](http://www.acgme.org)) now requires training in

palliative medicine for oncology fellows, including training in pain, psychosocial care, personal awareness, and hospice care. Unfortunately, a recent survey of 254 hematology/oncology fellows found that palliative care education is still lacking, with only 32% of respondents reporting formal training in managing end-of-life depression and only 33% reporting explicit training in opioid rotation.<sup>26</sup>

Patients and families should be informed that palliative care is an integral part of their comprehensive cancer care.<sup>27, 28</sup> Initially, the primary oncology team (interdisciplinary team of physicians, nurses, social workers, other mental health professionals, and chaplains) can provide most of the palliative care needed by the patient. Intractable symptoms or complex psychosocial problems can benefit from the inclusion of palliative care experts. As the disease progresses and the prognosis becomes a matter of months, collaboration with palliative/hospice teams is usually advised to best meet the many needs of the patient and family. Effective palliative care also requires an interdisciplinary team approach. Skilled, palliative care specialists and interdisciplinary palliative care teams should be readily available to provide consultative or direct care to patients/families that request or require their expertise. Clear, consistent, and empathetic communication with patient and family about the natural history of the cancer and its prognosis is at the core of effective palliative care.<sup>29, 30</sup> The Center to Advance Palliative Care ([www.capc.org](http://www.capc.org)) has been established to increase the availability of quality palliative care services in hospitals and other health care settings for people with advanced illness.

Assessing outcomes and evaluating palliative cancer care is essential to ensure high-quality, evidence-based care. Lorenz et al performed a systematic review of end-of-life care and outcomes and found that many aspects of palliative care lack high-quality evidence.<sup>31</sup> The



second edition of the Clinical Practice Guidelines for Quality Palliative Care by the National Consensus Project were published in 2009,<sup>32</sup> and the National Quality Forum has developed a national quality framework for evaluating palliative care programs, extending beyond terminally ill cancer patients to include a broad spectrum of patients with multiple illnesses.<sup>33</sup> These guidelines provide an in-depth assessment of many issues surrounding palliative care (eg, cultural, ethical, legal, physical, psychological, social, spiritual, and existential aspects of care). In addition, the American College of Physicians has developed evidence-based guidelines to improve palliative care of pain, dyspnea, and depression experienced at the end of life.<sup>34</sup>

In the United Kingdom in 2004, the National Consensus Project and the National Institute for Health and Clinical Excellence (NICE) issued guidance on how supportive and palliative care services should be provided for adults with cancer ([www.nice.org.uk/page.aspx?o=csgsp](http://www.nice.org.uk/page.aspx?o=csgsp)). Some of the key recommendations are listed below:

1. Patients and their caregivers should have access to a range of specialist services that help them cope with cancer and its treatment.
2. Whenever possible, significant information should be given to patients by a senior health professional that has received advanced level training and is assessed as being an effective communicator.
3. Good quality information should be available free of charge to help people affected by cancer make decisions about their care.

ASCO recently published a statement on individualized care for patients with advanced cancer.<sup>6</sup> While significant improvements over the past decade were noted (eg, improvements in palliative care

education and training for oncologists and an increase in hospital-based palliative care programs and community-based hospice organizations), the statement points out that conversations with patients about their palliative needs are still happening too late in the progression of their disease. Some of the key elements of individualized care listed in the report are

- giving patients enough information to enable them to make informed choices regarding their treatment
- encouraging patients to focus on symptom-directed palliative care when disease-directed therapies fail
- giving patients the opportunity to participate in clinical trials that may improve their outcome or that of future patients
- giving patients the opportunity to die with dignity and peace of mind.

Other resources that may be useful for patients, their caregivers, and/or clinicians are listed in Table 1, below.

## Palliative Care Guidelines

The NCCN Palliative Care Guidelines were developed to facilitate the appropriate integration of palliative care into oncology practice. The guidelines outline procedures for screening, assessment, palliative care interventions, reassessment, and after-death care. The panel chose to focus on the needs of patients in their last 12 months of life. The panel chose this period to distill the content of textbooks and curricula into guidelines that could facilitate clinical decision-making in the same way that NCCN disease-oriented and symptom-oriented guidelines have



done, although patients and families can certainly benefit from palliative care integrated throughout the illness trajectory.

The guidelines define palliative care as both a philosophy of care and an organized, highly structured system for delivering care to persons with life-threatening or debilitating illness. Palliative care is patient and family-centered care that focuses upon effective management of pain and other distressing symptoms while incorporating psychosocial, spiritual, and existential support according to patient/family needs, values, beliefs, and cultures. The goal of palliative care is to prevent and relieve suffering and to support the best possible quality of life for patients and their families, regardless of the stage of the disease or the need for other therapies. Palliative care can be delivered concurrently with life-prolonging care (integrated model) or as the main focus of care.

### Palliative Care Screening

All cancer patients should be screened for palliative care needs at their initial visit, at appropriate intervals, and as clinically indicated. Use of the NCCN Palliative Care Guidelines should be considered for patients in the following clinical situations: uncontrolled symptoms, moderate to severe distress related to cancer diagnosis and therapy, serious comorbid physical and psychosocial conditions, life expectancy of one year or less, patient or family's concerns about the course of disease and decision making, and/or a specific request by the patient or family for palliative care. An estimate of life expectancy in terms of years, a year to months, months to weeks, or weeks to days should be made to guide the use of specific palliative care interventions. Potential indicators that patients are in their last year of life include decreased performance status (Eastern Cooperative Oncology Group [ECOG] 3 or more; Karnofsky performance score [KPS] 50 or less), hypercalcemia,

central nervous system metastases, delirium, superior vena cava syndrome, spinal cord compression, cachexia, malignant effusions, liver failure, kidney failure, or other serious comorbid conditions. Some patients, for example those with stage IV lung cancer, pancreatic cancer, and glioblastoma multiforme would benefit from palliative care beginning at the time of diagnosis, as prognosis in these conditions is usually less than a year. Clinicians should integrate palliative care into general oncology care for patients who meet these screening criteria. These patients should undergo a comprehensive palliative care assessment by their primary oncology team. Comorbid physical and psychosocial conditions should be treated by appropriate clinicians. Consultation or collaboration with palliative care specialists is recommended for patients with more complex problems.

Patients who do not meet these screening criteria should be re-screened at regular intervals. In addition, patients and their family members should be informed about the role and benefits of palliative care services. Anticipation of palliative care needs and prevention of symptoms should also be discussed. Reassessment should be ongoing, with continuation or modification of life expectancy-guided palliative care until the patient's death.

### Palliative Care Assessment

A comprehensive palliative care assessment evaluates the benefits and risks of anticancer therapy; physical symptoms; psychosocial or spiritual distress; personal goals and expectations; educational and informational needs; cultural factors affecting care; and criteria for early consultation with a palliative care specialist.<sup>3-5</sup> Assessment of the benefits and risks of anticancer therapy is based on the existing NCCN disease-specific guidelines. Special attention should be given to the natural history of the specific tumor, potential for response to further

treatment, meaning of anticancer therapy to patient and family, impairment of vital organs, performance status, and serious comorbid conditions. Symptom assessment should look for common symptoms, such as pain, dyspnea, anorexia, cachexia, nausea, vomiting, constipation, malignant bowel obstruction, fatigue, weakness, asthenia, insomnia, sedation, and delirium. Assessment of psychosocial distress should focus upon psychosocial, spiritual, or existential issues according to the NCCN Distress Management Guidelines. Special problems with social support and resources must be addressed and managed. Patients and their families should be asked about their personal goals and expectations; priorities for palliative care; goals and meaning of anticancer therapy and quality of life; and the patient's eligibility for hospice based upon needs that might be met by the hospice model of palliative care. Patients and families should also be assessed for their educational and informational needs and cultural factors affecting their care including values and preferences about information and communication and perception of the patient's disease status.

Criteria for early consultation with a palliative care specialist are based on patient characteristics, social circumstances, and anticipatory bereavement issues. Patient-based criteria include patients with limited treatment options, high risk of poor pain control, history of significant psychiatric disorder, refractory non-pain symptoms, history of allergies or adverse effects to multiple palliative interventions, unexpected ICU admissions, high distress score (greater than 4) (see NCCN Distress Management Guidelines), cognitive impairment, severe comorbid conditions, communication barriers, and/or repeated requests for hastened death. Social circumstances or anticipatory bereavement issues that indicate a need for early referral for early consultation with a palliative care specialist include family/caregiver limitations, inadequate

social support, financial limitations, limited access to care, family discord, intensely dependent relationships, financial limitations, limited access to care, patient's concern regarding care of dependents, spiritual or existential distress, and/or unresolved or multiple recent losses.

### Palliative Care Interventions

The panel has divided the patients into three groups to address the effect of life expectancy on the delivery of palliative care interventions: patients with years to months to live, patients with months to weeks to live and dying patients in their final weeks to days. Patients in their final hours of life are referred to as “imminently dying” and may require special interventions. The panel recognizes the lack of precision of estimating life expectancy but believes that this delineation will be useful for the delivery of appropriate palliative care interventions. The patient and family's personal, spiritual and existential, cultural, and religious goals and expectations may change throughout these three time frames. Anticipation of patient and family needs is important. Optimal provision of palliative care requires ongoing reassessment and modification of strategies. Criteria for satisfactory care include adequate pain and symptom control, reduction of patient/family distress, acceptable sense of control, relief of caregiver burden, strengthened relationships, optimized quality of life, and personal growth and enhanced meaning.<sup>35-38</sup>

For patients whose life expectancy is “years to months” or “months to weeks,” it is important to determine how much information a patient wishes to know and how much of that information should be shared with the patient's family. Patients will also require answers to any questions about what to expect in the next few months and anticipatory guidance on the dying process as well. In addition, it is necessary to



determine the decision-making styles of patients and their families. This will help facilitate congruence of a patient's goals and expectations with those of the family. It is also important to determine patients' assessments of the relative importance of quality of life compared to length of life. Patients should be assisted in reviewing and revising their life priorities, resolving their unfinished business, and putting their financial and personal affairs in order.

Dying patients may wish to prepare for death and to help prepare family members to go on without them. Both the patient and the family benefit from education on the dying process. Families should be guided through their anticipatory grief, and arrangements should be made to ensure that the patient's and family's needs and goals regarding the dying process are respected. Planning to ensure continuing care and referrals to appropriate care is important. Arrangements should be available to ensure that the patient does not die alone unless that is the patient's preference.

Clinicians should discuss patient's prognosis with patients and their families clearly and consistently to help them develop realistic expectations. Information about the natural history of the specific tumor and the realistic outcomes of anticancer therapy should be included in the discussion. Many investigators have shown that seriously ill middle-aged and older patients tend to be more optimistic and less accurate about their prognosis than their physicians; such misunderstanding of the situation can affect their preferences for cardiopulmonary resuscitation and for measures extending life.<sup>39</sup>

Spiritual, existential, and cultural issues are often best addressed through collaboration with pastoral care counselors, professional translators, the patient's personal clergy, and representatives from the patient's cultural community. Religious and cultural issues surrounding

the beliefs and practices around the time of death must be anticipated and carefully managed.<sup>40</sup> Finally, social and spiritual support and resource management interventions should be provided to ensure a safe end-of-life care environment, a competent primary caregiver, and access to necessary medications and treatments. It is imperative for providers to be sensitive to cultural values that may influence the best way for such information to be presented and discussed.

Palliative care interventions for the management of specific symptoms as well as the benefits and risks of anticancer therapy are discussed below as outlined in the algorithms. Additional palliative care interventions for other symptoms will be developed as deemed necessary.

### **Benefits and Risks of Anticancer Therapy**

Patients who have years to months to live and a good performance status are likely to be interested in continuing anticancer therapy to prolong survival and reduce cancer-related symptoms.<sup>41-44</sup> Anticancer therapy may be conventional evidence-based treatment as outlined in the NCCN Cancer-Treatment Guidelines or treatment in the context of a clinical trial. In some of the advanced stage cancers, chemotherapy may be superior to best supportive care and may prolong survival.<sup>45, 46</sup> Furthermore, patients with advanced non-small cell lung cancer who are not eligible for systemic chemotherapy may benefit from targeted therapies that are effective for relieving symptoms, maintaining stable disease, and improving quality of life without the adverse events that may be associated with cytotoxic cancer therapies.<sup>47</sup> Physicians, patients, and their families should discuss goals, range of choices, benefits and risks of anticancer therapy, and possible effects on quality of life. Patients with months to weeks to live should be provided with guidance regarding the anticipated course of the disease. These

patients are typically tired of therapy, homebound, and more concerned about the side effects of more treatment. They shift the focus of treatment from prolonging life towards maintaining quality of life. These patients should be offered best supportive care, including referral to palliative care or hospice.<sup>48, 49</sup> Palliative care should not be described as “just hospice” to avoid demeaning the value of end-of-life care. In general, patients with weeks to days to live (ie, dying patients) should not be given anticancer therapy; instead they should be given intensive palliative care focusing on symptom control and preparation for the anticipated dying process.

### Symptoms

Special considerations in the implementation of these guidelines based on life expectancy are delineated in the algorithms. The major focus of these special considerations is the withholding and withdrawal of aggressive interventions, prevention and elimination of side effects associated with pharmacological pain management, the acceptance of loss of function for the sake of relief of symptoms, and the treatment of the unique symptoms of patients in their final hours of life. With regard to symptoms, the control of pain, dyspnea, anorexia/cachexia, nausea and vomiting, constipation, malignant bowel obstruction, fatigue, delirium, and psychological distress is fundamental and discussed in detail below.

### Pain

Please see the NCCN Adult Cancer Pain Guidelines. In addition, it is important to note that dying patients in their last weeks of life have several specific requirements. For instance, opioid dose should not be reduced solely for decreased blood pressure, respiration rate, or level of consciousness. In fact, opioids can be titrated aggressively for moderate/severe acute/chronic pain.<sup>50</sup> In addition, palliative sedation

can be considered for refractory pain (see below) following consultation with pain management/palliative care specialists.

### Dyspnea

Dyspnea is one of the most common symptoms in patients with advanced lung cancer.<sup>51</sup> The American Thoracic Society consensus statement defines dyspnea as “a subjective experience of breathing discomfort that consists of qualitatively distinct sensations that vary in intensity.”<sup>52</sup> In the management of dyspnea in patients with years to months to live, symptom intensity should be assessed followed by treatment of underlying causes or comorbid conditions using chemotherapy or radiation therapy, thoracentesis, pleurodesis or pleural drainage catheters, bronchoscopic therapy or bronchodilators, diuretics, steroids, antibiotics, or transfusions. Symptom intensity in non-communicative patients, with weeks to days to live, should be assessed using other distress markers of dyspnea.

Both pharmacologic and non-pharmacologic interventions have been assessed for management of dyspnea. A recent review concluded that there is little definitive data to evaluate the effectiveness of dyspnea interventions and that randomized controlled trials are needed.<sup>53</sup> Non-pharmacologic interventions include the use of handheld fans directed at the face.<sup>54</sup> Ventilation, as clinically indicated, and oxygen therapy for hypoxia are also recommended. Pharmacologic interventions include opioids or benzodiazepines.<sup>55, 56</sup> Scopolamine, atropine, hyoscyamine, and glycopyrrolate are all options to reduce excessive secretions associated with dyspnea.<sup>57-60</sup> Scopolamine can be administered subcutaneously or with patches; physicians should be aware that the onset of benefit for scopolamine patches is about 12 hours,<sup>61</sup> and they are thus not an appropriate choice for imminently dying patients. Benzodiazepines can be given for anxiety<sup>62</sup> and can be tried for treatment of dyspnea when other options have failed; the beneficial

effect of benzodiazepines on breathing in patients with advanced cancer is small.<sup>63</sup> As the life expectancy decreases, the role of mechanical ventilation and oxygen diminishes while the role of opioids, benzodiazepines, glycopyrrolate, and scopolamine increases.

### **Anorexia/Cachexia**

Anorexia-cachexia syndrome is prevalent in most patients with advanced cancer.<sup>64</sup> Anorexia is defined as loss of desire to eat. Cachexia results from loss of skeletal muscle mass leading to asthenia, changing body image, and autonomic failure. In patients with a life expectancy of years to months, interventions for anorexia or cachexia include treatment for early satiety, treatment of symptoms that interfere with intake, the use of appetite stimulants (such as megestrol acetate, medroprogesterone acetate, or steroids),<sup>65</sup> and/or evaluation of endocrine abnormalities. Nutrition support consultation<sup>66, 67</sup> or participation in a nutrition support clinical trial can be considered when the disease or treatment is affecting the ability to eat.

The goals and intensity of nutritional support change as life expectancy is reduced to weeks to days. Family members should be made aware of alternate ways of caring for the dying patient. Overly aggressive enteral or parenteral nutrition therapies can actually increase the suffering of dying patients.<sup>68-70</sup> Palliative care regarding hydration and nutrition in the final weeks of life typically includes the treatment of dry mouth and thirst, along with family education and support to deal with the psychosocial aspects of discontinuing feeding.

### **Nausea and Vomiting**

Chemotherapy-induced nausea and vomiting (CINV) has a major impact on a patient's quality of life.<sup>71</sup> Nausea and vomiting (NV) induced by chemotherapy or radiation therapy should be managed as outlined in the NCCN Antiemesis Guidelines. Patients can also

experience NV unrelated to chemotherapy and radiation, resulting from gastric outlet obstruction, bowel obstruction, constipation, opioid use, or hypercalcemia.<sup>72</sup> These causes should be identified and treated. Many medications can also cause nausea and vomiting, and blood levels of possible culprits, such as digoxin, phenytoin, carbamazepine, and tricyclic antidepressants, should be checked.<sup>73, 74</sup>

Non-specific nausea and vomiting can be managed with dopamine receptor antagonists (eg, prochlorperazine, haloperidol, metoclopramide) or benzodiazepines (anxiety-related nausea).<sup>75, 76</sup> Persistent nausea and vomiting can be treated by titrating dopamine receptor antagonists to maximum benefit and tolerance.<sup>77, 78</sup> If nausea still persists, addition of 5-HT<sub>3</sub> (5-hydroxytryptamine 3) receptor antagonists<sup>79, 80</sup> and/or anticholinergic agents and/or antihistamines,<sup>81</sup> corticosteroids,<sup>81, 82</sup> continuous or subcutaneous infusion of antiemetics, antipsychotics (eg, olanzapine or haloperidol),<sup>83</sup> and/or cannabinoids can be considered.<sup>84</sup> Opioid rotation may also help alleviate symptoms.<sup>85</sup> Alternative therapies (eg, acupuncture, hypnosis, or cognitive behavioral therapy) can also be considered.<sup>86-88</sup> Palliative sedation (see Special Palliative Care Interventions, below) can be considered as a last resort if intensified efforts by specialized palliative care or hospice services fail.

A recent systematic review assessed the level of evidence for antiemesis unrelated to chemotherapy.<sup>89</sup> While the authors concluded that antiemetic recommendations have moderate to weak evidence at best, the strongest evidence supports the use of metoclopramide; studies of multidrug combination therapies do not support their effectiveness.

**Constipation**

Constipation occurs in approximately 50% of all patients with advanced cancer and in the majority of patients treated with opioids.<sup>90</sup> A large number of drugs are known to cause constipation<sup>91</sup> including antacids, anticholinergic drugs (antidepressants, antispasmodics, phenothiazines, and haloperidol), and antiemetics; however, opioid analgesics are the drugs most commonly associated with constipation. Opioid-induced constipation should be anticipated and treated prophylactically with a stimulating laxative to increase bowel motility with or without stool softeners.<sup>92</sup> While there is little evidence on which is the best initial bowel regimen in cancer patients, one small study compared the use of senna alone versus a senna-docusate combination. The results demonstrated that the addition of the stool softener docusate was not necessary.<sup>93</sup> Increasing fluid intake, dietary fiber, and physical activity should also be encouraged, when appropriate.

If constipation is present, the cause and severity must be assessed. Impaction, obstruction, and other treatable causes of constipation such as hypercalcemia, hypokalemia, hypothyroidism, and diabetes mellitus should be assessed and treated. Constipation may also be treated by adding bisacodyl 10-15 mg, two to three times daily with a goal of one non-forced bowel movement every 1-2 days. If impaction is observed, glycerine suppositories may be administered or manual disimpaction may be performed.

If constipation persists, addition of other laxatives may be considered such as rectal bisacodyl once daily or oral polyethylene glycol, lactulose, magnesium hydroxide, or magnesium citrate. If gastroparesis is suspected, the addition of a prokinetic agent such as metoclopramide may be considered. Recent studies have shown that methylnaltrexone, a peripherally acting antagonist of  $\mu$ -opioid receptors, helps relieve

opioid-induced constipation while maintaining pain control.<sup>94, 95</sup> Based on these observations, the NCCN Palliative Care panel members recommend considering 0.15 mg per kilogram of body weight of methylnaltrexone every other day (no more than once a day) for patients suffering from constipation that has not responded to standard laxative therapy as described above.

**Malignant Bowel Obstruction**

Malignant bowel obstructions are usually diagnosed clinically and confirmed with radiography. For patients with years to months to live, surgery following CT scan is the primary treatment option. While surgery can lead to improvements in quality of life, surgical risks should be discussed with the patient and family.

Although surgery is the primary treatment for malignant obstruction, it is now recognized that some patients with advanced disease or patients in generally poor condition are unfit for surgery and require alternative management to relieve distressing symptoms. In these patients, medical management is preferable to surgical management and can include pharmacologic measures, parenteral fluids, endoscopic management, and nasogastric tube drainage. Medical measures such as opioid analgesics, anticholinergic drugs, corticosteroids, and antiemetics may be used alone or in combination to relieve symptoms. Use of octreotide is highly recommended early in the diagnosis due to its high efficacy and tolerability.<sup>96</sup> A venting gastrostomy tube (inserted by interventional radiology, endoscopy, or surgery), a percutaneous endoscopic gastrostomy tube, or an endoscopically placed stent can also palliate symptoms of malignant bowel obstruction.<sup>97, 98</sup> Total parenteral nutrition (TPN) can be considered to improve quality of life in patients with a life expectancy of months to years.

### ***Fatigue / Weakness / Asthenia***

Please see the NCCN Cancer-Related Fatigue Guidelines.

### ***Sleep / Wake Disturbances***

Patients with cancer often suffer from insomnia or from daytime sedation. Patients should first be evaluated for sleep/wake disturbances using, for example, the Epworth sleepiness scale.<sup>99</sup> If patients have a history of sleep-disordered breathing (eg, excessive snoring, gasping for air, observed apneas, frequent arousals, sudden involuntary movement of arm or legs during sleep, or unexplained daytime drowsiness), polysomnography should be considered.

Polysomnography should also be considered for patients with head and neck cancers, because obstructive sleep apnea (OSA) is prevalent in patients with this disease.<sup>100, 101</sup> Primary sleep disorders, such as OSA and periodic limb movement disorder (PLMD), should be treated with continuous positive-airway pressure (CPAP) or biphasic positive airway pressure (BiPAP).<sup>102</sup> Cognitive behavioral therapy may be effective in treating sleep/wake disturbances in patients with cancer.<sup>103-105</sup>

Furthermore, other contributing factors to the sleep/wake disturbance should be treated, including pain, depression, anxiety, delirium, and nausea.

For refractory insomnia, pharmacologic management includes the short-acting benzodiazepine lorazepam and the non-benzodiazepine zolpidem. For refractory daytime sedation, the guidelines suggest two options. The central nervous system stimulant methylphenidate should be given with a starting dose of 5mg PO with breakfast, proceeding to 5mg PO with breakfast and an additional 5mg PO with lunch. Doses can be escalated as needed as patients get sicker.<sup>106</sup> The other option for refractory daytime sedation is the psychostimulant modafinil, which has been approved in adults for excessive sleepiness associated with

obstructive sleep apnea/hypopnea syndrome (OSAHS), shift work sleep disorder (SWSD), and narcolepsy.<sup>107</sup>

Dying patients should be assessed for their desire to have their insomnia or sedation treated. The doses of their pharmacologic therapies can be adjusted as appropriate. The addition of the anti-psychotic drug chlorpromazine can be considered in patients whose insomnia is refractory.

Please also see the NCCN Adult Cancer Pain and the NCCN Cancer-Related Fatigue guidelines for their discussions on sleep/wake disturbances.

### ***Delirium***

Delirium should be assessed using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria.<sup>108</sup> Reversible causes should be identified and treated appropriately. Non-pharmacological interventions (eg, reorientation, cognitive stimulation, and sleep hygiene) should be maximized before pharmacological interventions are used. The symptoms of moderate delirium can be controlled with oral haloperidol, risperidone, olanzapine, or quetiapine fumarate.<sup>109, 110</sup> The symptoms of severe delirium (ie, agitation) should be controlled with intravenous or intramuscular antipsychotic, neuroleptic drugs such as haloperidol, olanzapine, or chlorpromazine.<sup>111</sup> A benzodiazepine, such as lorazepam, may be added for agitation that is refractory to high doses of neuroleptics.<sup>112</sup> The presence of therapeutic levels of neuroleptics usually prevents the paradoxical excitation sometimes seen when delirious patients are given lorazepam. The dosages of these symptom-control medications should be titrated to optimal relief. Caregivers should be supported in the care of their loved one and in coping with this distressing condition.



Delirium in patients with advanced cancer and limited life expectancy may shorten prognosis.<sup>113</sup> In these patients, iatrogenic causes should be eliminated whenever possible. Opioid rotation can be considered (see the NCCN Adult Pain Management Guidelines) if the delirium is felt to be due to neurotoxicity of the current opioid. If delirium is a result of disease progression, palliative care must be focused upon symptom control and family support. Neuroleptic and benzodiazepine medications should have their dose increased and/or their route of administration changed to ensure adequate delirium symptom control.<sup>114</sup> Unnecessary medications and tubes should be removed. For refractory delirium in dying patients, palliative sedation can be considered following consultation with a palliative care specialist and/or psychiatrist (see below).

### ***Psychosocial Distress – Social Support / Resource Management***

For distress related to psychological or psychiatric complications and spiritual or existential crisis, please see the NCCN Distress Management Guidelines.

For patients with estimated life expectancy ranging from years to months experiencing psychosocial distress, social support/resource management should be offered. Patients should be cared for in a safe environment with available caregivers. In addition, it is important to ensure that the patient has adequate financial resources and to refer to social services as needed. Support and education should be provided to the caregivers and family members. Personal, spiritual, or cultural issues related to the patient's prognosis should be discussed. Bereavement risk should be assessed. If language is a barrier, a professional healthcare interpreter, unrelated to the patient, should be available for patients, caregivers, and families as needed.

In a dying patient with an estimated life expectancy of weeks to days, the patient's desires for comfort should be evaluated and supported. The process of dying and the expected events should be explained to the patient, caregivers, and family members. Bereavement risk should be reassessed. Patients and family members should be provided with emotional support to address any intra-family conflict regarding palliative care interventions. Eligibility and readiness for specialized palliative/hospice care should be determined.

All patients should be reassessed regularly, and effective communication and information sharing must exist between the patient, caregivers, and healthcare providers. Patients and family members benefit most from ongoing discussions about the natural history of the disease and prognosis in clear, consistent language. If the interventions are unsatisfactory, then the patient and family situation should be reassessed; palliative care efforts should be intensified; specialized palliative care services or hospice should be consulted; and referral to a psychiatrist or psychologist to evaluate and treat psychologic disorders should be considered. If psychosocial distress persists, palliative care options should be intensified, and the patients should be managed according to the NCCN Distress Management Guidelines.

### **Advance Care Planning**

Advance care planning in patients with years to months to live should include an open discussion about palliative care options including hospice; personal values and preferences for end-of-life care; the congruence between the patient's wishes/expectations and those of the family/health care team; and information about advance directives. Patients should be asked if they have completed any advance care planning such as living wills, powers of attorney, or specific limitations



regarding life-sustaining treatments including cardiopulmonary resuscitation, mechanical ventilation, and artificial nutrition/hydration.

When the patient's life expectancy is reduced to months to weeks, the oncology team should actively facilitate completion of appropriate advance directives and should ensure their availability in all care settings. The desire for organ donation and/or autopsy should also be discussed with the patients. Where the patient wants to die should also be determined. Dying in a hospital can be traumatic for patients and their families; a recent prospective study showed that patients dying in an intensive care unit had higher levels of physical and emotional distress compared with patients dying at home or in hospice and that caregivers of these patients had greater incidence of prolonged grief disorder.<sup>115</sup> In fact, most cancer patients wish to die at home. According to the National Home and Hospice care survey, the number of adult cancer patients using hospice care tripled during 1991-1992 through 1999-2000.<sup>116</sup> Still, some patients request to remain in a facility for end-of-life care, and the provision of palliative care services has been shown to decrease deaths in an intensive care unit.<sup>117</sup>

In patients with a life expectancy of only weeks to days, the patient's decision regarding cardiopulmonary resuscitation must be clarified. Ethics, social work, or other consultation, such as chaplains, must be considered to assist in conflict resolution when patient, family and/or medical professional team do not agree on the benefit/utility of interventions. The desire for organ donation and/or autopsy must also be confirmed with the patient.

## Special Palliative Care Interventions

### *Requests for Hastened Death*

Special palliative care interventions include responses to requests for hastened death (physician-assisted suicide, active euthanasia). The

most appropriate response to a request for assistance in suicide is to intensify palliative care. A request for hastened death often has important meanings that require exploration. Clarifying these meanings can sometimes enlarge the range of useful therapeutic options instead of providing a lethal prescription. Open exploration of the patient's request for aid in dying can often identify unmet needs and new palliative care interventions that may be helpful. Alternatives to physician-assisted suicide such as treatment withdrawal, voluntary cessation of eating and drinking, and/or sedation should be considered and discussed with the patient and family. Psychiatric consultation to diagnose and treat reversible causes of psychological suffering should be requested. The patient should be assured of the commitment of his or her health care team to providing continuing care. Although physician-assisted suicide, under specified conditions, is legal in the states of Oregon, Montana, and Washington, euthanasia is not legal in any state in the USA. It is important for physicians to know the local legal status of hastened death, as other states have pending legislation regarding either prohibiting or permitting physician-assisted suicide.

### *Imminently Dying*

Care of the imminently dying patient is intense for the patient, family, and healthcare team. An End-of-Life Care order set that includes physical, practical, and psychosocial interventions may be beneficial for practitioners to use for imminently dying patients.

The physical aspects focus on adequate symptom management and comfort, keeping in mind the patient's wishes and values. This may include intensifying ongoing care; increasing medication doses for optimal comfort; discontinuing unnecessary interventions (diagnostic tests, transfusions, artificial nutrition, hydration, dialysis, needle sticks, etc.); ensuring access to symptom-relief medication through alternate routes if oral is difficult; providing physical comfort by providing a



pressure-relieving mattress and regular repositioning; treating urinary retention and fecal impaction; deactivation of implanted defibrillator; controlling terminal restlessness and agitation with palliative sedation; reducing death rattle/terminal secretion (repositioning patient, reducing parenteral and enteral fluids, adding medications such as scopolamine, hyoscyamine, atropine, or glycopyrrolate)<sup>118</sup>; and preparing for patient and family requests for autopsy and/or organ donation.

The psychosocial aspects of care for an imminently dying patient take into account individual and family goals, preferences, cultures, and religious beliefs. The care plan may include consultation with social workers or chaplains to meet identified social and spiritual needs; open communication between the patient, family, and care team regarding the physical and psychological aspects of the dying process and the importance of honoring any advance directives; and anticipatory grief counseling to help facilitate caregiver closure. Patients who are actively dying in their final hours of life should be allowed to spend uninterrupted time with their family.

The practical aspects of care for an imminently dying patient in the hospital include mobilizing in-hospital end-of-life care policy and procedures, ensuring that the patient's advance directive is documented and implemented and a do-not-resuscitate order is written and followed, securing a private room for the patient, and enabling family presence around-the-clock. If the patient and family have not yet accepted a do-not-resuscitate order, patient/family education and counseling should be intensified to try to help them accept this level of care to prevent harm to the patient from futile attempts at cardiopulmonary resuscitation. Dying patients and their families must be given respectful space and uninterrupted time together.

### ***Palliative Sedation***

Palliative sedation can be an effective symptom-control treatment for imminently dying patients with refractory symptoms and with a life expectancy of hours to days. Informed consent must be obtained from the patient and/or a surrogate or family member following discussions that clarify patient's disease status, treatment goals, prognosis, and expected outcomes. Clinicians may find that applying usual benefit/risk analysis to this type of intervention will suffice in medical decision making. Palliative sedation has its ethical justification in the Doctrine of Double Effect,<sup>119-124</sup> which means that the possible harm (possible respiratory depression, starvation, and hastened death) that may come as a side-effect of doing good (relieving suffering) is justified. Furthermore, results from a recent study that prospectively matched terminally ill cancer patients receiving or not receiving palliative sedation suggest that sedation does not, in fact, shorten life.<sup>125</sup> An ethics consult may be considered in accordance with institutional guidelines and state regulations.

Palliative sedation is best performed by palliative care experts. The most common sedatives used for palliative sedation are thiopental and midazolam by parenteral infusions.<sup>122</sup> Infusional lorazepam, amobarbital, and propofol may also be used.<sup>122</sup> Some protocols for sedation for comfort at end-of-life include planned periods of medication withdrawal that allow reevaluation with direct assessment of the patient.

### **Palliative Care Reassessment of Outcomes**

The outcome measures for these Palliative Care Guidelines are much more difficult to define than those for NCCN disease-specific guidelines. The panel reviewed end-of-life care outcomes from several surveys of North American citizens.<sup>38</sup> The panel chose a modified version of Singer's outcomes until more precise outcome measures are available.



Satisfactory palliative care should provide the following: (1) adequate pain and symptom management, (2) reduction of patient and family distress, (3) acceptable sense of control, (4) relief of caregiver burden, (5) strengthened relationships, and (6) optimized quality of life, personal growth, and enhanced meaning. Research is ongoing regarding better ways to measure "dying well."<sup>126</sup> For now, patients should be reassessed regularly for the six outcomes defined above, and palliative care efforts should be intensified as appropriate.

### **A Good Death**

The Palliative Care Guidelines are the first NCCN guidelines to include death as an expected outcome and after-death care for the family as an essential part of the continuum of cancer care. Many studies have attempted to define a "good death" from the perspective of clinicians, patients, and families.<sup>127-130</sup> Interestingly, one study found that patients, families, and physicians had very similar ideas of what constitutes a good death: freedom from pain, being at spiritual peace, and being with family ranking among the top three considerations by all three groups.<sup>130</sup> End-of-life care should be flexible enough to ensure that the death is viewed as a good death by those involved.<sup>130</sup> The definition of a "good death" used by the NCCN Palliative Care panel is "one that is free from avoidable distress and suffering for patients, families and caregivers; in general accord with patient's and family's wishes; and consistent with clinical, cultural, and ethical standards."<sup>20</sup>

### **After-Death Care Interventions**

Comprehensive palliative care for the patient's family and caregivers continues after the patient's death. Immediate issues include ensuring culturally sensitive and respectful treatment of the body including removal of implanted devices (unless an autopsy is planned), providing family time with the body, addressing survivor concerns about organ

donation or autopsy, facilitating funeral arrangements through completion of necessary paperwork, and informing insurance companies and other health care providers of the patient's death. Bereavement support should be offered, beginning with a personal visit or telephone call from the patient's primary oncology team, followed by a condolence letter. Family members at risk for complicated bereavement should be identified, and complicated grief should be treated.<sup>131</sup> Such bereavement care is often best provided by an experienced hospice team or a skilled mental healthcare professional. The family may request a debriefing meeting from the medical team and may require assistance in identifying community bereavement resources. A well-supported end-of-life care experience by the family will facilitate the family's acceptance of appropriate referrals for cancer risk assessment and risk modification.

Psychosocial support should also be provided for the staff. A bereavement or memorial ritual for medical staff (eg, brief reading, moment of quiet) can be considered. Funeral attendance by healthcare professionals can be considered for individual patients. Health care professionals should also review medical issues related to patient death, explore concerns and questions regarding quality of patient care, and review emotional responses of family and staff to the patient's death. Healthcare professionals can also be at risk for complicated bereavement<sup>132</sup>; such staff should be identified and assisted.

### **Putting Palliative Care Guidelines into Practice**

The NCCN Palliative Care Guidelines are aimed at providing the best quality of life possible for each patient and were developed to accompany the appropriate cancer treatment guidelines. Patients usually move from being ambulatory to being sedentary as their disease advances and their performance status lowers. When life



expectancy is a matter of days or hours, patients may become unable to communicate. Such patients may be at home, living with a family member, or in a healthcare facility. By understanding the patient's status relative to the natural disease trajectory and by using these Palliative Care Guidelines, the oncology team can provide the most appropriate treatment for each patient.

A cancer patient's experiences throughout the course of the disease begin with the diagnosis. The oncologist and patient should discuss at the outset whether the treatment will be curative or palliative. Many palliative care questions must be considered early in each patient's comprehensive cancer care. It is the responsibility of the primary oncology team to work with the patient to raise and answer these questions. It is important for the oncologist to identify the patient's goals for the rest of his or her life, in order to get a better sense of whether the patient has understood and accepted the diagnosis and prognosis. Additionally, the oncologist must explain the types of therapies that are available and how these therapies can affect the patient's daily life. As the cancer progresses and the value of further anticancer therapy diminishes, palliative therapy should be intensified. The issue of whether the patient wants more anticancer therapy must be openly addressed. The delivery of clear and consistent prognostic information can help patients make the most appropriate decisions.

Patients should be made aware of the fact that receiving anticancer therapy does not have to sidetrack them from addressing end-of-life issues. Collaborating with palliative care experts extends the oncologist's therapeutic repertoire and diminishes the stress of caring for patients who have incurable disease. Increasing emphasis on palliative care in oncology should improve patient outcomes and provide new avenues for clinical research and professional satisfaction. Timely introduction of members of the institutional or community

palliative care team allows patients to meet the individuals who will help them and their families through their experience. Because the diagnosis of cancer and impending death is such a frightening experience, it is important to try to alleviate those fears by assuring the patient that the members of a team will work with the patient and family to make things less burdensome. Additionally, it is important to discuss the natural history of the patient's disease and prognosis with the family and palliative care team to anticipate and manage symptoms and problems commonly associated with the diagnosis and treatment of cancer.

Palliative care applied late in the course of the disease is designed to help the patient and family to understand the disease and to begin to make end-of-life plans. Sometimes the patient and family do not accept the prognosis or do not begin to make end-of-life preparations.<sup>133, 134</sup> These things may be a sign that the patient does not fully understand the disease and may lead to the desire by patients and families for aggressive treatments that may be both futile and toxic.<sup>134</sup> Palliative care supports education so the patient can better understand the disease.

The oncologist must ensure that advance care plans are in place as early as possible in the disease trajectory. This focus on the patients' wishes assures patients that they will be provided with no more and no less aggressive care than they desire and also relieves them of concerns about burdening family members with difficult end-of-life decisions. The combined efforts of the oncology team and the hospice/palliative care team can improve the overall outcome for patients and their families.

## Hope

The NCCN Palliative Care Guidelines are intended to help oncology teams provide the best care possible for their patients with incurable



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cancer. The care outlined in these guidelines provides a different kind of hope than the hope for cure of the disease itself. Palliative care provides hope for dignity, comfort, and closure as well as for growth at the end of life.



### Table 1

#### Palliative Care Internet Resources for Clinicians<sup>a</sup>

##### Palliative Care Clinical Competencies

[www.epec.net](http://www.epec.net)

Education in Palliative and End-of-life Care (EPEC): Comprehensive curriculum covering fundamentals of palliative medicine; teaching guides

[www.eperc.mcw.edu](http://www.eperc.mcw.edu)

End of Life / Palliative Education Resource Center (EPERC): Medical educator resources for peer-reviewed palliative care teaching materials

[www.StopPain.org](http://www.StopPain.org)

Department of Pain Medicine and Palliative Care at Beth Israel Medical Center: Online education for physicians, nurses, and pharmacists

##### Clinical, educational, professional, and public resources

[www.palliativedrugs.com](http://www.palliativedrugs.com)

Palliativedrugs.com: Extensive information on pharmacologic symptom management

[www.aahpm.org](http://www.aahpm.org)

American Academy of Hospice and Palliative Medicine: Physician membership organization; board review courses; publications

<http://www.abim.org>

The American Board of Internal Medicine: Physician Board Certification

<http://www.nhpco.org/templates/1/homepage.cfm>

National Hospice and Palliative Care Organization: Nonprofit membership organization representing hospice and palliative care programs and professionals in the United States.

<http://www.hpna.org/>

Hospice and Palliative Nurses Association: Specialty nursing organization with evidence-based educational tools for the nursing team

[www.hms.harvard.edu/cdi/pallcare](http://www.hms.harvard.edu/cdi/pallcare)

Center for Palliative Care at Harvard Medical School: Faculty development courses, other educational programs

<http://www.nationalconsensusproject.org/>

National Consensus Project for Quality Palliative Care: Clinical practice guidelines

[www.americangeriatrics.org/](http://www.americangeriatrics.org/)

American Geriatrics Society: Clinical guidelines and continuing education

##### Palliative Care Program Development

[www.capc.org](http://www.capc.org)

Center to Advance Palliative Care: Technical assistance for clinicians and hospitals seeking to establish or strengthen a palliative care program

[www.capc.org/pclc](http://www.capc.org/pclc)

Palliative Care Leadership Centers: Eight exemplary palliative care programs providing site visits, hands-on training, and technical assistance to support new palliative care clinicians and programs nationwide

<sup>a</sup> All websites accessed March, 2011.

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