National
Comprehensive
Cancer
Network®

NCCN Clinical Practice Guidelines in Oncology™

Palliative Care

V.1.2010

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NCCN Guidelines Panel Disclosures

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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

Summary of the Guidelines updates

Summary of the changes in the 1.2010 version of the Palliative Care guidelines from the 1.2009 version include:

PAL-1

- Standards of Palliative Care were revised by removing:
  - Palliative care should be delivered based upon clinical practice guidelines.
  - Medical care contracts should include appropriate reimbursement for palliative care.

PAL-2

- Footnote "a" was modified to include "*social workers and other* mental health professionals" as part of the interdisciplinary team. (Also for PAL-3)

PAL-28

- Special palliative care interventions for an imminently dying patient were separated into "physical" and "psychosocial needs" and "practical".
- Interventions were added or modified under "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" was added.
  - "Ensure deactivation of implanted defibrillator and consider deactivation of implanted pacemaker" was added.
  - "Discontinue unnecessary diagnostic tests" was modified by adding, "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 4h) symptom control assessments" was added.
  - "Switch routes of medication administration when oral route is no longer feasible" was added.
  - "Treat unclearable terminal secretions (death rattle) by changing the patient's positioning, reducing parenteral and enteral fluids, reducing excessive secretions with medications such as scopolamine, hyoscyamine, atropine, or glycopyrrolate" was added.
  - "Treat refractory restlessness and agitation with palliative sedation (See PAL-29)" was added.
- New interventions were added under "psychosocial needs":
  - "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 worker and chaplain consults"
- New interventions were added under "practical":
  - "Ensure patient's wishes for resuscitation and/or DNR are documented"
  - "In hospital death policy and procedure should be mobilized"

PAL-29

- Palliative sedation,
  - "Continue current pain and symptom management control interventions" was added as a new bullet.
  - Sixth bullet was modified as, "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".

PAL-30

- A good death, "reasonably" was removed from the 3rd bullet, "consistent with clinical, cultural, and ethical standard".

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.**

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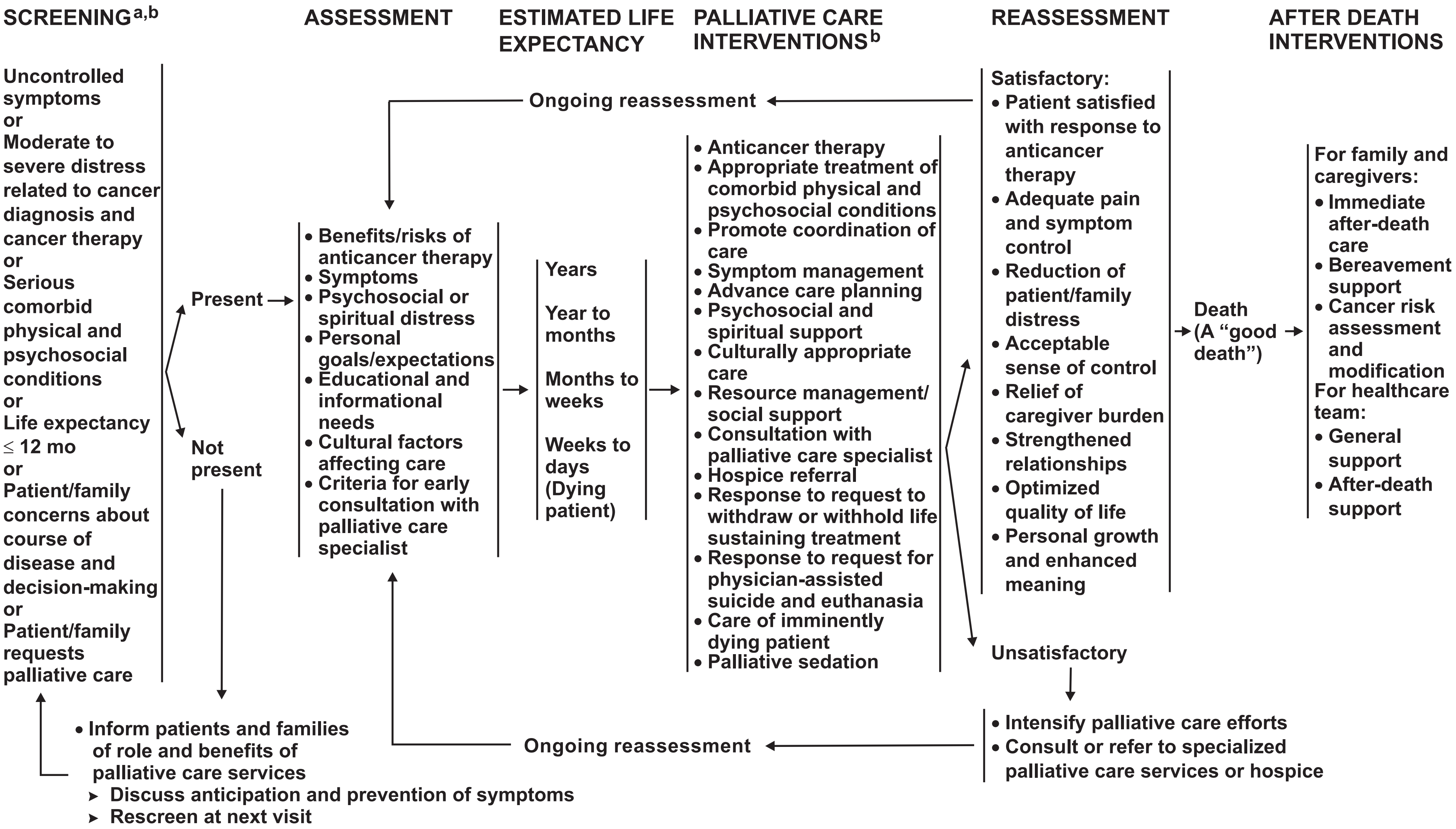
PALLIATIVE CARE OVERVIEW



SCREENING[a,b]

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 →

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

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[b]

- 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 request for 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

Ongoing reassessment

Death (A "good death")

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

Ongoing reassessment

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

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[a] Management of any patient with positive screening requires a care plan developed by a interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains.

[b] Oncologists should integrate palliative care into general oncology care for patients who meet screening criteria. Consultation/collaboration with a palliative care specialist/hospice team is recommended for patients with more complex issues.

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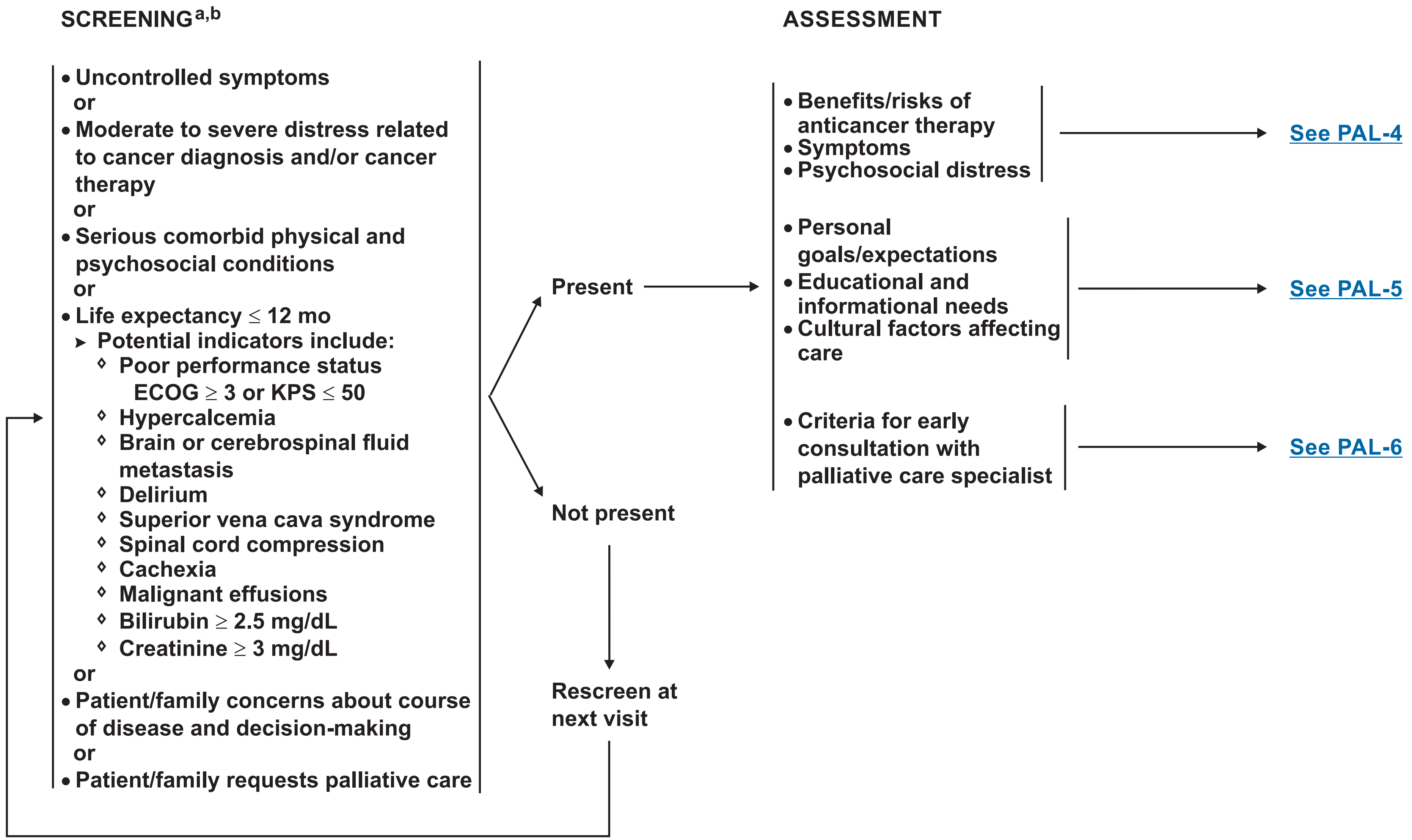
Palliative Care Assessment (PAL-3)



SCREENING[a,b]

- 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

Present → **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

Not present → Rescreen at next visit

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[a] Management of any patient with positive screening requires a care plan developed by a interdisciplinary team of physicians, nurses, social workers and other mental health professionals, and chaplains.

[b] Oncologists should integrate palliative care into general oncology care for patients who meet screening criteria. Consultation/collaboration with a palliative care specialist/hospice team is recommended for patients with more complex issues.

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PALLIATIVE CARE ASSESSMENT

Benefits/risks of anticancer therapy →
- Natural history of specific tumor
- Potential for response to further treatment
- Meaning of anticancer therapy to patient and family
- Impairment of vital organs
- Performance status
- Serious comorbid conditions

→ Interventions (See PAL-7)

Symptoms →
- Pain → Pain Interventions (See PAL-8)
- Dyspnea → Dyspnea Interventions (See PAL-9)
- Anorexia/cachexia → Anorexia/cachexia Interventions (See PAL-11)
- Nausea/Vomiting → Nausea/Vomiting Interventions(See PAL-13)
- Constipation → Constipation Interventions(See PAL-15)
- Malignant bowel obstruction → Malignant Bowel Obstruction (See PAL-16)
- Fatigue/weakness/asthenia → See NCCN Cancer-Related Fatigue Guidelines
- Insomnia
- Sedation
- Delirium → Delirium Interventions (See PAL-18)

Psychosocial distress →
- Psychosocial/psychiatric
- Spiritual or existential crisis

→ See NCCN Distress Management Guidelines

- Social support problems
  - Family
  - Community
- Resources problems
  - Financial

→ Social Support/Resource Management (See PAL-20)

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PALLIATIVE CARE ASSESSMENT

Personal goals/expectations →

- Patient goals and expectations
- Family goals and expectations
- Priorities for palliative care
  - Goals and meaning of anticancer therapy
  - Quality of life
- Eligibility for hospice, with needs that might be met by hospice

→ Interventions (See PAL-22)

Educational and informational needs

Cultural factors affecting care →

- Patient/family values and preferences about information and communication
- Patient/family perception of disease status

→ Interventions (See PAL-22)

Criteria for early consultation with palliative care specialist → (See PAL-6)

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ASSESSMENT

Criteria for early consultation with palliative care specialist

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 opiate 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[c]
- Repeated requests for hastened death

→ See Intervention (PAL-26)

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

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[c] Communication barriers include language, literacy, and physical barriers.

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BENEFIT/RISK OF ANTICANCER THERAPY

ESTIMATED LIFE EXPECTANCY	INTERVENTION
Years Year to months	• 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
Months to weeks	• 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
Weeks to days (Dying patient)	• 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

REASSESSMENT

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

→ Continue anticancer therapy and palliative care → Ongoing reassessment

Unsatisfactory →
- 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

→ Ongoing reassessment

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PAIN

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

Years
Year to months
Months to weeks
→ Treat according to NCCN Adult Cancer Pain Guidelines → Ongoing reassessment

Weeks to days (Dying patient) →

Treat according to NCCN Adult Cancer Pain Guidelines

In addition:
- Do not reduce dose of opioid solely for decreased blood pressure, respiration rate, or level of consciousness
- Maintain analgesic therapy; titrate to optimal comfort
- Recognize and treat opioid-induced neurotoxicity including hyperalgesia
- If opioid reduction is indicated, reduce by ≤ 50% per 24 h to avoid acute opioid withdrawal or pain crisis. Do not administer opioid antagonist
- Balance analgesia against reduced level of consciousness based on patient preference
- Modify routes of administration as needed (PO, IV, PR, subcutaneous, sublingual, transmucosal transdermal) applying equianalgesic dose conversions
- Consider sedation for refractory pain (See PAL-29)

→ 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

→
- Continue to treat according to NCCN Adult Cancer Pain Guidelines
- Monitor symptoms and quality of life to determine whether additional end of life measures are required

→ Unsatisfactory →
- Continue to treat according to NCCN Adult Cancer Pain Guidelines
- Consider consultation with pain management/ palliative care specialist

→ Ongoing reassessment

See Special Palliative Care Interventions: Imminently Dying Patient (PAL-28)

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DYSPNEA

ESTIMATED LIFE EXPECTANCY

Years

Year to months

Months to weeks

INTERVENTION

- Assess symptom intensity
- Treat underlying causes/comorbid conditions:
  - Radiation/chemotherapy
  - Thoracentesis/pleurodesis/pleural drainage catheter
  - Bronchoscopic therapy
  - Bronchodilators, diuretics, steroids, antibiotics, transfusions
- Relieve symptoms
  - Temporary ventilatory (CPAP, BiPAP) support if clinically indicated for severe reversible condition
  - O_2 therapy for hypoxia
  - Benzodiazepines for anxiety (if benzodiazepine naive, starting dose lorazepam, 0.5-1 mg PO every 4 hr prn)
  - Opioids for cough or dyspnea (if opioid naive, morphine, 2.5-10 mg PO every 4 hr prn)
  - Nonpharmacologic therapies including fan, cooler temperatures, stress management, relaxation therapy, and physical comfort measures
  - Educational, psychosocial, and emotional support

REASSESSMENT

Satisfactory:
- Adequate dyspnea 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

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

Weeks to days (Dying patient)

See Intervention (PAL-10)

See List of Symptoms in
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DYSPNEA

ESTIMATED LIFE EXPECTANCY

- Years
- Year to months
- Months to weeks

→ See Intervention (PAL-9)

- Weeks to days (Dying patient) →

INTERVENTION

- Assess symptom intensity
  - Use physical signs of distress as potential dyspnea in noncommunicative patients
- Focus on comfort
  - Continue to treat underlying condition as appropriate
- Relieve symptoms
  - Opioids for cough/dyspnea/air hunger (if opioid naive, morphine, 2.5-10 mg PO every 4 hr prn; 1-4 mg IV every 4 hr prn)
  - Benzodiazepines for anxiety/agitation/ air hunger (if benzodiazepine naive, starting dose lorazepam, 0.5-1 mg PO or IV every 4 hr prn)
  - Nonpharmacologic therapies; educational, psychosocial, and emotional support (See PAL-9)
  - Reduce excessive secretions (scopolamine, hyoscyamine, atropine, glycopyrrolate)
  - O_2 if subjective report of relief
- Withhold/withdraw/time-limited trial of mechanical ventilation as indicated
  - Address patient and family preferences, prognosis, reversibility
  - Sedation as needed
- Discontinue fluid support/consider low-dose diuretics if fluid overload may be contributing factor
- Anticipatory guidance for patient/family regarding dying of respiratory failure
- Provide emotional support

REASSESSMENT

Satisfactory
- Adequate dyspnea 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

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

Unsatisfactory →
- Intensify palliative care interventions and consider consultation with palliative care specialist
- Consider sedation for intractable symptoms (See PAL-29)

→ Ongoing reassessment

See List of Symptoms in Palliative Care Table of Contents

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ANOREXIA/CACHEXIA

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

Years
Year to months →

- 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)
- Exercise program
- Assess 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 → Ongoing reassessment

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

→ Ongoing reassessment

Months to weeks
Weeks to days (Dying patient) → See Interventions (PAL-12)

See Special Palliative Care Interventions; Imminently Dying Patient (PAL-28)

See List of Symptoms in Palliative Care Table of Contents

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ANOREXIA/CACHEXIA

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

Years
Year to months → See Interventions (PAL-11)

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
- 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

See Special Palliative Care Interventions; Imminently Dying Patient (PAL-28)

See List of Symptoms in Palliative Care Table of Contents

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NAUSEA AND VOMITING

ESTIMATED LIFE EXPECTANCY

Years

Year to months

Months to weeks[d]

Weeks to days (Dying patient)[d]

INTERVENTION[e,f]

- Chemotherapy/radiation therapy-induced
  - See NCCN Antiemesis Guidelines
- Severe constipation/fecal impaction. (See PAL-15)
- Gastroparesis (metoclopramide, 10-20 mg every 6 hr)
- Bowel obstruction (See PAL-16)
- CNS involvement (brain, meninges)
  - Corticosteroids (dexamethasone, 4-8 mg tid-qid)
  - Palliative radiation therapy
- Gastric outlet obstruction (squashed stomach syndrome) from intra-abdominal tumor and liver metastasis
  - If not contraindicated by comorbid conditions, treat with corticosteroids, proton pump inhibitor, metoclopramide, and consider stenting
- Metabolic abnormalities
  - Correct hypercalcemia
  - Treat dehydration
- Medication-induced
  - Discontinue any unnecessary medications
  - Check available blood levels of necessary medications (digoxin, phenytoin, carbamazepam, tricyclic antidepressants)
  - Treat medication-induced gastropathy (proton pump inhibitor, metoclopramide)
  - If due to opioids, initiate opioid rotation and/or consider reducing opioid requirement with non-nauseating coanalgesics or anesthesiologic/neurosurgical procedures
- Psychogenic
  - Consider psychiatric consultation if patient has eating disorder, somatization, phobia, or panic disorder causing nausea and vomiting
- Non-specific Nausea and Vomiting (NV)
  - Initiate pharmacological management with dopamine receptor antagonists (eg, haloperidol, metoclopramide, prochlorperazine)
  - If anxiety contributes to NV, consider adding a benzodiazepine
  - If oral route not feasible, consider rectal, subcutaneous, or intravenous administration of antinauseant therapy

If NV stops
See Reassessment PAL-14

If NV persists
See Interventions PAL-14

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[d] 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).

[e] Around-the-clock dosing schedule would likely provide the greatest benefit to the patient.

[f] Continuous intravenous or subcutaneous infusions of different antiemetics may be necessary for the management of intractable NV.

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PERSISTENT NAUSEA AND VOMITING

INTERVENTION

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

↓

Add a 5-HT3 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), or palliative sedation (See PAL-29)

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

→ Ongoing Reassessment (See PAL-13)

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CONSTIPATION

ESTIMATED LIFE EXPECTANCY

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

→

Preventive measures
- Prophylactic medications
  - Stimulant laxative + stool softener (senna + docusate, 2 tablets every night)
  - Increase dose of laxative and stool softener (senna + docusate, 2-3 tablets bid-tid with goal of 1 non-forced bowel movement every 1-2 days
- Increase fluids
- Increase dietary fiber if patient has adequate fluid intake and physical activity
- Exercise, if appropriate

→

INTERVENTION

If constipation present:
- Assess for cause and severity of constipation
- Rule out impaction, especially if diarrhea accompanies constipation (overflow around impaction)
- Rule out obstruction (physical exam, abdominal x-ray)
- Treat other causes (hypercalcemia, hypokalemia, hypothyroidism, diabetes mellitus, medications)
- Add and titrate bisacodyl 10-15 mg daily-tid with goal of 1 non-forced bowel movement every 1-2 days
- If impacted:
  - Administer glycerine suppository ± mineral oil retention enema
  - Perform manual disimpaction following pre-medication with analgesic ± anxiolytic

If constipation persists:
- Reassess for cause and severity of constipation
- Recheck for impaction or obstruction
- Consider adding other laxatives, such as bisacodyl (one suppository rectally daily-bid); polyethelene glycol (1 capful/8 oz water bid); lactulose, 30-60 mL bid-qid; sorbitol, 30 mL every 2 h x 3, then prn; magnesium hydroxide, 30-60 mL daily-bid; or magnesium citrate, 8 oz daily
- Consider methylnaltrexone, 0.15 mg/kg subcutaneous, every other day, no more than 1 per day
- Phosphasoda or tap water enema until clear
- Consider use of a prokinetic agent (eg, metoclopramide, 10-20 mg PO qid)

REASSESSMENT

Satisfactory:
- Adequate constipation 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 → Ongoing reassessment

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

→ Ongoing reassessment

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.

MALIGNANT BOWEL OBSTRUCTION[g]

ESTIMATED LIFE EXPECTANCY / **ASSESSMENT**

Years
Year to months
Months to weeks

→

- Screen for and treat underlying benign reversible causes
  - Adhesions
  - Radiation-induced strictures
  - Internal hernias
- Assess for malignant causes
  - Tumor mass
  - Carcinomatosis
- Assessment of the goals of treatment for the patient can help guide the intervention[h] (eg, decrease NV, allow patient to eat, decrease pain, allow patient to go home/hospice)

→ See Interventions PAL-17

Weeks to days (Dying patient)[h]

→

- Consider medical management rather than surgical management
- Assessment of goals of treatment for the patient can help guide the intervention[h] (eg, decrease NV, allow patient to eat, decrease pain, allow patient to go home/hospice)

→

- Pharmacologic management (See PAL-17)
- Intravenous or Subcutaneous fluids (See PAL-17)
- Endoscopic management (See PAL-17)
- Nasogastric (NG) tube drainage (See PAL-17)
  - Consider only if other measures fail to reduce vomiting

→ See Reassessment PAL-17

---

[g] 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.

[h] 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[i]
  - 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
- 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 (start 150 mcg SC BID up to 300 BID or via continuous subcutaneous 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

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

→ Ongoing Reassessment (See PAL-16)

---

[i] 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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DELIRIUM

ESTIMATED LIFE EXPECTANCY

Years
Year to months
Months to weeks

→

- Assess for delirium (eg, DSM-IV criteria)
- Screen for and treat underlying reversible causes
  - ➤ Metabolic causes
  - ➤ Hypoxia
  - ➤ Bowel obstruction/obstipation
  - ➤ Infection
  - ➤ CNS events
  - ➤ Bladder outlet obstruction
  - ➤ Medication or substance effect or withdrawal (eg, benzodiazepines, opioids, anticholinergics)
- Assess, screen, and maximize nonpharmocologic interventions (eg, reorientation, cognitive stimulation, sleep hygiene)

Severe delirium →

INTERVENTION

- Haloperidol 0.5-2 mg every 1 h prn until episode under control
- Alternative agents: risperidone (0.5-1 mg BID), olanzapine (2.5-15 mg daily), or quetiapine fumarate (50-100 mg PO/SL BID)
- If agitation is refractory to high doses of neuroleptics, consider adding lorazepam 0.5-2 mg every 4-6 h
- Titrate starting dose to optimal effect
- Support caregiver

Mild delirium →

- Evaluate primary therapy
- Haloperidol 0.5-1 mg BID
- Alternative agents: risperidone (0.5-1 mg BID), olanzapine (2.5-15 mg daily), or quetiapine fumarate (50-100 mg PO or SL BID)
- Orient patient with family presence

REASSESSMENT

Satisfactory:
- Adequate delirium 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 interventions and consider consultation with palliative care specialist or psychiatrist

→ Ongoing reassessment

Weeks to days (Dying patient) → See Intervention (PAL-19)

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DELIRIUM

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

- Years
- Year to months
- Months to weeks

→ See Intervention (PAL-18)

Weeks to days (Dying patient) → Evaluate for iatrogenic causes

- Iatrogenic → Treat cause if possible and provide symptomatic relief
- Disease progression →
  - Agitation may be mistaken for pain resulting in higher doses of opioids which may exacerbate delirium
  - Rotate opioids
  - Focus on symptom control
  - Focus on family support and coping mechanism
  - Appropriate upward dose titration of haloperidol, risperidone, olanzapine, and quetiapine fumarate
  - Appropriate upward dose titration of lorazepam for patients with refractory agitation despite high doses of neuroleptics
  - Decrease doses of medications dependent upon hepatic or renal failure
  - Consider rectal or intravenous haloperidol or administration of chlorpromazine ± lorazepam
  - Remove unnecessary medications, tubes, etc.
  - Educate family and caregiver

Satisfactory:
- Adequate delirium 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 interventions
- Consult with a palliative care specialist or psychiatrist

→ Ongoing reassessment

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SOCIAL SUPPORT/RESOURCE MANAGEMENT

ESTIMATED LIFE EXPECTANCY

Years
Year to months
Months to weeks

→

INTERVENTION

- Ensure caregiver(s) are available
- Ensure safe home environment
- Ensure adequate access to transportation
- Ensure sufficient financial resources
- Refer to social services as needed to assist with mobilization of family, community, financial resources
- Ensure support and education to caregiver(s) and family members
  - Counseling
  - Support groups
- Respond to caregiver-specific burdens and stresses
- Assess bereavement risk
- Discuss personal, spiritual, and cultural issues relating to prognosis
- Obtain medical interpreters/translators unrelated to patient and family as needed
- Assist family/caregiver with respite care

REASSESSMENT

Satisfactory:
- Adequate social support and resource management
- 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, caregiver(s), family members, and the health care team

Unsatisfactory →
- Intensify efforts to communicate palliative care options
- Consider referral to psychiatrist to evaluate and treat psychiatric disorders
- See NCCN Distress Management Guidelines

→ Ongoing reassessment

Weeks to days (Dying patient) → See Intervention (PAL-21)

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SOCIAL SUPPORT/RESOURCE MANAGEMENT

ESTIMATED LIFE EXPECTANCY

- Years
- Year to months
- Months to weeks

→ **INTERVENTION**: See Intervention (PAL-20)

- Weeks to days (Dying patient)

→ **INTERVENTION**:

- Discuss prognosis on an ongoing basis in clear, consistent language with patient, caregiver(s), and family, including information about the natural history of the specific tumor
- Evaluate and support patient's desires for comfort
- Explain the dying process and expected events to patient, caregiver(s), and family members
- Respond to caregiver-specific demands and stresses
- Reassess bereavement risk
- Ensure that care conforms with cultural and spiritual/religious practices
- Provide emotional support and address any patient-family or intra-family conflicts regarding intervention
- Consider ethics, social work, or chaplaincy consultation to assist in conflict resolution when patient, family and/or professional team do not agree on benefit/utility of interventions
- Obtain medical interpreter/translators unrelated to patient and family as needed
- Determine eligibility and readiness for specialized palliative/hospice care and needs that might be best met by hospice

REASSESSMENT

Satisfactory:
- Adequate social support and resource management
- 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

Unsaturated →

- Reassess patient and family
- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice
- Consider referral to psychiatrist to evaluate and treat psychiatric disorders
- See NCCN Distress Management Guidelines

→ Ongoing reassessment

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

ESTIMATED LIFE EXPECTANCY

- Years
- Year to months
- Months to weeks

→

INTERVENTION

- Assess patient/family understanding of expected course of disease
- Assess for decision-making capacity and need for surrogate decision maker
- Clarify with patient how much information the patient wishes to have and how much information should be given to the family
  - Desire for information may change and may need to be challenged as death approaches
  - Provide information about expected course of disease and anticipated care needs
  - Provide anticipatory guidance on dying process
- Facilitate decisions on providing information to family
- Determine the decision-making preferences/styles of the patient and family
  - Facilitate congruence of patient goals and expectations with those of family
  - The involvement of the family may change over time
- Determine the patient/family values and preferences with respect to quality of life
- Facilitate advance care planning (See PAL-24)
- Encourage the patient to review and revise personal priorities, identify "unfinished business", heal interpersonal relationships, and put affairs in order (providers demonstrate cultural sensitivity)
- Determine eligibility and readiness for specialized palliative /hospice care and needs that might be best met by hospice
- Foster realistic expectations
- Provide clear, consistent discussion with patient and family about prognosis on an ongoing basis
- Respect goals and needs of patient and family regarding the dying process
- Address cultural customs and beliefs directly or through a cultural liaison
- Anticipate patient and family needs
- Provide anticipatory grief support and end of life education

REASSESSMENT

Satisfactory:
- 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 →
- Reassess patient and family
- Intensify palliative care efforts
- Consult or refer to specialized palliative care services or hospice

→ Ongoing reassessment

Weeks to days (Dying patient) → See Interventions PAL-23

See Advance Care Planning (PAL-24)

Note: All recommendations are category 2A unless otherwise indicated.
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GOALS AND EXPECTATIONS, EDUCATIONAL AND INFORMATIONAL NEEDS, AND CULTURAL FACTORS AFFECTING CARE FOR THE PATIENT AND FAMILY

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

Years
Year to months
Months to weeks
→ See PAL-22

Weeks to days (Dying patient) →

- Assess patient/family understanding of the dying process
- Educate patient and family on dying process
- Prepare for patient's death
- Facilitate anticipatory grief work
- Ensure continuing care process and refer to appropriate care
- Promote that patient does not die alone
- Offer spiritual support
- Encourage planning for funeral/memorial services, as determined by personal preferences and modified by cultural customs and beliefs

→ Satisfactory:
- 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 reassessment (See PAL-22)

→ Unsatisfactory →
- Reassess patient and family
- Intensify palliative care efforts
- Consult or refer to hospice or specialized palliative care services

→ Ongoing reassessment (See PAL-22)

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ADVANCE CARE PLANNING

ESTIMATED LIFE EXPECTANCY

Years

Year to months

→

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

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

Unsatisfactory →

- Intensify efforts to communicate palliative care options
- Consider referral to psychiatrist to evaluate and treat psychiatric disorders
- See NCCN Distress Management Guidelines

→ Ongoing reassessment

Months to weeks

Weeks to days (Dying patient)

→ See Intervention (PAL-25)

See List of Symptoms in Palliative Care Table of Contents

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ADVANCE CARE PLANNING

ESTIMATED LIFE EXPECTANCY | **INTERVENTION** | **REASSESSMENT**

Years
Year to months → See Intervention (PAL-24)

Months to weeks →
- Determine patient and family preferences for the location of patient's death
- Confirm and ensure complete documentation of advance care directives including cardiopulmonary resuscitation (CPR), mechanical ventilation, artificial nutrition/hydration, blood products, antibiotics, dialysis
- Ensure advance care directives are available to all caregivers regardless of treatment setting
- Seek resolution of conflict between patient and family goals and wishes
- Explore fears about dying and provide emotional support
- Discuss desire for organ donation and/or autopsy

Weeks to days (Dying patient) →
- Ensure advance care directives are available to all caregivers regardless of treatment setting
- Implement and ensure compliance with advance care directive
- Clarify patient's decision regarding CPR
- Consider ethics, social work, or chaplaincy consultation to assist in conflict resolution when patient, family and/or professional team do not agree on benefit/utility of interventions
- Confirm desire for organ donation and/or autopsy

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

→ Ongoing reevaluation and communication between the patient/family and the health care team

Unsatisfactory →
- Intensify efforts to communicate palliative care options
- Consult with a psychiatrist to evaluate and treat psychiatric disorders
- See NCCN Distress Management Guidelines

→ Ongoing reassessment

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CRITERIA FOR EARLY CONSULTATION WITH PALLIATIVE CARE SPECIALIST

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

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SPECIAL PALLIATIVE CARE INTERVENTIONS

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 aside from 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 only legal in Oregon and has 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.

See Special Palliative Care Interventions: Imminently Dying Patient (PAL-28)

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SPECIAL PALLIATIVE CARE INTERVENTIONS
IMMINENTLY DYING PATIENT

For an imminently dying patient, consider using a comfort 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 4h) symptom control assessments
  - Switch routes of medication administration when oral route is no longer feasible
  - Treat unclearable terminal secretions (death rattle) by changing the patient's positioning, reducing parenteral and enteral fluids, reducing excessive secretions with medications such as scopolamine, hyoscyamine, atropine, or glycopyrrolate
  - Treat refractory restlessness and agitation with palliative sedation (See PAL-29)
  - 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**
  - Ensure patient's wishes for resuscitation and/or DNR are documented
  - In hospital death policy and procedure should be mobilized
  - Try to ensure privacy; if not at home, arrange for a private room if possible
  - Facilitate around-the-clock family presence
  - Provide respectful space for families

See After Death Interventions (PAL-30)

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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
  - 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
  - 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

Death →

ASSESSMENT

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

→

AFTER DEATH INTERVENTIONS

For family and caregivers

- Immediate after death care:
  - Remove implanted devices
  - 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

For health care 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.)

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Discussion

NCCN Categories of 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 panel of representatives from NCCN member institutions, comprising 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 from the collaborative efforts of these experts based on their clinical experience and available scientific evidence.

Palliative Oncology

During the past 20 years, increasing attention has been paid to quality-of-life issues in oncology[1-4] Statistics reveal that an estimated 38% of patients diagnosed with cancer will die of their disease.[5] As the hospice movement has grown in this country, palliative care has developed into an integral part of (rather than the antithesis of) comprehensive cancer care.[6-10] Most patients who receive hospice care in this country are referred too late for comprehensive palliative care to exert its full benefit. Many patients are never referred at all. Administration of chemotherapy late in the course of cancer care, including in the last days of life, is growing more common.[11] In addition, oncologists have reported that they have difficulty obtaining the services they need for their dying patients.[12] Palliative care needs to be integrated earlier into the continuum of cancer care.[13-17] Palliative care needs exist right from the time of diagnosis through survivorship and end-of-life care. Building on the World Health Organization's recommended model of resource allocation in cancer care,[6]palliative, symptom-modifying therapy should be provided simultaneously with disease-modifying therapy from diagnosis.[18] As the cancer progresses and anticancer therapy becomes less effective, appropriate, or desired, palliative care becomes the major focus of the continuing care of the patient and family.[19] Palliative care should begin with the presentation of symptoms, even before the source of those symptoms has been fully determined. 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 seven cosponsoring American Board of Medical Specialties (ABMS) (www.abms.org) boards including Anesthesiology, Family Medicine, Internal Medicine, Physical Medicine and Rehabilitation, Psychiatry and Neurology, Surgery, and Pediatrics. The Center to Advance Palliative Care (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. Support for expansion of palliative medicine education has been offered by the Liaison Committee on Medical Education (LCME) (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) now requires training in palliative medicine for oncology fellows, including training in pain, psychosocial care, personal awareness, and hospice care.

Patients and families should be informed that palliative care is an integral part of their comprehensive cancer care.[20-21] Initially the primary oncology team (interdisciplinary team of physicians, nurses, social workers, and 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.[22-23]

In December 2004, National Institutes of Health (NIH) held a state-of-the-science conference on Improving End-of-Life Care, indicating that palliative medicine is a recognized research area. The final statement from this NIH conference is a useful resource for understanding the complex issues surrounding end-of-life care (http://consensus.nih.gov/2004/2004EndOfLifeCareSOS024html.htm). Some of the conclusions are listed below:

1. End-of-life care is often fragmented among providers and provider settings, leading to a lack of continuity of care and impeding the ability to provide high-quality, interdisciplinary care.
2. Enhanced communication among patients, families, and providers is crucial to high-quality end-of-life care.
3. The design of the current Medicare hospice benefit limits the availability of the full range of interventions needed by many persons at the end of life" (eg, radiation therapy for symptom management).

Lorenz KA et al performed a systematic review of end-of-life care and outcomes as the background for National Institute of Health State of the Science Conference on End-of-Life care.[24] Clinical Practice Guidelines for Quality Palliative Care by the National Consensus Project were published in 2004 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.[25] 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). 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.[26] National Consensus Project and National Institute for Clinical Excellence (NICE) issued guidance in 2004 on how supportive and palliative care services should be provided for adults with cancer (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.

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

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, advanced or progressive disease for which there is no effective curative therapy, and/or 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 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, the 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 palliative care specialist.[2-4] Assessment of the benefits and risks of anticancer therapy is based on the existing NCCN disease-specific guidelines, for that patient's cancer. Special attention should be given to the natural history of 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, sleep disturbance, 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, and 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, family discord, patient's concern regarding care of dependents, spiritual or existential distress, and 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. Optimal provision of palliative care requires ongoing reassessment and modification of strategies. Criteria 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.[27-30] 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.

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 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 are 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, which can affect their preferences for cardiopulmonary resuscitation and for measures extending life.[31]

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 managed carefully.[32] 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. More 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 may be interested in continuing anticancer therapy to prolong survival and reduce cancer-related symptoms.[33-36] 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.[37-38]For example, 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.[39] 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.[40-41]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

[See NCCN Adult Cancer Pain Guidelines]

Dyspnea

Dyspnea is one of the most common symptoms in patients with advanced lung cancer.[42] 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.” In the management of dyspnea in patients with years to months to live, symptom intensity has to 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, 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. As the life expectancy decreases, the role of mechanical ventilation and oxygen diminishes while the role of opioids, benzodiazepines, glycopyrrolate, and scopolamine increases.[43-47]

Anorexia/Cachexia

Anorexia-cachexia syndrome is prevalent in most patients with advanced cancer.[48] 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 or the use of appetite stimulants (such as megestrol acetate, medroprogesterone acetate, or steroids),[49] and/or evaluation of endocrine abnormalities. Nutrition support consultation[50-51] or participation in a nutrition support clinical trials 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. 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.[52] Nausea and vomiting (NV) induced by chemotherapy or radiation therapy should be managed as outlined in the NCCN Antiemesis Guidelines. Continuous intravenous or subcutaneous infusions of different antiemetics may be necessary for the management of intractable NV. Non-specific nausea and vomiting can be managed with dopamine receptor antagonists or benzodiazepines (anxiety related nausea). Persistent nausea and vomiting can be treated by titrating dopamine receptor antagonists (eg, prochlorperazine, haloperidol, metoclopramide to maximum benefit and tolerance. If nausea still persists, consider adding 5-HT3 (5-hydroxytryptamine 3) receptor antagonists and/or anticholinergic agents and/or antihistamines, corticosteroids, continuous infusion of antiemetics, antipsychotics (eg, olanzapine or haloperidol), or cannabinoids. Alternative therapies (eg, acupuncture) or palliative sedation can also be considered.

Constipation

Constipation occurs in approximately 50% of all patients with advanced cancer and in majority of patients treated with opioids.[53] A large number of drugs are known to cause constipation[54] including antacids, anticholinergic drugs (antidepressants, antispasmodics, phenothiazines, and haloperidol), and antiemetics. But 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 stool softeners as indicated.[55] Increasing fluid intake, dietary fiber and physical activity must 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 must be ruled out. Persistent constipation may 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 2 times daily or oral polyethylene glycol; lactulose; magnesium hydroxide; 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 μ-opioid receptors helps relieve opioid-induced constipation while maintaining pain control.[56-57] 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 1 per 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. Patients with years to months to live should be screened for malignant bowel obstructions and the reversible causes should be treated appropriately. 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 imminently dying patients with weeks to days to live, medical management is preferable to surgical management. A number of treatment options are now available for the patient with advanced and terminal cancer who develops symptomatic intestinal obstruction. 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.[58] CT scan is used to identify the cause of obstruction if surgical intervention is contemplated for improvement of quality of life. Surgical risks should be discussed with patient and family. 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

[See NCCN Cancer–Related Fatigue Guidelines]

Delirium

Delirium should be assessed using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria.[59] Reversible causes should be identified and treated appropriately. The symptoms of delirium should be controlled with antipsychotic, neuroleptic drugs such as haloperidol, risperidone, olanzapine, or quetiapine fumarate.[60] A benzodiazepine, such as lorazepam, should be added for agitation that is refractory to high doses of neuroleptics. The dosages of these symptom control medications should be titrated to optimal relief. In addition, the use of nonpharmacologic interventions such as reorientation, cognitive stimulation, sleep hygiene etc. should be maximized. Caregivers should be supported in the care of their loved one and in coping with this distressing condition.

In patients with a life expectancy limited to weeks or days, iatrogenic causes should be eliminated whenever possible. Persistent delirium may shorten prognosis.[61] If delirium is a result of disease progression, palliative care must be focused upon on 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.[62] Opioid rotation can be considered (see NCCN Adult Pain Management Guidelines) if the delirium is felt to be due to neurotoxicity of the current opioid. Unnecessary medications and tubes should be removed. Family and caregivers must be supported and educated about the anticipated course of disease progression and the dying process.

Psychosocial Distress

For distress related to psychological or psychiatric complications and spiritual or existential crisis, see 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. This may be done by ensuring availability of caregivers and caring for patients in a safe environment. 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 caregiver(s) and family members. Personal, spiritual, or cultural issues related to the patient's prognosis should be discussed. Bereavement risk should be assessed.

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, caregiver(s), 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 patient, caregiver, and healthcare provider. Patients and family members benefit most from ongoing discussion about the natural history of the disease and prognosis in clear, consistent language. If the interventions are unsatisfactory, then reassess patient and family situation; intensify palliative care efforts; consult or refer to specialized palliative care services or hospice; and consider referral to psychiatrist to evaluate and treat psychiatric disorders. If psychosocial distress persists, palliative care options should be intensified and the patients should be managed according to the NCCN Distress Management Guidelines.[65]

Advance Care Planning

Advance care planning in patients with a year to months to live should include the open discussion about palliative care options including hospice, the elicitation of personal values and preferences for end-of-life care, the exploration for congruence between the patient's wishes/expectations and those of the family/health care team, and the provision of information about advance directives. Patients should be asked if they have completed any advance care planning such as living wills, power of attorneys, 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. Where the patient wants to die should also be determined. The desire for organ donation and/or autopsy should also be discussed with the patients. Dying in a hospital can be traumatic for patients and their families, although some patients request to remain in a facility for terminal care. The provision of palliative care services has been shown to decrease deaths in an intensive care unit.[66] 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 doubled during 1991-1992 through 1999-2000.[67] As the patient's life expectancy decreases down to months to weeks, compliance with advance directives should be ensured regardless of treatment setting. 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 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. 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 state of Oregon and Washington, euthanasia is not legal in any state in the USA.

Imminently dying

Care of the imminently dying patient is an intense interval for the patient, family, and the health care team. The care of an imminently dying patient includes physical, practical, and psychological interventions. A comfort care order set may be beneficial for practitioners to use for imminently dying patients.

The physical aspect focuses on adequate symptom management and comfort keeping in mind the patient's wishes and values. This may include intensifying ongoing care, 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 including pressure-relieving mattress and regular repositioning; treating urinary retention and fecal impaction, documentation and implementation of do-not-resuscitate (DNR) status, deactivation of implanted defibrillator, controlling terminal restlessness with palliative sedation, reducing death rattle/terminal secretion (repositioning patient, reducing parenteral and enteral fluids, adding medications such as scopolamine, hyoscyamine, atropine, or glycopyrrolate);[68]and preparing for patient and family's requests for autopsy and organ donation.

The psychosocial aspect of care for imminently dying patient takes into account individual and family goals and preferences. Consultation with social workers or chaplains is encouraged to meet identified social and spiritual needs. Patients and family members need clear information about the physical and psychological aspects of the dying process. Open communication with the patient, family, and care team regarding the dying phase and plan of care is very important. Attention to cultural and religious needs of the patient's family is critical. Caregivers should be helped to understand and honor the patient's advance directive. Anticipatory grief counseling should help facilitate caregiver closure.

The practical aspect may include mobilizing in-hospital death policy and procedure, ensuring that the patients' advance directives are documented, ensuring a private room for the patient, and enabling family presence around-the-clock. The patients and their family must be given respectful space and uninterrupted time together.

Palliative Sedation

Palliative sedation can be an effective symptom control treatment for imminently dying patients or those with refractory symptoms and with a life expectancy of hours to days. Typical sedatives used for palliative sedation by parenteral infusions include pentobarbital, thiopental and midazolam. Palliative sedation is best performed by palliative care experts and has its ethical justification in the Doctrine of Double Effect.[69-73] Clinicians may find that applying usual benefit/risk analysis to this type of intervention will suffice in medical decision making. Patients who are actively dying in their final hours of life should be allowed to spend uninterrupted time with their family. Diagnostic tests should be discontinued, the family should be prepared and supported, and advanced directives should be honored. Secretions should be minimized and delirium controlled with regular administration of appropriate medications by whatever route of administration is feasible. Make sure the patient is repositioned regularly for comfort, and monitor the patient for urinary retention and fecal impaction. Privacy and respectful space for the family should be provided to facilitate closure. Most 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 that those for NCCN disease-specific guidelines. The panel adapted a list of end-of-life outcomes from several surveys of North American citizens.[30] For the purpose of these guidelines, the NCCN panel has chosen Singer's outcomes until more precise outcome measures are available. Satisfactory palliative care should provide the following: adequate pain and symptom management, reduction of patient and family distress, acceptable sense of control, relief of caregiver burden, optimized quality of life, personal growth and enhanced meaning, insofar as this is desired. Research is ongoing regarding better ways to measure "dying well". [74] For now, patients should be reassessed regularly for these five outcomes, and palliative care efforts should be intensified as appropriate. Again, cultural sensitivity is mandatory in this setting. Consultation with a psychiatrist and/or other mental health professionals to evaluate and treat pre-existing psychiatric disorders, substance abuse and dysfunctional adjustment reactions should be considered for some patients. See NCCN Distress Management Guidelines.

After Death Care Interventions

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. This Guideline has modified this delineation of the attributes of satisfactory palliative care to 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. A "good death" has been defined as "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".[15] Another definition of a good death is from Singer and colleagues who state that satisfactory palliative care should promote a good death by providing adequate pain and symptom management, reduction of distress to the patient and family, acceptable sense of control, relief of caregiver's burden, strengthened personal relationships and optimized quality of life.[29]

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, 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. Funeral attendance can be considered for individual patients. For family members, grief should be normalized, risk factors for complicated grief should be identified, and complicated grief should be identified and treated. Such bereavement care is often best provided by an experienced hospice team or a skilled mental health care professional. The family may request a debriefing meeting and require assistance in identifying community bereavement resources. Health care professionals should review medical issues related to patient death, explore concerns and questions regarding quality of patient care, review emotional responses of family and staff to patient's death. A well-supported end-of-life care experience by the family will facilitate the family's acceptance of appropriate referral for cancer risk assessment and risk modification. Psychosocial support should also be provided for the staff.

Putting Palliative Care Guidelines into Practice

The NCCN Palliative Care Guidelines are aimed at providing the best quality of life that is 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 health care 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.

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, 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 they want 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. The combined efforts of the oncology team and the hospice/palliative care team can improve the overall outcome for patients and their families.

Palliative care applied late in the course of the disease is designed to help guide 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.[75-76] This may be a sign that the patient does not fully understand the disease. 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

NCCN Palliative Care Guidelines are intended to help oncology teams provide the best care possible for their patients with incurable cancer. During the next few years, the panel will complete the details of specific palliative care interventions and will refine the palliative care reassessment outcome measures. The panel will also incorporate information from the institutions that review and implement these guidelines. Additionally, the panel will try to address barriers to access to high-quality end-of-life care. 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[a]

Palliative Care Clinical Competencies

www.epec.net
Education on Palliative and End of Life Care (EPEC) Comprehensive curriculum covering fundamentals of palliative medicine, free downloadable power point and teaching guides

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
Department of Pain Medicine and Palliative Medicine at Beth Israel Medical Center:

Clinical, educational, professional, and public resources

www.palliativedrugs.com
Palliativedrugs.com: Extensive information on pharmacologic symptom management

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

www.abhpm.org
American Board of Hospice and Palliative Medicine: Cooperating boards within the ABMS offer a subspecialty certificate in hospice and palliative medicine.

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
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/products/positionpapers
American Geriatrics Society: Clinical guidelines on pain management in the elderly

Palliative Care Program Development

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

[a] All websites accessed December, 2009.

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References

1. ASCO Task Force for Cancer Care at the End of Life. Cancer care during the last phase of life. J Clin Oncol. 1998;16:1986-1996.

2. Berger A, Portenoy R, Weissman D eds. Practice and Principles of Supportive Oncology. Philadelphia: Lippincott-Raven; 1998.

3. Doyle D, Hanks G, MacDonald Ne eds. Oxford Textbook of Palliative Medicine. Oxford: Oxford University; 1998.

4. Emanuel L, von Gunten C, FD F eds. The Education for Physicians on End-of-Life Care (EPEC) Curriculum. Princeton: The Robert Wood Johnson Foundation; 1999.

5. Jemal A, Siegel R, Ward E, et al. Cancer statistics, 2008. CA Cancer J Clin. 2008;58:71-96.

6. Cancer Pain Relief and Palliative Care: Report of a WHO Expert Committee. Geneva: WHO; 1990.

7. Levy MH. Living with cancer: hospice/palliative care. J Natl Cancer Inst. 1993;85:1283-1287.

8. Levy MH. Supportive oncology: forward. Semin Oncol. 1994;21:699-700.

9. MacDonald N. Palliative care--the fourth phase of cancer prevention. Cancer Detect Prev. 1991;15:253-255.

10. Elsayem A, Swint K, Fisch MJ, et al. Palliative Care Inpatient Service in a Comprehensive Cancer Center: Clinical and Financial Outcomes. J Clin Oncol. 2004;22:2008-2014.

11. Earle CC, Neville BA, Landrum MB, Ayanian JZ, Block SD, Weeks JC. Trends in the Aggressiveness of Cancer Care Near the End of Life. J Clin Oncol. 2004;22:315-321.

12. Foley K, Gelband H eds. Improving palliative care for cancer. Washington, DC: National Academy Press; 2001.

13. A controlled trial to improve care for seriously ill hospitalized patients. The study to understand prognoses and preferences for outcomes and risks of treatments (SUPPORT). The SUPPORT Principal Investigators. JAMA. 1995;274:1591-1598.

14. Davis M. Integrating palliative medicine into an oncology practice. American Journal of Hospice & Palliative Medicine. 2005;22:447-456.

15. Field M, Cassel Ce eds. Approaching Death: Improving Care at the End of Life. Washington, D.C: National Academy Press; 1997.

16. Malin JL. Bridging the divide: integrating cancer-directed therapy and palliative care. J Clin Oncol. 2004;22:3438-3440.

17. Meyers FJ, Linder J. Simultaneous care: disease treatment and palliative care throughout illness. J Clin Oncol. 2003;21:1412-1415.

18. Levy M. NCCN Task Force reports: Supportive and Palliative Care. Oncology. 1999; 13:517-522.

19. Weissman DE. Decision making at a time of crisis near the end of life. JAMA. 2004;292:1738-1743.

20. Chochinov HM. Dying, Dignity, and New Horizons in Palliative End-of-Life Care. CA Cancer J Clin. 2006;56:84-103.

21. Kim A, Fall P, Wang D. Palliative Care: Optimizing Quality of Life. J Am Osteopath Assoc. 2005;105:S9-14.

22. de Haes H, Teunissen S. Communication in palliative care: a review of recent literature. Curr Opin Oncol. 2005;17:345-350.

23. Sinclair CT. Communicating a prognosis in advanced cancer. J Support Oncol. 2006;4:201-204.

24. Lorenz KA, Lynn J, Dy SM, et al. Evidence for improving palliative care at the end of life: a systematic review. Ann Intern Med. 2008;148:147-159.

25. National Consensus Project for Quality Palliative Care (2004). Clinical practice guidelines for quality palliative care. http://www.nationalconsensusproject.org.

26. Qaseem A, Snow V, Shekelle P, et al. Evidence-based interventions to improve the palliative care of pain, dyspnea, and depression at the end of life: a clinical practice guideline from the American College of Physicians. Ann Intern Med. 2008;148:141-146.

27. Khatcheressian J, Cassel JB, Lyckholm L, Coyne P, Hagenmueller A, Smith TJ. Improving palliative and supportive care in cancer patients. Oncology (Williston Park). 2005;19:1365-1376; discussion 1377-1368, 1381-1362, 1384 passim.

28. Levy MH. Supportive oncology-palliative care: What's in a name? Semin Oncol. 2005;32:131-133.

29. Morrison R, Meier D. Palliative Care. N Engl J Med. 2004;350:2582-2590.

30. Singer PA, Martin DK, Kelner M. Quality end-of-life care: patients' perspectives. JAMA. 1999;281:163-168.

31. Weeks JC, Cook EF, O'Day SJ, et al. Relationship Between Cancer Patients' Predictions of Prognosis and Their Treatment Preferences. JAMA. 1998;279:1709-1714.

32. Lo B, Ruston D, Kates LW, et al. Discussing Religious and Spiritual Issues at the End of Life: A Practical Guide for Physicians. JAMA. 2002;287:749-754.

33. Freelove R, Walling AD. Pancreatic cancer: diagnosis and management. Am Fam Physician. 2006;73:485-492.

34. Guarneri V, Conte P. The curability of breast cancer and the treatment of advanced disease. European Journal of Nuclear Medicine and Molecular Imaging. 2004;31:S149-S161.

35. Pienta KJ, Smith DC. Advances in Prostate Cancer Chemotherapy: A New Era Begins. CA Cancer J Clin. 2005;55:300-318.

36. Prommer E. Guidelines for the Use of Palliative Chemotherapy. AAHPM Bulletin. 2004;5:2-13.

37. Ajani J. Evolving Chemotherapy for Advanced Gastric Cancer. Oncologist. 2005;10:49-58.

38. Brown J, Thorpe H, Napp V, et al. Assessment of Quality of Life in the Supportive Care Setting of the Big Lung Trial in Non-Small-Cell Lung Cancer. J Clin Oncol. 2005;23:7417-7427.

39. Silvestri GA, Rivera PM. Targeted Therapy for the Treatment of Advanced Non-small Cell Lung Cancer: A Review of the Epidermal Growth Factor Receptor Antagonists. Chest. 2005;128:3975-3984.

40. Higginson IJ, Finlay IG, Goodwin DM, et al. Is there evidence that palliative care teams alter end-of-life experiences of patients and their caregivers? J Pain Symptom Manage. 2003;25:150-168.

41. Kinzbrunner BM. Hospice: what to do when anti-cancer therapy is no longer appropriate, effective, or desired. Semin Oncol. 1994;21:792-798.

42. Temel JS, Pirl WF, Lynch TJ. Comprehensive symptom management in patients with advanced-stage non-small-cell lung cancer. Clin Lung Cancer. 2006;7:241-249.

43. Ben-Aharon I, Gafter-Gvili A, Paul M, Leibovici L, Stemmer SM. Interventions for alleviating cancer-related dyspnea: a systematic review. J Clin Oncol. 2008;26:2396-2404.

44. Clemens KE, Quednau I, Klaschik E. Is there a higher risk of respiratory depression in opioid-naive palliative care patients during symptomatic therapy of dyspnea with strong opioids? J Palliat Med. 2008;11:204-216.

45. Davis MP, Furste A. Glycopyrrolate: a useful drug in the palliation of mechanical bowel obstruction. J Pain Symptom Manage. 1999;18:153-154.

46. Jennings AL, Davies AN, Higgins JP, Gibbs JS, Broadley KE. A systematic review of the use of opioids in the management of dyspnoea. Thorax. 2002;57:939-944.

47. Navigante AH, Cerchietti LC, Castro MA, Lutteral MA, Cabalar ME. Midazolam as adjunct therapy to morphine in the alleviation of severe dyspnea perception in patients with advanced cancer. J Pain Symptom Manage. 2006;31:38-47.

48. Laviano A, Meguid MM, Inui A, Muscaritoli M, Rossi-Fanelli F. Therapy insight: Cancer anorexia-cachexia syndrome--when all you can eat is yourself. Nat Clin Pract Oncol. 2005;2:158-165.

49. Yavuzsen T, Davis MP, Walsh D, LeGrand S, Lagman R. Systematic Review of the Treatment of Cancer-Associated Anorexia and Weight Loss. J Clin Oncol. 2005;23:8500-8511.

50. Isenring EA, Capra S, Bauer JD. Nutrition intervention is beneficial in oncology outpatients receiving radiotherapy to the gastrointestinal or head and neck area. Br J Cancer. 2004;91:447-452.

51. Ravasco P, Monteiro-Grillo I, Vidal PM, Camilo ME. Dietary counseling improves patient outcomes: a prospective, randomized, controlled trial in colorectal cancer patients undergoing radiotherapy. J Clin Oncol. 2005;23:1431-1438.

52. Schwartzberg L. Chemotherapy-induced nausea and vomiting: state of the art in 2006. J Support Oncol. 2006;4:3-8.

53. Becker G, Galandi D, Blum HE. Peripherally acting opioid antagonists in the treatment of opiate-related constipation: a systematic review. J Pain Symptom Manage. 2007;34:547-565.

54. Mancini I, Bruera E. Constipation in advanced cancer patients. Support Care Cancer. 1998;6:356-364.

55. American Pain Socitey. Principles ofAnalgesic use in the treatment of acute pain and cancer pain (ed 5th). Glenview, IL: American Pain Society; 2003.

56. Portenoy RK, Thomas J, Moehl Boatwright ML, et al. Subcutaneous methylnaltrexone for the treatment of opioid-induced constipation in patients with advanced illness: a double-blind, randomized, parallel group, dose-ranging study. J Pain Symptom Manage. 2008;35:458-468.

57. Thomas J, Karver S, Cooney GA, et al. Methylnaltrexone for opioid-induced constipation in advanced illness. N Engl J Med. 2008;358:2332-2343.

58. Mercadante S, Casuccio A, Mangione S. Medical treatment for inoperable malignant bowel obstruction: a qualitative systematic review. J Pain Symptom Manage. 2007;33:217-223.

59. Diagnostic and statistical manual of mental disorders. 4th ed. Washington, DC: American Psychiatric Association. 1994:124-133.

60. Lacasse H, Perreault MM, Williamson DR. Systematic review of antipsychotics for the treatment of hospital-associated delirium in medically or surgically ill patients. Ann Pharmacother. 2006;40:1966-1973.

61. Caraceni A, Nanni O, Maltoni M, et al. Impact of delirium on the short term prognosis of advanced cancer patients. Italian Multicenter Study Group on Palliative Care. Cancer. 2000;89:1145-1149.

62. Kehl KA. Treatment of terminal restlessness: a review of the evidence. J Pain Palliat Care Pharmacother. 2004;18:5-30.

63. Mock V, Atkinson A, Barsevick AM, et al. Cancer-related fatigue. Clinical Practice Guidelines in Oncology. J Natl Compr Canc Netw. 2007;5:1054-1078.

64. Swarm R, Anghelescu DL, Benedetti C, et al. Adult cancer pain. J Natl Compr Canc Netw. 2007;5:726-751.

65. Holland JC, Andersen B, Breitbart WS, et al. Distress management. J Natl Compr Canc Netw. 2007;5:66-98.

66. Elsayem AF, Jenkins R, Parmley L, Smith ML, Palmer JL, Bruera E. The impact of a palliative care service on overall hospital mortality in a

comprehensive cancer center. J Clin Oncol (Meeting Abstracts). 2004;22:8034.

67. Han B, Remsburg RE, McAuley WJ, Keay TJ, Travis SS. National Trends In Adult Hospice Use: 1991-1992 To 1999-2000. Health Aff. 2006;25:792-799.

68. Wildiers H, Dhaenekint C, Demeulenaere P, et al. Atropine, hyoscine butylbromide, or scopolamine are equally effective for the treatment of death rattle in terminal care. J Pain Symptom Manage. 2009;38:124-133.

69. Braun TC, Hagen NA, Clark T. Development of a Clinical Practice Guideline for Palliative Sedation. Journal of Palliative Medicine. 2003;6:345-350.

70. Cherny NI, Portenoy RK. Sedation in the management of refractory symptoms: guidelines for evaluation and treatment. J Palliat Care. 1994;10:31-38.

71. Cowan JD, Palmer TW. Practical guide to palliative sedation. Curr Oncol Rep. 2002;4:242-249.

72. Levy MH, Cohen SD. Sedation for the relief of refractory symptoms in the imminently dying: a fine intentional line. Semin Oncol. 2005;32:237-246.

73. Wein S. Sedation in the imminently dying patient. Oncology (Williston Park). 2000;14:585-592; discussion 592, 597-588, 601.

74. Byock I ed Dying Well: The Prospect for Growth at the End of Life. New York: Riverhead Books; 1997.

75. Hartmann LC. Unrealistic Expectations. J Clin Oncol. 2005;23:4231-4232.

76. Kalemkerian GP. Commentary on "Unrealistic Expectations". J Clin Oncol. 2005;23:4233-4234.