Goals of Care / Future Directions
- clarify if goal is palliation OR prolongation of life OR balance of both
- make sure patient is able to make goal decisions with clear mind (i.e. not depressed, not confused, not being pressured, not in unremitting pain)

PAIN
- is pain relief adequate? IF NO, re-assess for reversible cause and start or increase analgesia (see below)
  - mild pain -> acetaminophen and/or NSAIDS (particularly in bone pain)
  - avoid NSAIDS in elderly, renal impaired, GI bleed (consider PPI)
  - moderate pain -> weak opioid (codeine or tramadol)
  - severe pain -> strong opioid (morphine, oxycodone, hydromorphone)

  Equivalencies
<table>
<thead>
<tr>
<th>PO</th>
<th>Parenteral</th>
<th>IV/PO</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>10mg</td>
<td>10mg</td>
<td>3 h</td>
</tr>
<tr>
<td>Codeine</td>
<td>20-30mg</td>
<td>15-20mg</td>
<td>3-4 h</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1-2mg</td>
<td>1-2mg</td>
<td>3-4 h</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1.5-3mg</td>
<td>1.5-3mg</td>
<td>5 h</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>10-20mcg</td>
<td>-</td>
<td>1-3 h</td>
</tr>
</tbody>
</table>

Typical Starting po doses
- Morphine 5-10mg q4h
- Codeine 8-15mg q4h
- Oxycodone 2.5-5mg q4h
- Hydromorphone 1-2mg q4h
- Fentanyl 10-20mcg q4h

- opioid adverse effects:
  - constipation (prevent or treat with PEG 3350 OR senna)
  - somnolence/sedation (consider switching or add psycho-stimulant)
  - nausea (metoclopramide 10mg PO/SC/IV qid PRN)
  - neurotoxicity (avoid renal impairment - i.e. good hydration)
  - respiratory depression (RARE with careful titration)

  - adjuvant therapy:
    - bone pain (1st line: NSAIDS; 2nd line: dexamethasone, bisphosphonates)
    - neuropathic pain (nortriptyline, gabapentin)

  - titrating opioid dose upwards (if > 2 doses of breakthrough needed/24h)
    - add up previous 24 hour total, and divide by 6 to get new q4h dose
    - remember: give 10% of this new 24 hr total as the breakthrough dose

NAUSEA&VOMITING:
- opioid-induced:
  - metoclopramide (see above)
  - haloperidol 1-5mg PO/SC BID/TID/PRN (watch for EPSs)
- malignant bowel obstruction: haloperidol (as above)
- chemo/radiotherapy induced: ondansetron 4-8mg PO/SC/IV BID/TID

DYSPNEA:
- awareness of breathing; frequent and often multifactorial
  - treat/optimize treatment for reversible causes (eg. PE, COPD, etc.)
  - try air directed across face, sit upright and by open window
  - systemic opioids: initiate as for PAIN
  - O2 nasal prongs: in hypoxic patients (SaO2 < 88% or PaO2 < 55 mmHg)

DELIRIUM:
- control symptoms: haloperidol or methotrimeprazine (more sedating)
- treat the underlying cause (if possible and indicated)
- educate family (disease fluctuations, need for antipsychotics > opioids)

PAIN CRISIS:
- rule out delirium, psycho-spiritual crisis, opioid neurotoxicity
- use appropriate breakthrough dose
- consider emergent breakthrough dosing with fentanyl (NOT by patch)

SPINAL CORD COMPRESSION:
- recognize and treat ASAP to reduce morbidity
  - dexamethasone 8-10mg PO/SC/IV STAT if any suspicion, then BID/TID
- urgent radiotherapy and/or neurosurgery referral