Appendix G: Example: Algorithm for Assessing Pain in Adults with Cancer (Source: Cancer Care Ontario)

ALGORITHM: Pain in Adults with Cancer: Screening an Assessment

SCREEN FOR PAIN USING ESAS AT EACH VISIT

ESAS score 1 to 3	ESAS score 4 to 6	ESAS score 7 to 10

Assessment using Acronym O, P, Q, R, S, T, U and V

Onset	When did it begin? How long does it last? How often does it occur?
Provoking/Palliating	What brings it on? What makes it better? What makes it worse?
Quality	What does it feel like? Can you describe it?
Region/Radiation	Where is it? Does it spread anywhere?
Severity	What is the intensity of this symptom (On a scale of 0 to 10, with 0 being none and 10 being worst possible)? Right now? At best? At worst? On average? How bothered are you by this symptom? Are there any other symptom(s) that accompany this symptom?
Treatment	What medications or treatments are you currently using? How effective are these? Do you have any side effects from the medications/treatments? What medications/treatments have you used in the past?
Understanding/ Impact on You	What do you believe is causing this symptom? How is this symptom affecting you and/or your family?
Values	What is your goal for this symptom? What is your comfort goal or acceptable level for this symptom (On a scale of 0 to 10, with 0 being none and 10 being worst possible)? Are there any other views or feelings about this symptom that are important to you or your family?

* Physical assessment (focus on area of pain to determine cause and type of pain); Pertinent History (risk factors); Assess risks for addiction; Associated symptoms: e.g. nausea, vomiting, constipation, numbness, tingling, urinary retention.

Mild Pain	Moderate Pain	Severe Pain
• Patient not using analgesia effectively • Mild pain not interfering with ADL's	• Pain or analgesics interfering with function and ADL's • Patient states he/she cannot manage pain with present treatment regime	• Patient in acute distress/discomfort • Pain onset is sudden and acute • Acute exacerbation of previous levels • Has developed a new site for pain • Associated motor weakness • Analgesics interfering with ADL's

CHART CONTINUED ON NEXT PAGE

Interventions for all patients, as appropriate

NON-PHARMACOLOGICAL

- Psycho-social-spiritual interventions (patient education, counseling, recreational activities, relaxation therapy imagery, social interaction, spiritual counselling).
- Other therapies (physiotherapy, occupational therapy, massage, aromatherapy, music therapy, acupuncture, transcutaneous electrical nerve stimulation, reflexology, Reiki, hypnotherapy).
- Other interventions such as radiation therapy, vertebroplasty, surgery and anesthetic interventions should be considered in patients with difficult to control pain.

Patient Education

- Taking routine and breakthrough analgesics, adverse effect management, non-pharmacologic measures that can be used in conjunction with pharmacologic treatment.

PHARMACOLOGICAL

- The severity of pain determines the strength of analgesics required specified by the World Health Organization (WHO) Analgesic Ladder.
- The type and cause of the pain will influence the choice of adjuvant analgesic (e.g., nociceptive, neuropathic, bone metastases).
- In the presence of reduced kidney function all opioids should be used with caution and at reduced doses and/or frequency.
- Fentanyl, methadone and oxycodone are the safest opioids of choice in patients with chronic kidney disease.
- Methadone requires an experienced prescriber, check for significant drug interactions before prescribing any drug to a patient on methadone.
- When using a transmucosal fentanyl formulation for breakthrough pain the effective dose should be found by upward titration independent of the regular opioid dose.
- For those with stabilized severe pain and on a stable opioid dose or those with swallowing difficulties or intractable nausea and vomiting, fentanyl transdermal patches may be appropriate, provided the pain is stable.
- Classify the pain – nociceptive, neuropathic or mixed?
- The type and cause of the pain will influence the choice of adjuvant analgesic (e.g., nociceptive, neuropathic, bone metastases).
- The choice of antidepressant or anticonvulsant should be based on concomitant disease, drug therapy and drug side effects and interactions experienced.
- There is insufficient evidence to support a recommendation for topical opioids.
- There is insufficient evidence to support first or second line therapy of cancer pain with cannabinoids but they may have a role in refractory pain, particularly refractory neuropathic pain.
- Transdermal fentanyl should not be used in opioid-naïve patients.
- Specialist palliative care advice should be considered for the appropriate choice, dosage and route of opioid in patients with reduced kidney function or in patients with difficult to control pain.

ADVERSE EFFECTS OF OPIOIDS

- Many opioid-naïve patients will develop nausea or vomiting when starting opioids, tolerance usually occurs within 5-10 days. Patients commencing an opioid for moderate to severe pain should have access to an antiemetic to be taken if required.
- The majority of patients taking opioids for moderate to severe pain will develop constipation. Little or no tolerance develops. The commonest prophylactic treatment for preventing opioid-induced constipation is a combination of stimulant (senna or bisocodyl) and osmotic laxatives (lactulose or PEG 3350).

Pain in Adults with Cancer: Care Map

Mild Pain Care Pathway 1

PHARMACOLOGICAL

Treatment with non-opioids

- Acetaminophen and NSAIDS including COX-2 inhibitors should be considered at the lowest effective dose.
- The need for ongoing or long term treatment should be reviewed periodically, if no significant response in one week drugs should be stopped.
- Long term use of NSAIDs should require gastric mucosa protection.
- There is insufficient evidence to recommend bisphosphonates for first line therapy for pain management.

Treatment with opioids

- For mild to moderate pain, weak opioids such as codeine or tramadol could be given in combination with a non-opioid analgesic.
- If pain is not controlled with these combinations go to "Moderate Pain" re: initiation and treatment with opioids.

Moderate Pain Care Pathway 2

PHARMACOLOGICAL

Treatment with opioids

- If the person is opioid naïve:
  - Morphine starting dose is usually 5mg Q4h with 2.5-5mg Q1H prn for breakthrough pain. For elderly or debilitated patients consider a starting dose of 2.5mg Q4h.
  - Hydromorphone starting dose is 1mg Q4h with 0.5-1mg Q1h prn for breakthrough pain. For elderly or debilitated patients consider a starting dose of 0.5mg Q4h.
  - Oxycodone starting dose is 2.5mg or one half tablet Q4H with 2.5mg or one half table Q2H prn for breakthrough. (The lowest dose oxycodone tablets available, either in combination with acetaminophen or alone, contain 5mg of oxycodone, equivalent to ~5-10mg of morphine).
- If the person is taking an opioid:
  - As an immediate release preparation with q4h dosing, increase the regular and breakthrough doses by 25%.
  - As a sustained release opioid, increase this dose by 25%. Change the breakthrough dose to 10% of the regular 24h dose, wither q1-2h PRN PO or q30 min PRN subcut.
  - Patients with stable pain and analgesic usage, receiving oral morphine, oxycodone or hydromorphone should have the drug converted to a sustained or controlled release formulation given q12h for ease of administration. The short acting breakthrough dose is usually 10% of the total daily dose.
  - The frequency of breakthrough doses for oral opioids is Q1-2h prn. After conversion to a long acting preparation, if pain is not well controlled, reassess the patient and consider why multiple breakthrough doses are being used and the effectiveness of the breakthrough doses.
  - If indicated after proper assessment, the daily dose can be titrated by adding 20 to 30% of the breakthrough doses used in the preceding 24 hrs to the daily sustained release formulation.
  - Make frequent assessments and adjustments to the opioid dose until the pain is better controlled.

Severe Pain Care Pathway 3

PHARMACOLOGICAL

Treatment with strong opioids

- If the person is opioid naïve: Oral: Morphine 5-10mg PO q4h and 5mg PO q1h PRN **OR** hydromorphine 1.0-2.0mg PO q4h and 1.0mg PO q1h PRN **OR** *Subcutaneous*: Morphine 2.5-5mg subcut q4h & 2.5mg subcut q30 min PRN **OR** hydromorphone 0.5-1.0mg subcut q4h & 0.5mg subcut q30 min PRN.
- If the patient is taking an opioid with q4h dosing, increase the regular and breakthrough doses by 25%. Change frequency of the breakthrough to q1h PRN if PO and q30 min PRN if subcut.
- If the patient is taking a sustained release opioid, increase this dose by 25%. Change the breakthrough dose to 10-15% of the regular 24h dose, either q1h PRN PO or q30 min PRN subcut.
- Titrate the dose every 24h to reflect the previous 24h total dose received.
- If unmanageable opioid-limiting adverse effects are present (e.g., nausea, drowsiness, myoclonus), consider switching to another opioid and re-titrate or consult palliative care.
- For patients with severe uncontrolled pain consider switching back to an equivalent daily dose of immediate release morphine to allow more rapid titration of dose or switch to a sc preparation/infusion.
- Meperidine and pentazocine should generally not be used in cancer patients with chronic or acute pain.
- If there is difficulty getting the pain under control consider a consultation to palliative care.

SEVERE PAIN CRISIS

1. A severe pain crisis requires prompt use of analgesics, adjuvant therapies, reassurance and a calm atmosphere.
2. **Consider a consultation to palliative care or a cancer pain specialist.**
3. If IV access is present, and the person is **opioid naïve** give stat morphine 5-10mg IV q10 min until pain is relieved; if the person is **on opioids** give the po prn dose IV q10 min until pain is relieved. Monitor carefully.
4. If no IV access available, and the person is **opioid naïve** give stat morphine 5-10mg subcut q20-30 min until pain is relieved; if the person is **on opioids** give the po prn dose subcut q20-30 min until pain is relieved.
5. Titrate dose by 25% every 1-2 doses until pain is relieved.
6. When pain is controlled: If the patient is taking a sustained release opioid increase this dose by 25% and change to q4h dosing po or subcut. **Do Not** try to manage a severe pain crisis with a long-acting opioid. Change the breakthrough dose to half of the regular dose, either q1h PRN PO or q30 min PRN subcut.

Follow-up and Ongoing Monitoring

If pain remains unrelieved despite the approaches outlined above, request the assistance of a palliative care consultation team.

For full references and more information please refer to CCO's Symptom Management Guide-to-Practice: Pain document.

Disclaimer: Care has been taken by Cancer Care Ontario's Algorithm Development Group in the preparation of the information contained in this Algorithm. Nonetheless, any person seeking to apply or consult the guidance for practice document is expected to use independent clinical judgement and skills in the context of individual clinical circumstances or seek out the supervision of a qualified specialist clinician. CCO makes no representation or warranties of any kind whatsoever regarding their content or use or application and disclaims any responsibility for their application or use in any way.

Note. These resources have been provided by Cancer Care Ontario (CCO) through the CCO website. Reprinted with permission.