As we start the New Year we are eagerly anticipating 2019 to bring some important improvements in cancer care for the North East. The long awaited implementation of the new colorectal cancer screening fecal immunochemical test (FIT) will replace the fecal occult blood test and we expect PET/CT to be available in the region by summer.

We will also be seeing changes in leadership for the North East Regional Cancer Program. I am pleased to introduce to you Maureen McLellan who has started in the role of Cancer Care Ontario Regional Vice President for the North East as well as Vice President, Social Accountability at Health Sciences North (HSN) and Chief Operating Officer, Health Sciences North Research Institute. Maureen replaces me as I take on a new role as Senior Vice President, Patient Experience and Digital Transformation at HSN. Maureen has an extensive knowledge of the North East having provided many years of leadership, particularly in Mental Health and Addictions and Medical Programs at HSN. In her most recent role Maureen served as special advisor to the CEO in developing the 2019-2024 HSN and HSNRI Strategic Plan. With the Ontario Cancer Plan V coming soon in 2019 I look forward to seeing the ongoing inclusion of primary care in our Regional Cancer Plan under Maureen’s leadership. As I transition to a new role I want to thank all primary care providers from across the North East for your ongoing commitment, collaboration and support in improving cancer care for the people of our region.

Mark Hartman
Senior Vice President, Patient Experience and Digital Transformation
Health Sciences North

**Pain in Adults with Cancer**

Cancer Care Ontario (CCO) has released a new resource: *Symptom Management Algorithm: Pain in Adults with Cancer*. The comprehensive approach from screening, assessment and classifying pain to the pharmacological and non-pharmacological approaches dependent on the type and severity of pain makes this a useful resource for both oncologists and primary care providers caring for cancer patients.

Of note is the importance of classifying a patient’s type of pain (e.g. neuropathic, nociceptive, intracranial pressure, bone metastases) to best tailor treatment. Pharmacological interventions differ according to the predominant type of pain (e.g. antidepressants and anticonvulsants for neuropathic pain, analgesics for nociceptive pain). Non-pharmacological interventions are helpful for appropriate indications (e.g. radiation for patients with pain related to bone metastases, interventional anesthesia for patients not responding to first and second-line approaches). With the heightened focus on judicious opioid prescribing, the algorithm also offers advice on risk assessment for addiction, opioid titration and monitoring for adverse effects.

A hard copy of *Symptom Management Algorithm: Pain in Adults with Cancer* is provided with this issue of North East Oncology News. A useful adjunct to provide the patient with general pain management education is the CCO patient symptom management guide: *How to Manage Your Pain*. Both documents can be downloaded at: [www.cancercareontario.ca/symptom-management/3121](http://www.cancercareontario.ca/symptom-management/3121)
Enhance your EMR and Digital Health Use

The July 2018 issue of North East Oncology News (NEON) featured information on: Cancer Care Ontario’s Screening Activity Report (SAR) as a supplementary electronic tool to support patient enrolment model physicians in improving cancer screening; the partnership with the College of Physicians and Surgeons of Ontario to make eHealth Ontario’s ONE®ID registration easier; and methods for gaining SAR access. The full benefit of the SAR can be realized when its information can be integrated with a practice’s electronic medical record (EMR) and the EMR functions optimized. In this and subsequent issues, NEON is pleased to feature Dr. Darren Larsen introducing OntarioMDs’ digital health products and services that can assist primary care clinicians in meeting their cancer screening targets and general practice needs.

Dr. Amanda Hey
Regional Primary Care Lead
North East Regional Cancer Program

Every day, you make hundreds of clinical decisions that impact the health and wellness of your patients, while running a busy practice. At OntarioMD, we understand the important role efficient clinical workflows and administrative processes, and access to patient data plays in your ability to deliver the highest quality patient care.

Since 2004, OntarioMD has supported clinician practices across the province in choosing, implementing and using electronic medical records (EMRs) and other digital health tools that are right for their unique practice needs. Over 16,000 primary care clinicians use our programs and services to do everything from receive patient reports from hospitals and specialty clinics, receive lab results and connect quickly with specialists for advice. We have a successful track record in developing and implementing digital health tools that integrate with EMRs and align with clinician needs and system priorities.

We are also responsible for certifying EMR offerings, which are mandatory for access to provincial electronic health record (EHR) products and services including the Ontario Laboratories Information System (OLIS), Health Report Manager (HRM), and future EHR solutions and services as they become available. When you use an OntarioMD-certified EMR, you have assurance that your vendor has met, and continues to meet, the requirements and obligations to drive EMR maturity in Ontario.

Our team developed the concept of EMR maturity to help you understand your current level of EMR knowledge and use and guide you toward taking full advantage of the technology’s potential for improved population health and patient outcomes.

Our EMR Maturity Model (see insert) plots users on a six-point scale based on how they are currently using their EMR to enter and use patient data - from simply entering data, to full connection with provincial digital health platforms. You can complete an EMR Progress Assessment (EPA) – an online survey tool that asks questions related to your EMR use across 10 key measures – to find out your current EMR maturity level, and help uncover areas for improvement in practice workflow, efficiency and patient care.

Armed with an understanding of your current EMR maturity level, you can start to focus on ways to improve your EMR knowledge and use to understand how the technology can help you improve your cancer screening and other practice priorities. But we know that busy clinicians don’t have the time or resources to do this work on their own. That is where our practice support teams come in. Over the next two issues of this newsletter, we will let you know how OntarioMD Peer Leaders and our EMR Practice Enhancement Program work one-on-one with clinicians and their staff to analyze their workflows and EMR data, and provide practical tips, tricks and advice that can help you quickly improve your EMR use and get more from the digital health tools at your disposal.

In the meantime, we invite you to understand your current EMR maturity level by completing an EPA at https://www.ontariomd.ca/products-and-services/emr-practice-enhancement-program/emr-progress-assessment. You can also find more information on OntarioMD programs and services at OntarioMD.ca or by contacting us at support@ontariomd.com.

Dr. Darren Larsen
Chief Medical Officer
OntarioMD
Introduction of the New North East Regional Pathology Lead

I am pleased to be appointed to the role of Regional Pathology Lead for the North East Regional Cancer Program. My role in the position is to work with my regional and provincial colleagues to improve pathology services for patients in the region and the province. Pathology is fundamentally important to cancer diagnosis, prognosis and treatment determinations.

The provincial Pathology and Laboratory Medicine Program Committee’s goal is to create a system that allows pathology and laboratory medicine providers to effectively and efficiently perform analyses of samples ensuring that treatment plans and care for individual patients are based on accurate and timely pathology and laboratory findings.

I obtained my MD at Western University in 1998 and completed my general pathology training at the University of British Columbia in 2003. I practiced in a large group setting in British Columbia’s lower mainland for two years prior to returning to my hometown of North Bay in 2005 to practice in a small group setting at the North Bay Regional Health Centre.

I look forward to working with my colleagues across the region and the province to improve pathology services for our patients.

Dr. Scott Kerrigan
Regional Pathology Lead
North East Regional Cancer Program

Fecal Immunochemical Test (FIT) Update

Cancer Care Ontario (CCO) is in the final stages of preparing for the launch of FIT to replace the gFOBT for colorectal cancer screening. Watch for the following activities to support the transition for you and your patients.

1. Prior to the launch of FIT, all primary care providers in the province will receive a hard-copy package from CCO that will include the following inserts:

   • Primary care provider mail-out cover letter
   • ColonCancerCheck: Average Risk Screening with FIT
   • FIT requisition
   • FIT instructions for patients
   • Primary Care Provider Registration for Patient Attachment
   • Sample FIT specimen collection device

2. Continuing professional development (CPD) events certified with the College of Family Physicians of Canada will be offered in select North East Ontario communities or via the Ontario Telehealth Network. For more information about CPD events please contact: Merci Miron-Black, North East Regional Cancer Program at mmironblack@hsnsudbury.ca or (705) 522-6237 ext. 2537

3. An online Cancer Care Ontario FIT Resource Hub where FIT resources are housed and updated: www.cancercareontario.ca/FIThub

Dr. Amanda Hey
Regional Primary Care Lead
North East Regional Cancer Program
Update: HSN Hepato-Pancreatic Biliary Cancer Surgery Centre

Health Sciences North has been designated as one of ten Hepato-Pancreatic Biliary (HPB) Cancer Surgery Centres in Ontario.

Pancreatic and liver cancer rates are increasing at about 3% to 6% respectively per year. Historically, the natural history of these cancers is poor. Between 2009-2013, the five-year relative survival ratio at diagnosis, combining all stages, for pancreatic cancer and liver cancer was 9.5% and 20.4% respectively. Pancreatic cancer, despite having a much lower incidence, is projected to cause almost as many deaths (1,956 deaths) as breast cancer in 2018. However, there is a demonstrable survival benefit from appropriate HPB surgery for both primary hepatopancreatic biliary cancers and also select patients with colorectal cancer liver metastases. Therefore, it is important these procedures are undertaken by surgeons with the training, experience and technical skill in a hospital with a multidisciplinary team and the resources to ensure proper pre-operative, intra-operative and post-operative care.

Moreover, malignant diseases of the liver, pancreas, and biliary tract, whether resectable or not, are complex problems that require a comprehensive management plan by a multidisciplinary team with the knowledge and resources to provide a spectrum of surgical and endoscopic interventions, systemic and radiation therapy, supportive and palliative care in order to optimize patient care and outcomes. Health Sciences North in Sudbury is pleased to offer these services to patients in North East Ontario.

Meet the HPB Service Team:

The HPB surgeons:
Dr. Shum and Dr. Asai perform a wide array of open and laparoscopic procedures including, but not limited to pancreaticoduodenectomy (Whipple procedure), liver resection, and common bile duct resection.

The HPB radiologist:
Dr. Dhanoa, an interventional radiologist, is the lead in providing cancer patients with transarterial chemoembolization (TACE) and radiofrequency ablation (RFA). He provides interventional radiology services including liver biopsies, transhepatic drainage and is involved in diagnostic imaging (MRI, multiphasic CT scans and ultrasounds) for HPB patients.

The HPB gastroenterologists:
Dr. Boudreau has a special interest in hepatology. She manages a large volume of cirrhotic patients and screens them routinely for hepatocellular carcinoma. She also manages a large number of patients with chronic pancreatitis. Dr. Khorasani recently joined the team and provides endoscopic ultrasound to diagnose pancreatic malignancies.

The HSN endoscopic retrograde cholangiopancreatography (ERCP) group provides continuous coverage for diagnosis and management of obstructive jaundice. The goal is that no patient who needs a procedure is turned away. Medical and radiation oncologists specialized in treating HPB malignancies are based out of the Northeast Cancer Centre. HSN is also fortunate to have a number of pathologists specialized in the diagnosis of HPB malignancies.

Dr. J. Shum
HPB Surgeon
Health Sciences North

Erratum in: North East Oncology News. Volume 8, Issue 2, July 2018. ONE®ID and Cancer Care Ontario’s Screening Activity Report: Access Made Easier. The eHealth Ontario Registration Agent contact email was incorrect. The original article with the corrected address has been reprinted and inserted in this issue, and in the online edition at: www.hsnsudbury.ca/NECCprimarycareresources. We apologize for any confusion this may have caused.

North East Oncology News is a triannual publication from the North East Regional Cancer Program providing evidence-based guidance, and clinical and operational updates of interest with a focus on primary care in North East Ontario.

References used for this issue of North East Oncology News are available upon request from the editor. Articles may be reprinted without permission, provided the source is acknowledged.

Available online at www.hsnsudbury.ca/NECCprimarycareresources
Enhance your EMR and Digital Health Use: The OntarioMD EMR Maturity Model

<table>
<thead>
<tr>
<th>Level</th>
<th>Criteria</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>INTEGRATE</td>
<td>Use of portals, hubs, attachment to provincial e-health platforms sharing data from the EMR.</td>
</tr>
<tr>
<td>4</td>
<td>POPULATION DATA USE</td>
<td>Dashboading of whole populations, acting upon the whole, performing population analysis at the practice level.</td>
</tr>
<tr>
<td>3</td>
<td>LOOK AHEAD / PREDICT</td>
<td>Reminders and alerts are used at the point of care. Searches are done regularly and scheduled for review.</td>
</tr>
<tr>
<td>2</td>
<td>EARLY DATA USE</td>
<td>Acting upon the output of episodic searches, quick entry tools, forms, calculators, etc.</td>
</tr>
<tr>
<td>1</td>
<td>ENTER DATA</td>
<td>Documentation occurs electronically. Progress notes, forms, and other documents are entered into the EMR.</td>
</tr>
<tr>
<td>0</td>
<td>PAPER</td>
<td>Processes are primarily paper-based.</td>
</tr>
</tbody>
</table>

OntarioMD supports clinician practices across the province in choosing, implementing and using electronic medical records (EMRs) and other digital health tools that are right for their unique practice needs.

OntarioMD invites you to understand your current EMR maturity level by completing an EMR Progress Assessment (EPA) at [https://www.ontariomd.ca/products-and-services/emr-practice-enhancement-program/emr-progress-assessment](https://www.ontariomd.ca/products-and-services/emr-practice-enhancement-program/emr-progress-assessment). You can also find more information on OntarioMD programs and services at [OntarioMD.ca](http://OntarioMD.ca) or by contacting us at support@ontariomd.com
ONE®ID and Cancer Care Ontario’s Screening Activity Report: Access Made Easier

The Screening Activity Report (SAR) was created by Cancer Care Ontario (CCO) as a supplementary electronic tool to support patient enrolment model (PEM) primary care physicians in improving their practice breast, cervical and colorectal cancer screening rates and appropriate follow-up.

The SAR is accessed through ONE®ID, eHealth Ontario’s digital identity and authentication system, which allows health care professionals to securely access digital health services with a single user name and password. In addition to the SAR, digital health services accessed through ONE®ID include:

- ONE®Mail
- Ontario Telemedicine Network
- ConnectingOntario ClinicalViewer

A recent partnership with the College of Physicians and Surgeons of Ontario (CPSO) has simplified the ONE®ID registration process by eliminating the need to contact and provide identity documents to an eHealth Ontario Local Registration Authority (LRA).

ONE®ID registration for CPSO Members

1. Go to the CPSO website and log in using your CPSO account credentials, then scroll to the bottom of the “Welcome” page and click on “Get your eHealth ONE ID”

2. On the “Getting an eHealth Ontario ONE ID” page, review and agree to the Consent Statement, then

3. Click on the “Register for ONE ID” button

4. You will be directed to the ONE®ID site to complete the registration, involving reviewing your pre-populated personal profile and a password. You will then be provided with a login ID, generally in the format of FIRSTNAME.LASTNAME@ONEID.ON.CA

Gaining SAR access once registered for ONE®ID

Once registered for ONE®ID, the SAR can be added to your account remotely by contacting and providing your name, CPSO number and ONE®ID login to one of the following entities:

1. If available; an LRA working in your health care setting
2. eHealth Ontario Registration Agents: registration.agents@ehealthontario.on.ca
3. Northeast Cancer Centre’s Primary Care Outreach Coordinator and LRA, Merci Miron-Black (see below)

The addition of the SAR to your ONE®ID account is confirmed by email.

Using the SAR

Cancer Care Ontario’s website offers an “Access your SAR” tab and a number of useful SAR tips and video tutorials at: www.cancercareontario.ca/SAR

For additional SAR support, please feel free to contact:

Merci Miron-Black
Regional Coordinator, Primary Care Outreach | Northeast Cancer Centre
mvironblack@hsnsudbury.ca or 705-522-6237 ext. 2537

Dr. Amanda Hey Regional
Primary Care Lead
Northeast Cancer Centre
Symptom Management Algorithm

Pain in Adults with Cancer
Screening with ESASr and Performing Clinical Assessment

1. ESASr

ESASr is a valid and reliable symptom screening tool which can be used to identify a patient’s pain level on a scale from 0-10. In many patients the ESASr pain scores may suggest the following: 1-3 = Mild Pain, 4-6 = Moderate Pain, and 7-10 = Severe Pain. ESASr scores should not be considered in isolation.

Whenever pain is endorsed at any level, further assessment is required to understand the ESASr scores meaning and impact. The following Pain Assessment Acronym should be used to help determine the best pain management approach.

2. Adapted Pain Assessment Acronym: OPQRSTU (adapted from Fraser Health(1))

<table>
<thead>
<tr>
<th>Onset</th>
<th>When did it begin? Is it new? How long does it last? How often does it occur?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provoking/ Palliating</td>
<td>What/ who brings it on? What/who makes it better? What/ who makes it worse?</td>
</tr>
<tr>
<td>Quality</td>
<td>What does it feel like? Can you describe? Examples provided below:</td>
</tr>
<tr>
<td></td>
<td>Nociceptive</td>
</tr>
<tr>
<td></td>
<td>• Sharp, aching, throbbing</td>
</tr>
<tr>
<td></td>
<td>Neuropathic</td>
</tr>
<tr>
<td></td>
<td>• Shooting, burning, tingling, painfully numb</td>
</tr>
<tr>
<td></td>
<td>• Allodynia/hyperalgesia</td>
</tr>
<tr>
<td>Region/ Radiation</td>
<td>Where is it? Does it spread anywhere?</td>
</tr>
<tr>
<td>Severity</td>
<td>What is the intensity of this symptom? Right now? At best? At worst? On average?</td>
</tr>
<tr>
<td>Treatment</td>
<td>What medications or treatments are you currently using? What medications have you tried in the past for this, and how well did they work? Do you/did you have any side effects from the medications/treatments?</td>
</tr>
<tr>
<td>Understanding/ Impact on you</td>
<td>What do you believe is causing this symptom? How is this symptom affecting you/your level of functioning and/ or your family?</td>
</tr>
<tr>
<td>Values</td>
<td>What is your goal for this symptom? What is your comfort goal or acceptable level for this symptom? Are there any other views or feelings about this symptom that are important to you and your family?</td>
</tr>
</tbody>
</table>

3. Additional Areas for Assessment

Physical assessment (focus on the area of pain to determine cause of pain)
- Site and number of pains, intensity and severity of pains, timing of pains, etc.(2)

Pertinent history (risk factors)
- Analgesic drug history,(2) multiple cancer mechanisms,(3) premorbid psychiatric conditions(4) etc.

Psychosocial and spiritual assessment
- Assess for psychosocial or spiritual distress, coping deficits, i.e. psychogenic effects.

Risks for addictions
- History of alcohol or drug abuse, family history of alcohol or drug misuse, etc.(5)

Please see page 4.

- Mild Pain
  - Generally tolerated by the patient and does not interfere with quality of life
  - Patient can be easily distracted from the pain
  - Generally does not interfere with activities of daily living (ADLs)

- Moderate Pain
  - Patient states they cannot manage pain
  - Pain is interfering with quality of life
  - Patient feels it is difficult to concentrate because of pain
  - Hard to distract from the pain
  - Pain is interfering with function and ADLs

- Severe Pain
  - Patient is in acute distress or discomfort
  - Patient is completely focused on pain
  - Patient is unable to complete activities
  - Pain dominates quality of life
  - Pain onset is sudden and acute
  - Acute exacerbation of previous levels
  - Pain may present at a new/ different site
Types of Pain

1. Neuropathic Pain (burning, shooting and stinging in nature)
   - The choice of antidepressant or anticonvulsant should be based on concomitant disease, drug therapy, drug side effects, and drug-drug interactions.\(^\text{10}\)
   - First line treatment for neuropathic pain includes tricyclic antidepressants (e.g., amitriptyline, desipramine, nortriptyline or imipramine), anticonvulsants (e.g., gabapentin or pregabalin) or duloxetine, with careful monitoring of adverse effects. The choice of agent should be guided by individual risk factors. Avoid tricyclic antidepressants in the elderly.
   - Offer a choice of nortriptyline, duloxetine, gabapentin or pregabalin as initial treatment for neuropathic pain. Individual risk factors should also be considered when treating neuropathic pain.
   - If the initial treatment is not effective or is not tolerated, consider a different agent, and consider switching again if the second and third drugs tried are also not effective or not tolerated.
   - If oral agents are ineffective, consider a neuroablative procedure if possible.

2. Nociceptive Pain
   - Nociceptive pain is inflammatory pain where pain arises from chemical or natural stimuli from damaged tissue.\(^\text{11}\)
   - Nociceptive pain often responds well to analgesics, including nonsteroidal anti-inflammatory drugs (NSAIDs) and opioids.\(^\text{12}\)
   - It is important to keep in mind that cancer patients will generally experience a combination of neuropathic and nociceptive pain,\(^\text{12}\) and that chronic, poorly-treated nociceptive pain may acquire neuropathic characteristics and require neuropathic adjuvants.

3. Intracranial Pressure
   - Patients with primary brain tumours and/or brain metastases often develop vasogenic edema and increased intracranial pressure.\(^\text{13}\)
   - Corticosteroid therapy is a necessary pre-requisite to embarking on radiotherapy prior to and following surgery - particularly in patients whose brain tumours exert a significant mass effect.\(^\text{14}\)
   - Similarly, management of edema and intracranial pressure with corticosteroids forms an integral aspect of treatment in the postradiotherapy phases of care.\(^\text{15}\)
   - When there is significant intracranial pressure, measures may be required until corticosteroids take effect. These include elevation of the head on the bed, fluid restriction, mannitol, diuretics and hyperventilation.
   - The recommended maximum dose is 16mg daily of dexamethasone, administered in four equal daily doses for symptomatic patients following biopsy or surgical resection.

4. Pain related to Bone Metastases
   - Patients who have pain from bone metastases (not at risk of pathological fracture) should be offered palliative radiotherapy.\(^\text{16}\) A single 8 Gy fraction is recommended for uncomplicated bone metastases.\(^\text{17}\)
   - Suspected metastatic spinal cord compression requires immediate treatment with high-dose dexamethasone and imaging by MRI. Confirmed spinal cord compression requires immediate consultation with a neurosurgeon and radiation oncology.

Important Points when Considering Pharmacological Interventions

- Pain can have nociceptive and neuropathic elements; we refer to this as “mixed” pain. Neuropathic descriptors suggest the need for an adjuvant analgesic.
- Patient education on opioid therapy should take place before initiating treatment. Risks, benefits, contraindications, safe storage, disposal, diversion reduction, as well as myths and misconceptions should be discussed. It is also important to review side effects and the length of these effects when initiating therapy in order to reduce compliance failure.
- Breakthrough pain can often be effectively managed with immediate-release opioids.
- Where possible, the long acting and breakthrough opioid should be the same type of opioid. An exception exists for fentanyl transdermal patches as buccal or intranasal short-acting options can be costly.
- Pain regimen should be reassessed on a regular basis. The titration of the long acting opioid should be based on the total amount of opioid use in 24 hours including breakthrough dosing.
- As a general guide, the safest breakthrough dose should be approximately 10% of the total daily opioid dose. The oral breakthrough frequency can vary from q1 to q2 hour prn.
- Fentanyl transdermal patches may be used for those with stable severe pain on a stable opioid dose, or those with swallowing difficulties or intractable nausea and vomiting.\(^\text{18}\) Do not start fentanyl transdermal patches on opioid naïve patients or patients with uncontrolled pain.
- Opioids should be used with caution for patients who have liver dysfunction.
- Currently, there is insufficient evidence to recommend medical cannabis for first-line management of cancer related chronic pain. However, evidence suggests it is worthy of consideration as an adjuvant analgesic or in the management of refractory pain conditions.\(^\text{19}\) At this time, there is insufficient evidence for the use of cannabinoids in acute cancer pain.

*Although there is evidence to support cannabinoids as an adjuvant analgesic or in the management of refractory pain conditions, there is a lack of research on best practice for dosing and administration. Despite this, CCO is committed to sharing best practice in this area as new evidence emerges.*
Adverse effects of opioids:

- Many opioid-naive patients will develop nausea, drowsiness or vomiting when starting opioids. Tolerance to these side-effects usually occurs within 5-10 days. Patients starting an opioid for moderate to severe pain should have access to an antiemetic if required. The majority of patients taking opioids for moderate to severe pain will develop constipation. Little or no tolerance normally develops to constipation. The most common prophylactic treatment for preventing opioid-induced constipation is a combination of stimulant (senna or bisacodyl) and osmotic laxatives (lactulose or PEG 3+350). A bowel management plan should be implemented when starting opioid treatment.

- In the presence of reduced kidney or liver function, all opioids should be used with caution and doses and/or frequencies may need to be altered to avoid opioid toxicity such as nausea, sedation, subtle agitation, intermittent confusion, and increased myoclonus. In those with reduced kidney or liver function, a palliative care specialist can be consulted for advice on opioid treatment.

For patients already on methadone:

- Methadone requires a license to prescribe. Check for significant drug interactions before prescribing any drug to a patient on methadone.

For patients at-risk of addiction:

- Clinicians should incorporate a universal precautions approach to minimize abuse, addiction and adverse consequences of opioid use such as opioid-related deaths. Patients should undergo a risk assessment to measure the likelihood of aberrant drug-related behaviour. Patients should be regarded as high risk if the patient:
  - Has history or family history of alcohol or drug misuse
  - A major psychiatric disorder
  - Patient’s cancer is associated with heavy alcohol use or smoking
  - Current heavy smoking
  - Young age
  - History of mobile accidents, chronic unemployment, poor support system

- For patients with a history of substance abuse or opioid/drug addiction, or any patient felt to be at risk of addiction, it is recommended that physicians attain a Written Care Treatment Agreement when initiating opioid therapy.
## Consider Non-Pharmacological Interventions as Appropriate

- Patient and family education
  - General pain management education such as provision, revision and teaching of the Patient Symptom Management Guides or other patient and family education materials should be provided to assist with pain management.
  - Patients may be referred to one or more of the following to optimize pain management:

### Referral Options:

<table>
<thead>
<tr>
<th>Referral Options</th>
<th>Orthopedic Surgeons</th>
<th>Complementary Therapies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Radiation Oncology/ Bone Metastases Clinic</strong></td>
<td>Patients with bone metastases at risk of fracture treatment may include:</td>
<td>May aid in some additional pain relief in patients.</td>
</tr>
<tr>
<td>• For assistance in pain management in patients with bone metastases</td>
<td>• Fracture stabilization, joint replacement</td>
<td>• Treatment may include massage therapy, aromatherapy, music therapy, reflexology, acupuncture, transcutaneous electrical nerve stimulation, reiki, and hypnotherapy, although evidence is variable for these therapies</td>
</tr>
<tr>
<td><strong>Palliative Care Services</strong></td>
<td>• Vertebroplasty/ kyphoplasty can be used to increase stability and reduce pain</td>
<td></td>
</tr>
<tr>
<td>• For early access to specialized palliative services that can help with pain and symptom management strategies</td>
<td></td>
<td></td>
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<tr>
<td>• This may be different than acute, chronic or transitional pain teams</td>
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<tr>
<td><strong>Referral to Home Care Services</strong></td>
<td></td>
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<tr>
<td>• For patients who need support and further education/ monitoring of pain and a management plan</td>
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<tr>
<td><strong>Occupational and/or Physical Therapy (Health Shared Services Ontario or private insurance if available)</strong></td>
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<tr>
<td>• For patients experiencing pain OT/PT services can aid in pain control</td>
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<tr>
<td>• Treatment may include assistive devices, activity modification, exercise and ways to move to reduce pain</td>
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<tr>
<td><strong>Interventional Anesthesia</strong></td>
<td></td>
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<tr>
<td>• For patients who do not experience satisfactory pain relief with first-line or second-line approaches interventional pain management strategies may be appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Treatment helps with nerve blocks and celiac plexus blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Vertebroplasty/kyphoplasty</td>
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</tbody>
</table>
Pain Map: Pain in Cancer Patients

**Mild Pain**
*Treatment with Non-Opioids*
- Acetaminophen, adjuvant analgesics and NSAIDS should be considered at the lowest effective dose.
- The need for ongoing or long term treatment should be reviewed periodically; if there is no significant response in one week drugs should be stopped.
- Meperidine and pentazocine should not be used.
- Long term use of NSAIDS requires gastric mucosa protection.
- There is insufficient evidence to recommend bisphosphonates for bone pain management.

*Treatment with Opioids (opioid naïve or opioid tolerant)*
- For mild to moderate pain, a weak or lower potency opioid could be given in combination with a non-opioid analgesic.
- If pain is not controlled with these combinations, go to “Moderate Pain - Treatment with Opioids.”

**Moderate Pain**
*Treatment for Opioid Naïve Patients*
- Morphine starting dose is usually 5mg PO 4h with 2.5-5mg PO q1h prn for breakthrough pain. For elderly or frail patients, consider a starting dose of 2.5mg PO q4h.
- Hydromorphone starting dose is 1mg PO q4h with 0.5 to 1mg PO q1h prn for breakthrough pain. For elderly or frail patients consider a starting dose of 0.5 mg PO q4h.
- Oxycodone starting dose is 2.5 mg or one half tablet PO q4h, with 2.5 mg or one half tablet PO q4h prn for breakthrough. The lowest dose oxycodone tablets available, either in combination with acetaminophen or alone, contain 5mg of oxycodone. This is equivalent to approximately 5 to 10mg of oral morphine.

*Treatment with Opioids*
- If the patient is taking an opioid, increase the regular and breakthrough doses by 25%. Ensure that the breakthrough doses are 10-15% of the daily dose. Ensure that the frequency of the breakthroughs are q1h prn if PO and q30min prn if subcutaneous.
- Adjust the regular and breakthrough opioid dose every 24h to 48h to reflect the previous 24h total dose received.
- If unmanageable opioid-limiting adverse effects are present (e.g. nausea, drowsiness, myoclonus), consult a palliative care service to assist with rotating to another opioid.
- If there is difficulty getting the pain under control consider a consultation to palliative care.

**Severe Pain**
*Treatment for Opioid Naïve Patients*
- Oral: Morphine 5 to 10 mg PO q4h and 5mg PO q1h prn or hydromorphone 1 to 2 mg PO q4h and 1 mg PO q1 to q2h prn.
- Subcutaneous/Intravenous: Morphine 2.5 to 5 mg SC/IV q4h & 2.5 mg q30min SC/IV prn or hydromorphone 0.5 to 1 mg SC/IV q4h & 0.5 mg SC/IV q30min prn.

*Treatment with Opioids*
- If the patient is taking an opioid with q4h dosing, increase the regular and breakthrough doses by 25%. Ensure that the breakthrough doses are 10-15% of the daily dose. Ensure that the frequency of the breakthroughs are q1h prn if PO and q30min prn if subcutaneous.
- If the patient is taking a sustained release opioid, increase this dose by 25%. Change the breakthrough dose to 10% of the total 24h dose, either q1 to 2h pm PO or q30 min pm subcutaneous.
- Make frequent assessments and adjustments to the opioid dose until the pain is better controlled.

**Pain Crisis**
*Pain Crisis can occur at any time.*
- A severe pain crisis requires prompt use of analgesics, adjuvant therapies, reassurance and a calm atmosphere.
- Consider a consultation to palliative care or cancer pain specialist
- If IV access is present, and the person is opioid naive, give stat morphine 5 to 10 mg IV q10min until pain is relieved;
- If IV access is present and the patient is taking oral opioids, convert the PO dose to IV, and administer IV q1min until pain is relieved. Monitor carefully.
- If IV access is not present and the patient is opioid naive, give stat morphine 5-10 mg subcutaneous q30min until pain is relieved.
- If IV access is not present, and the patient is opioid tolerant, convert the PO dose to subcutaneous, and administer q1min until pain is relieved. Monitor carefully.
- Titrate dose by 25% every 1 - 2 doses until pain is relieved.
- Do not try to manage a severe pain crisis with a long-acting opioid.

*Follow-up and ongoing monitoring should take place at all pain levels*
If pain remains unrelieved despite the approaches outlined above, request the assistance of a palliative care consultation team.
Reference List


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Content to be Reviewed in 2022