UNIVERSITY OF MANITOBA: Thompson Community Based CPD Program 2023

Palliative Care In Northern Manitoba

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Sep 15, 2023

Rady Faculty of Health Sciences | University of Manitoba

Disclosure

- **Faculty:** Nathan Coleman

- **Relationships with commercial interests:**
  - Employee:
    - Northern Regional Health Authority- Family Physician, Palliative Care Prescriber
    - University of Manitoba
  - All of my income currently comes from serving and teaching in Northern Manitoba
  - Training as an associate LEAP Facilitator with Pallium Canada
  - No Grants, Honoraria or Consulting Fees from Commercial Sources

Disclaimer

OFF Label treatments are common in Palliative Care due to unique dosing, routes of administration and challenges at end of life.

All OFF Label treatments in this presentation are common practice, supported by expert opinion and varying degrees of evidence.

Need to be aware that as evidence base grows treatments advice and options may be adapted accordingly.

Mitigating Potential Bias

- **My Bias**: I strongly desire to see accessible timely palliative approach to care incorporated across our region to meet patient and families' needs in a good way across the continuum of care and illness trajectory.
- **Self-Positioning**: I am a settler Canadian, raised in Ethiopia, trained in Manitoba primarily in western biomedical approaches to medicine but heavily affected and influenced by lived experience/knowledge of individuals and communities whose knowledge was transmitted orally and practically since before my ancestors immigrated to what is now called Canada.

Acknowledgements

- Dr Nadin Gilroy
- Patients and Families
- Teachers
- Pallium
- BC Centre for Palliative Care

Learning Objectives

- Define a Palliative Approach to Care
- Identify when and how Palliative Approach to Care can help meet patient needs
- Describe Key Conversations to help facilitate palliative approach to care
- Describe Regional and Provincial Resources for meeting needs
- Describe Management Tips for common Symptoms
- Describe an approach to preparing for potential end of life at home

What is Palliative Care?

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What is Palliative Approach to Care?

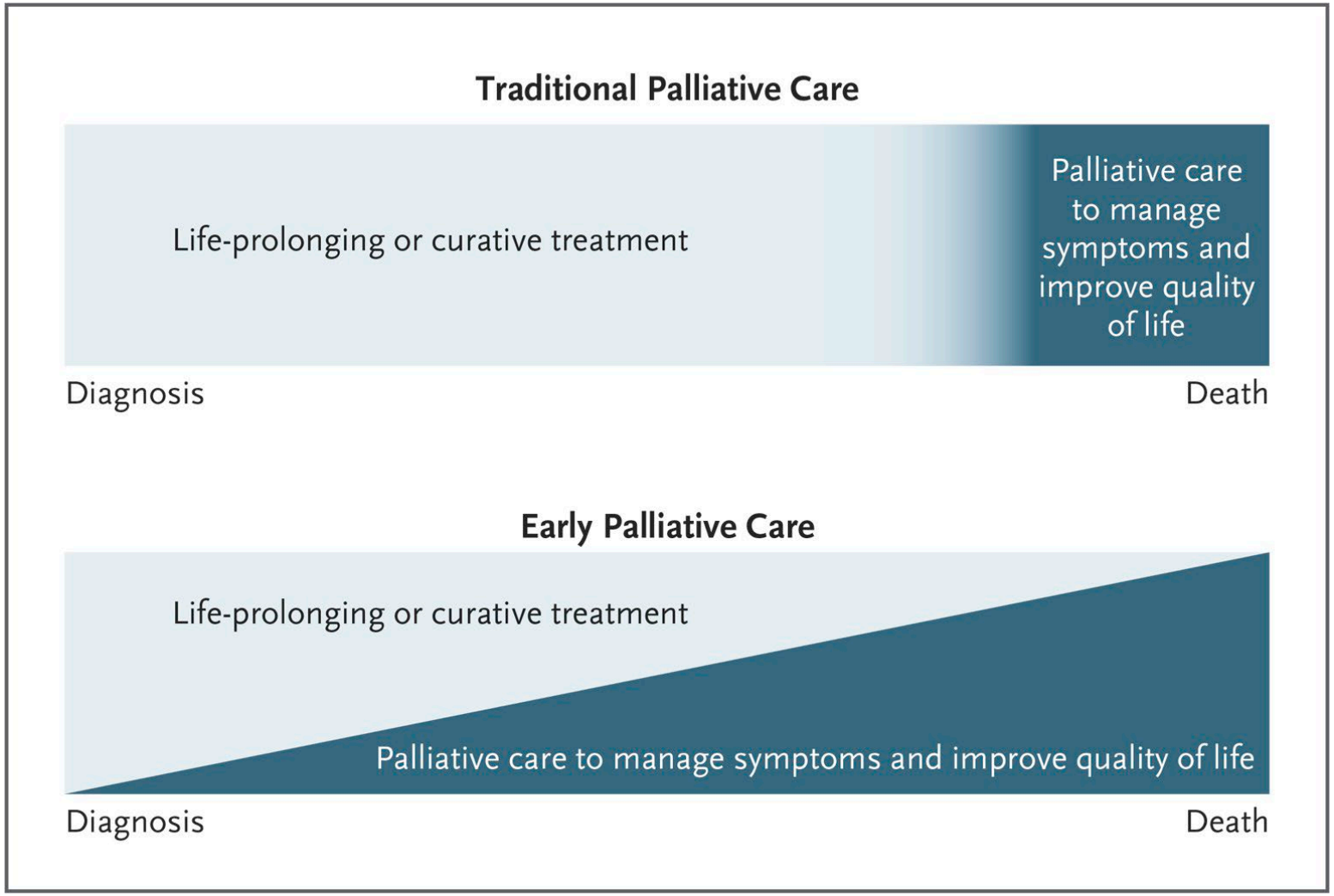
"An approach that improves the quality of life of patients and their families facing the problems associated with life threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual."

-WHO Definition

"It honors the connections and relationships that people have with family members, community members, and care providers, and views the family as the unit of care. Culture plays a key role since it incorporates the social practices and beliefs of any group of people."

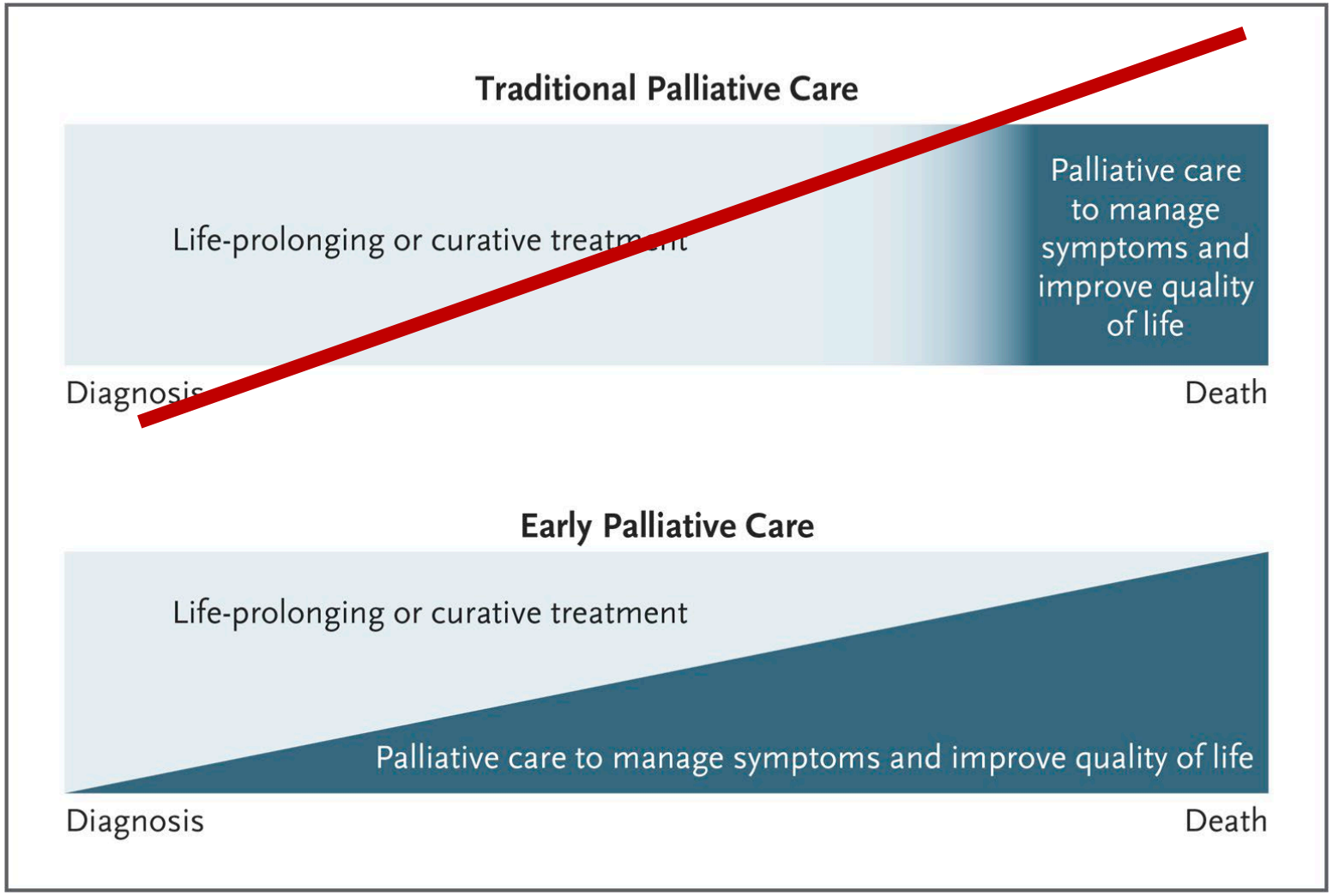
-Johnston et al.

When?



Parikh et al

When?

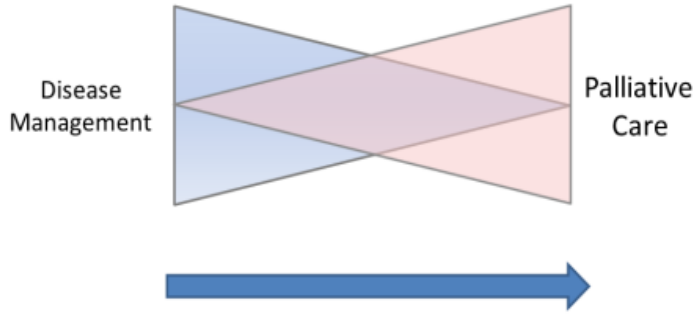


Parikh et al

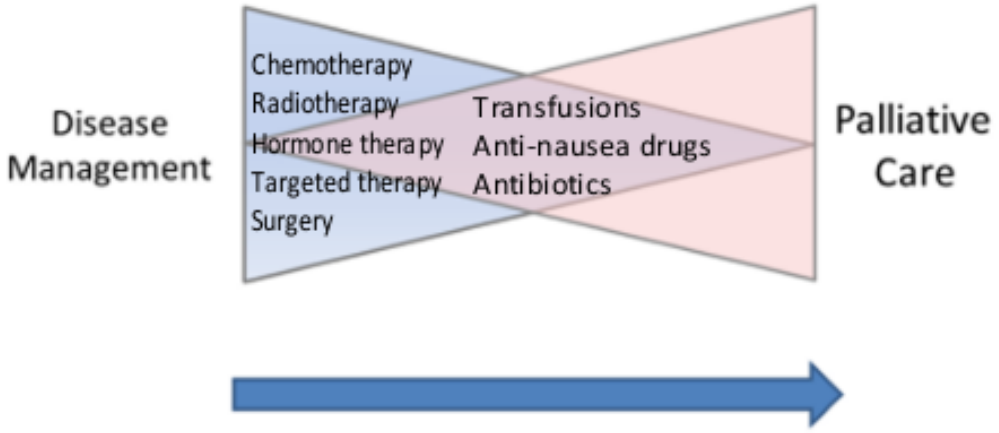
When?

Bow Tie Model of Care: Hoping for the best (Cure), preparing for the worse (Death)

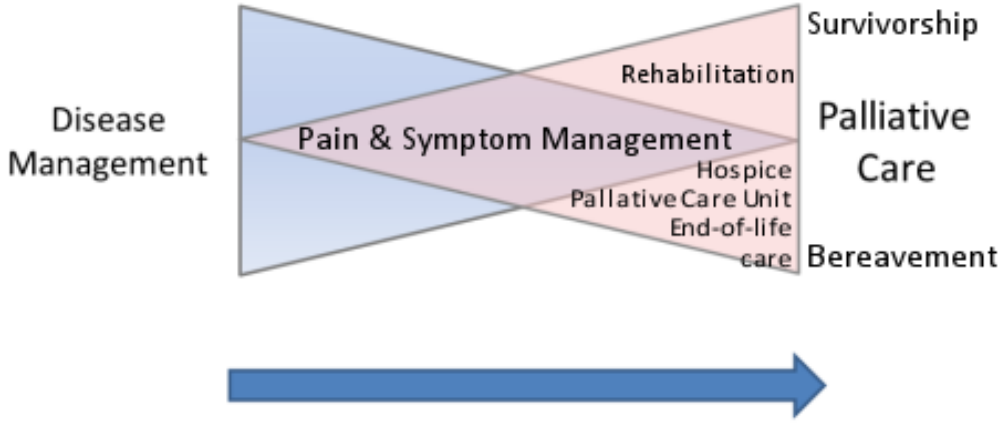
Basic Model of Integrated Palliative Care



Disease Management-Enhanced Model



Palliative Care-Enhanced Model



Hawley 2014

Palliative care continuum

Adapted from: BC Centre for Excellence

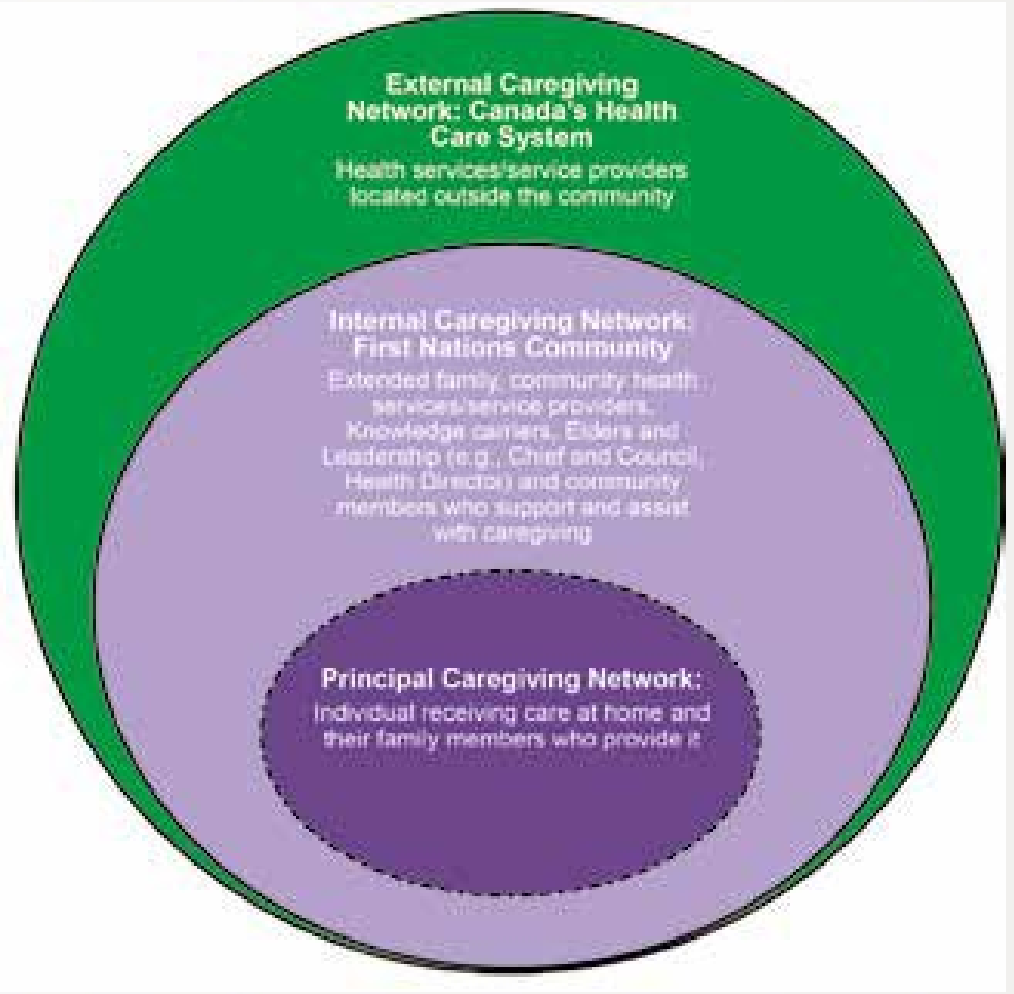
Where?

All Settings: home, clinic, hospital, nursing station, specialized units, hospice, PCH, shelters…

Effective Palliative Care is delivered where the patient/family is and wishes to be.

“Dying outside the community negatively impacts families and community members.” (Kelley ML, Smith J. et al)

- *“In the hospital, you got to get out at a certain time, certain number of people, but when you’re at home people can come and go in and out. People can sit there and sit with you for hours on end. That is one of the reasons people like being in their household.”* — Elder/Knowledge Carrier



Who?

Surprise question:

“Would you be surprised if this patient died in the next 12 months?”

Who? General Indicators of decline

Look for any general indicators of poor or deteriorating health (Two or more consider palliative needs)

1. Unplanned hospital admission(s)

2. Performance status is poor of deteriorating, with limited reversibility. (I.e. The person stays in bed or a chair more than half the day)

3. Depends on others for care due to increasing physical and/or mental health problems. The person's care needs more help and support.

4. The person has significant weight loss over the past few months, or remains underweight.

5. Persistent symptoms despite optimal treatment of underlying condition(s).

6. The person (or family) asks for palliative care.

Who? Disease specific indicators of decline

Respiratory Disease: Severe, chronic lung disease with breathlessness at rest or on minimal exertion between exacerbations, despite optimal medical management.

Heart / Vascular Disease: i. Heart failure or extensive, untreatable coronary artery disease; with breathlessness or chest pain at rest or on minimal exertion, despite optimal medical management. ii. Severe, inoperable peripheral vascular disease.

Kidney Disease: i. Stage 4 or 5 chronic kidney disease (eGFR<30ml/min) with deteriorating health. ii. Kidney failure complicating other life-limiting conditions or treatments. iii. Stopping or not starting dialysis.

Liver Disease: Cirrhosis with one or more of the following complications in the past six months: •Diuretic resistant ascites, Hepatic encephalopathy , Hepatorenal syndrome , Bacterial peritonitis , Recurrent variceal bleeds (Liver transplant is not possible)

Dementia 3 of: i. Unable to dress, walk or eat without help. ii. Eating and drinking less; difficulty with swallowing. iii. Urinary and fecal incontinence. iv. Not able to communicate by speaking; little social interaction. v. Frequent falls; fractured femur. vi. Recurrent febrile episodes or infections; aspiration pneumonia

Cancer: i. Functional ability deteriorating due to progressive cancer. ii. Too frail for or declines oncology treatment AND radiation treatments are for symptom control only.

Neurological: i. Progressive deterioration in physical and/or cognitive function despite optimal therapy. ii. Speech problems with increasing difficulty communicating and/or progressive difficulty swallowing. iii. Recurrent aspiration pneumonia; breathless or respiratory failure.

Other Conditions: i. Deteriorating and at risk of dying with other conditions or complications that are not reversible; any treatment available (or that is undesirable to the patient) would have a poor outcome.

- See SPICT TOOL- WRHA for details

How?

- Identify
- Assess/Communicate
- Care Plan/Collaborate

Identify

- Surprise Question
- Indicators of Decline
- Patient and Family Request
- Routine review of care (Hospital or LTC Admission/Discharge, periodic health exams, home care service access)

Assess/Communicate

- Serious Illness Conversation Guide: https://bc-cpc.ca/wp-content/uploads/2018/08/SIC-Conversation-Guide-V3-April2017.pdf?pdf=SICConversationGuide%E2%80%8B
- Holistic Assessment- Physical, Emotional, Mental, Social, Spiritual
- Key Northern Conversations
  - When would transfer to another community, care facility or hospital be desired or undesirable?
  - How do you/your family/community prefer decisions to be made about care?
  - Where is your preferred place to be living? Where is your preferred place of passing?
  - Are you a caregiver?
  - When care options are limited, how best can we honour you/your family member?
- Recognise TRUST must be earned. Always advocate for the Best Care Possible.

Serious Illness Conversation Guide

PATIENT-TESTED LANGUAGE

SET UP

"I would like to **talk together** about what's happening with your health and **what matters to you. Would this be ok?"**

ASSESS

"To make sure I share information that's helpful to you, can you tell me **your understanding** of what's happening with your health now?"

"How much **information about what might be ahead** with your health would be helpful to discuss today?"

SHARE

"Can I share my understanding of what may be ahead with your health?"

Uncertain: "It can be difficult to predict what will happen. **I hope you will feel as well as possible** for a long time, and we will work toward that goal. **It's also possible that you could get sick quickly**, and I think it is important that **we prepare** for that."
OR
Time: "I **wish** this was not the case. I am **worried** that time may be as short as *(express a range, e.g. days to weeks, weeks to months, months to a year)."*
OR
Function: "It can be difficult to predict what will happen. **I hope you will feel as well as possible** for a long time, and we will work toward that goal. **It's also possible that it may get harder to do things** because of your illness, and I think it is important that we prepare for that."

Pause: Allow silence. Validate and explore emotions.

EXPLORE

"If your health was to get worse, what are your **most important goals**?"

"What are your biggest **worries**?"

"What **gives you strength** as you think about the future?"

"What **activities** bring joy and meaning to your life?"

"If your illness was to get worse, **how much would you be willing to go through** for the possibility of more time?"

"How much do the **people closest to you know** about your priorities and wishes for your care?"

"Having talked about all of this, **what are your hopes** for your health?

CLOSE

"I'm hearing you say that ___ **is really important to you** and that you are **hoping for** ___. Keeping that in mind, and what we know about your illness, I **recommend** that we ___. This will help us make sure that your **care reflects what's important to you. How does this plan seem to you?"**

"I will do everything I can to support you through this and to make sure you get the **best care possible."**

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ARIADNE LABS

Care Plan/Collaborate

- Identify Team Members/resources
- Anticipate goals and challenges
- Symptom Management
- Prepare for end of life care

Identify Team Members and Resources

Principal Network

- Individual Receiving Care
- Family Caregivers
- Substitute Decision Maker

Local Network

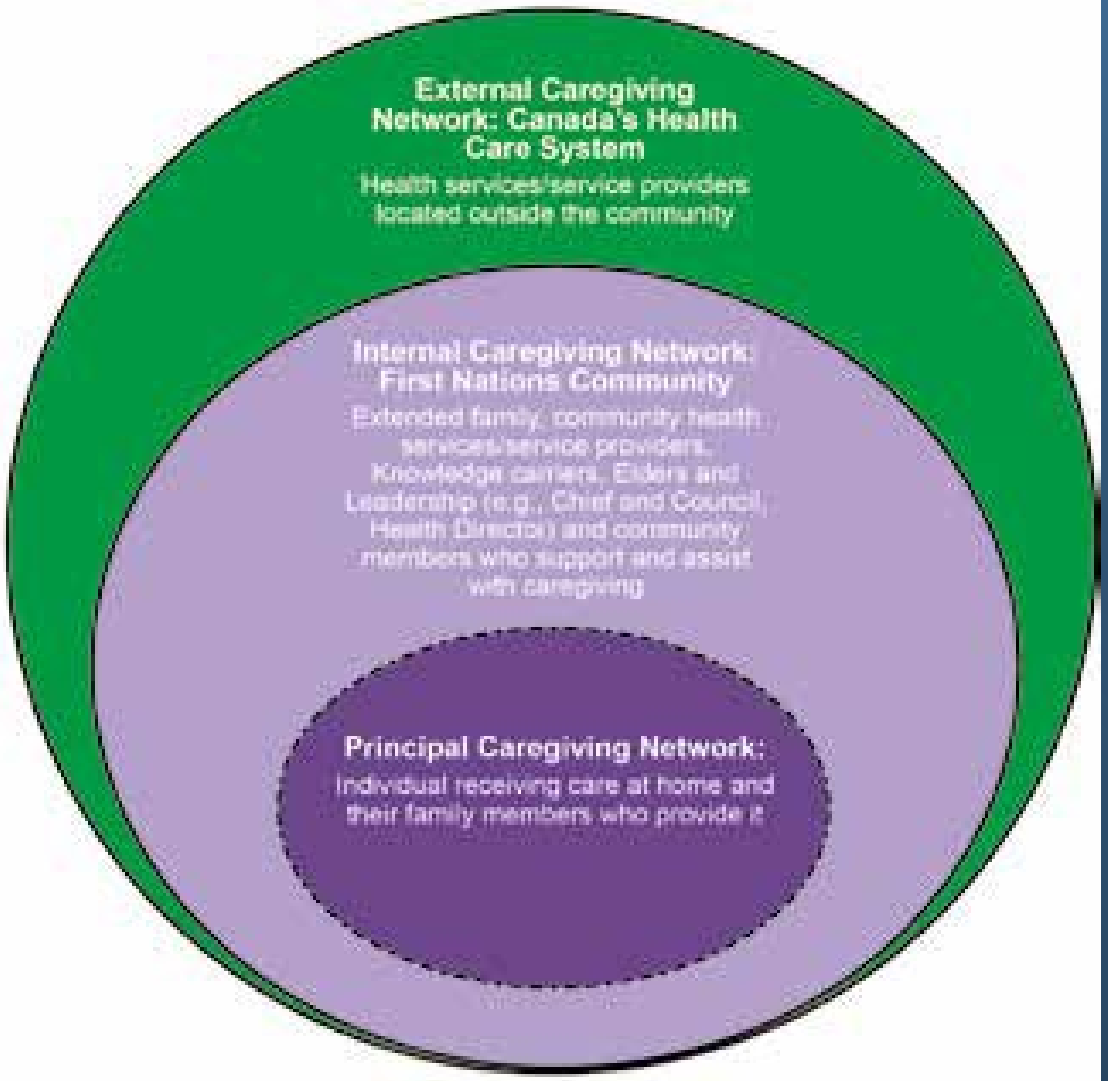
- Home and Continuing Care
- Primary Care Provider
- Nursing Station/Health Centre/Clinic

Regional Network

- Palliative Care Coordinator
- Palliative Care Prescriber
- Hospitals/Emergency Rooms

Provincial Network

- Palliative Care MD On Call
- Palliative Care Units/Provincial Hospitals



Anticipate Goals and Challenges

- Goals of Care
  - R- Resuscitation, M- Medical , C- Comfort (and Communication)
  - Transfer
- Loss of independence
  - Early identification of Substitute decision maker
  - Will and Estate planning
  - Financial Power of Attorney
- Drug coverage
  - Provincial Drug Access Program (Application Form at https://wrha.mb.ca/files/palliative-care-drug-access-form.pdf , PC Coordinator)
  - NIHB Palliative Drug Access requires Prior Approval (after rx is sent prior approval form will be faxed)- Consider Calling Pharmacy
- Disease progression
  - Titration of medications
  - Removal of unnecessary medications (Continue Disease modifying treatment if aligned with pt goals e.g. CHF meds)
  - Loss of Oral Route
- Systems- service gaps, transport times, provider availability, Medication Supply

Symptom Management

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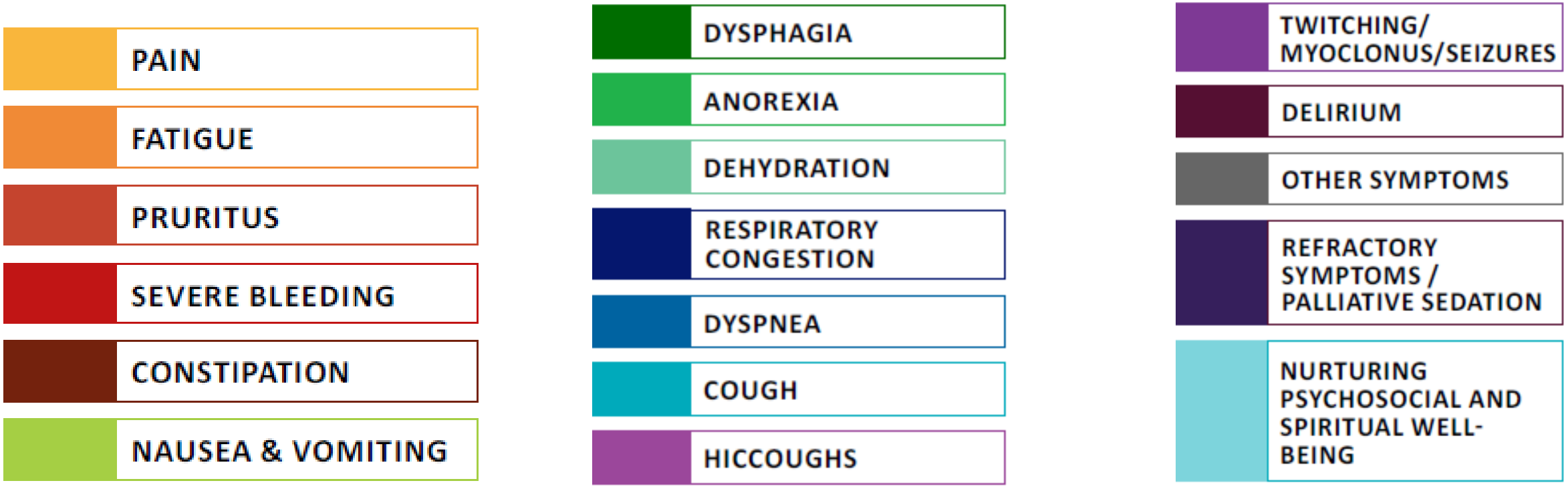
Symptom Management



B.C. INTER-PROFESSIONAL PALLIATIVE SYMPTOM MANAGEMENT GUIDELINES

BC Centre for Palliative Care

SYMPTOMS TO EXPLORE

- PAIN
- FATIGUE
- PRURITUS
- SEVERE BLEEDING
- CONSTIPATION
- NAUSEA & VOMITING
- DYSPHAGIA
- ANOREXIA
- DEHYDRATION
- RESPIRATORY CONGESTION
- DYSPNEA
- COUGH
- HICCOUGHS
- TWITCHING/ MYOCLONUS/SEIZURES
- DELIRIUM
- OTHER SYMPTOMS
- REFRACTORY SYMPTOMS / PALLIATIVE SEDATION
- NURTURING PSYCHOSOCIAL AND SPIRITUAL WELL-BEING

DOWNLOAD PRINTER FRIENDLY PDF VERSION

AUDIENCE

Inter-professional clinicians working with adults living with advanced life-limiting illnesses. Though these guidelines were created for adults, the symptoms may also be experienced by children. See additional resources within each guideline specific to pediatrics, illnesses such as cancer, and your organization/region.

CITATION, COPYRIGHT AND DISCLAIMER

BACKGROUND

CLINICIAN INTRODUCTION

ACKNOWLEDGEMENTS

FIRST NATIONS PERSPECTIVE ON HEALTH & WELLNESS

CONTRIBUTING PARTNERS

fraserhealth

Interior Health

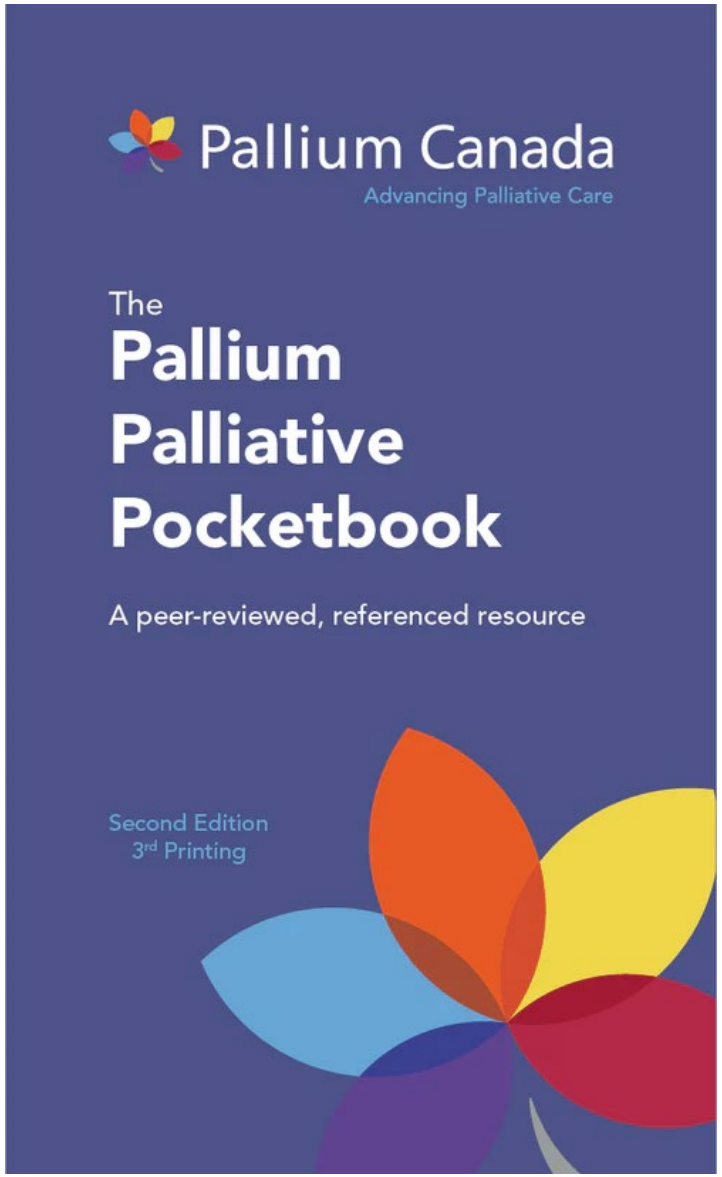
First Nations Health Authority
Health through wellness

island health

Providence HEALTH CARE

Vancouver CoastalHealth

northern health


Pallium Canada
Advancing Palliative Care
The
Pallium
Palliative
Pocketbook
A peer-reviewed, referenced resource
Second Edition
3rd Printing


Pallium Canada

Pain- Assessment

- Management begins with Pain Assessment- see references for details
- Rule out Emergency:

Spinal cord compression, bone fracture or impending fracture of weight-bearing bone, infection/abscess, obstructed or perforated viscus, ischemic process, superior vena cava obstruction.

- Determine etiology and possible causes
- Investigations should be based on goals of care- consider benefits and costs (to patient) when ordering tests
- Assess for substance use disorder/opioid misuse risk
    - NOT a contraindication to opioids but requires management plan (seek support/ consultation as needed)

PAIN

Nociceptive

Caused by direct stimulation of peripheral nociceptors in an intact nervous system

Usually associated with tissue damage and an inflammatory process

Somatic

Occurs as a result of activation of nociceptors in cutaneous and deeper tissues

Superficial

Confined to nociceptors in the skin

Descriptors: sharp, sore, burning

Usually well-localized.

Examples:

Decubitus ulcers, fungating wounds

Superficial

Topical Morphine
Topical Methadone
Topical Lidocaine

Deep

Nociceptors found in muscle, bone, joints and ligaments

Descriptors: aching, throbbing

More diffuse.

Examples:

Bone metastases, muscle spasms, rheumatoid and osteoarthritis,

Bone

NSAIDs
Dexamethasone
Bisphosphonates
Denosumab

Soft Tissue

NSAIDs (topical or systemic)
Dexamethasone
Muscle Relaxants

Visceral

Nociceptors found in viscera, peritoneum, pleura

Descriptors: aching, squeezing, cramping, gnawing, pressure, distention, stretching, bloated

Diffuse, often poorly localized. Can be referred to distant sites.

Examples:

Pancreatitis, biliary colic, renal colic, bowel obstruction, constipation, pleural, liver and peritoneal metastases, pulmonary thromboembolism, angina, bladder spasms,

Visceral

Antispasmodics
Dexamethasone

Neuropathic

Perpetuated by nerve damage or originates from a site of aberrant somatosensory processing in central pain pathways

Central

Lesion in brain or spinal cord.

Examples:

Post-stroke, Multiple Sclerosis, spinal cord injury or compression, phantom limb pain, leptomeningeal carcinomatosis

Peripheral

Lesion in peripheral nerves or plexus.

Descriptors: burning, numb, tingling, pins & needles, shooting, electric or shock-like, fire-like or "indescribable".

Examples:

Post herpetic neuralgia, diabetic or post-chem neuropathy, cervical, lumbar or brachial plexopathy, trigeminal neuralgia

Central or Peripheral

Antidepressants
Anticonvulsants
NMDA Antagonists
Antiarrhythmics

Adapted by: BC Centre for Palliative Care from Dr Nicola Macpherson.

Pain Management- Principles

- By Ladder

  Mild-Acetaminophen/NSAIDS

  Moderate- Combine acetaminophen/NSAID +opioid/weak opioid, codeine is not preferred*

  Severe- Strong Opioid-Morphine, Hydromorphone, Oxycodone
- By Mouth- PO Preferred route if present
- By Clock (Avoid PRN only)
- Breakthrough (additional PRN available if needed)
- Can consider concurrent Adjuvants at all pain levels
- 72 hours reassessment/titration- consult if not managed
- Assess side affects- anticipate and address- Constipation, etc.

Pain Management- Principles

Sample Starting Doses

Opioid	Usual (PO)	Frail OR Advanced CV/Resp disease	
Codeine	15mg PO Q4h + 15mg Q 1H prn	7.5 mg PO Q4h + 7.5mg Q1h prn	NOT PREFERRED
Tramadol	37.5mg po TID +37.5mg po QID PRN	37.5mg PO BID + 37.5mg PO TID prn	
Morphine	5mg PO Q4h + 5mg Q 1H prn	1-2.5mg PO Q4h + 1-2.5mg Q 2H prn	
Hydromorphone	1mg PO Q4h + 1mg Q 1H prn	0.5mg PO Q4h + 0.5mg Q 2H prn	

Titration

1. Calculate total daily dose (TDD) for the past 24 hours **TDD = Regular + all BTD**
2. Regular dose q4h for the next 24 hours = past **TDD ÷ 6**
3. Breakthrough dose (BTD) = **new regular dose × 10%**

Increase the opioid BTD proportionately whenever the regular dose is increased.

Can also used fixed dose adjustment. of 30-50% if pain is not controlled

Source: BC Centre for Palliative Care

Addressing Common Misconceptions

Fear of Addiction

- very rare, Withdrawal with abrupt discontinuation is normal, is prevented by gradual decreases

Fear of Side effects

-can be managed- constipation, drowsiness or nausea improve after 3-5d

Fear it won't be effective when pain becomes worse

- not accurate, early control is more effective, can be titrated effectively

Fear of Tolerance

-many people remain on same dose for a long time

Fear People Will Think You Are 'Giving Up'

-well controlled pain allows better quality of life and more active living

Opioids hasten Death

-Evidence shows improved quality and frequently quantity of life

Addressing Side Effects/Issues

- Constipation
  - treat preventatively with opioid initiation (examples Senna 1 Tab PO at HS, Peg 17-34g PO daily in 250-500ml) continue to titrate to effect
  - Established constipation may require Enema, suppositories or disimpaction (may need sedation).
  - Methylnaltrexone Subcut- rarely needed and only used for opioid induced constipation with no obstruction
- somnolence/sedation (consider switching or add psycho-stimulant)
- respiratory depression (RARE with careful titration)
- Opioid Induced Neurotoxicity (OIN)
  - Recognise: cognitive dysfunction, delirium, Hallucinations, **Myoclonus**/seizures, **Hyperalgesia**/allodynia
  - Management: hydration, Lower dose, Switching opioid (rotation), **Consultation**
- Loss of Oral Route
  - Anticipate at end of life
  - Consider subcut or IV formulation, reduce to 50% due equivalent potency or parenteral administration
  - Continue scheduled and ensure BT available, alternate routes include intranasal and Sublingual for some preparations

Opioids Equianalgesic

Appendix A: Equianalgesic Conversion for Morphine

Morphine Equivalence Table (for chronic dosing)			
DRUG	**SC/IV (mg)**	**PO (mg)**	**COMMENTS**
morphine	10	30[A]	
codeine	120 (SC only)	200	metabolized to morphine
fentanyl patch	see table below – useful when PO / PR routes not an option		
fentanyl	0.1 (100 mcg)	NA	usually dosed prn less than 1 hour effect
hydromorphone	2	4	
oxycodone	not available in Canada	20	
sufentanil	0.01 – 0.04 (10 – 40 mcg)	NA	usually dosed prn less than 1 hour effect

[A] Health Canada recommends using a conversion of 10 mg SC/IV morphine = 30 mg PO (1:3) Refer to http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2010/14603a-eng.php

Source: BC Guidelines.ca

Fentanyl Transdermal Patch Equianalgesic Conversion[A, B, C, D]			
Morphine PO (mg/day)	Hydromorphone PO (mg/day)	Oxycodone PO (mg/day)	Fentanyl Patch (mcg/hr)
45 – 59	6 – 11	30 – 44	12[E]
60 – 134	12 – 26	45 – 89	25
135 – 179	27 – 35	90 – 119	37
180 – 224	36 – 44	120 – 149	50
225 – 269	45 – 53	150 – 179	62
270 – 314	54 – 62	180 – 209	75
315 – 359	63 – 71	210 – 239	87
360 – 404	72 – 80	240 – 269	100
405 – 449	81 – 89	270 – 299	112
450 – 494	90 – 98	300 – 329	125
495 – 539	99 – 107	330 – 359	137
540 – 584	108 – 116	360 – 389	150
585 – 629	117 – 125	390 – 419	162
630 – 674	126 – 134	420 – 449	175
675 – 719	135 – 143	450 – 479	187
720 – 764	144 – 152	480 – 509	200
765 – 809	153 – 161	510 – 539	212
810 – 854	162 – 170	540 – 569	225
855 – 899	171 – 179	570 – 599	237
900 – 944	180 – 188	600 – 629	250
945 – 989	189 – 197	630 – 659	262
990 – 1034	198 – 206	660 – 689	275
1035 – 1079	207 – 215	690 – 719	287
1080 – 1124	216 – 224	720 – 749	300

Approximate Breakthrough Doses Recommended for Fentanyl Transdermal Patch[A] Breakthrough should be 10% of the total daily opioid dose			
Patch Strength mcg/hour	Oral Morphine Immediate Release (mg)	Oral Hydromorphone Immediate Release (mg)	Oral Oxycodone Immediate Release (mg)
12	5	1	2.5
25	10	2	5
37	15	3	10
50	20	4	12.5
62	25	5	15
75	25	5	17.5
87	30	6	20
100	35	7	25
112	40	8	27.5
125	45	9	30
137	50	10	32.5
150	55	11	35
162	60	12	40
175	65	13	42.5
187	70	14	45
200	70	14	47.5
212	75	15	50
225	80	16	55
237	85	17	57.5
250	90	18	60
262	95	19	62.5
275	100	20	65
287	105	21	70
300	110	22	72.5

[A] Adapted from Fraser health Hospice Palliative Care Program Principles of Opioid Management, Appendix A – Fentanyl Transdermal. September 10, 2015 [cited April 6, 2016]. Available from: http://www.fraserhealth.ca/media/HPC_SymptomGuidelines_Opioid.pdf

[B] Initiation of fentanyl in patients who are opioid-naïve is contraindicated at any dose.

[C] The conversion table is unidirectional only and should **ONLY** be used to convert adult patients from their current oral or parenteral opioid analgesic to the approximate fentanyl transdermal patch for use in chronic pain.

[D] Do not convert patients previously on codeine or tramadol to fentanyl transdermal patch due to significant inter-patient variability in metabolism, safety, and effectiveness of these drugs.

[E] Health Canada recommends that 12 mcg/hr patches be used for dose titration or adjustments, not as the initiating dose.

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Comments on Fentanyl Patches

- Contraindications:
  - opioid naive (Or from Codieine/Tramadol)
  - Inadequate adipose tissue- severe cachexia (relative due to variable absorption)
- Not effective approx. 12 hours (do not stop scheduled IR immediately, or utilize BT doses while initiating, also remains present for 12 hours after removal
- Change q 72 hrs (earliest can adjust dose is every 3 days)
- If at 200mcg/hr but inadequate symptom control consider alternate agents (consult with Palliative MD)

MEDICATIONS FOR MANAGEMENT OF PAIN BASED ON TYPE OF PAIN

Drug, Action	Dose, Therapeutic Range[73]	Onset, Adverse Effects, Precautions and Dosing Concerns[73-75]
1. Pain		
Acetaminophen	500 mg to 1g PO, PR q6h to q4h	Caution in renal impairment and severe hepatic impairment, particularly when associated with alcohol dependence and malnutrition. Maximum 4 g per day or 3 g in the elderly.[76, 77]
	650 to 1300 mg SR PO q8h	
NSAIDs		**Avoid in frail elderly, cardiac, renal and hepatic dysfunction, or active peptic ulcers.**
Diclofenac	50 mg PO, PR q12h or q8h	Maximum dose 100 mg per day. Contraindicated in those with cardiovascular impairment. [21]
	75 SR PO q12h or 100 mg daily	
	50 to100 mg PR q8h	
Ibuprofen	400 to 800 mg PO q8h	Maximum 2400 mg per day
COX-2 Inhibitors		**Contraindicated if established ischaemic heart disease, peripheral arterial disease or cerebrovascular disease.**
Celecoxib	200 to 400 mg PO daily or q12h	Maximum 400 mg per day
Meloxicam	7.5 to 15 mg PO daily	Maximum 15 mg per day
Corticosteroids		Start at a high dose then reduce to a maintenance level. Stop if no response within 7 to 10 days. Taper steroid dose gradually if used for more than 3 weeks or if stopping doses greater than 4 mg per day. Hyperglycemia, anxiety, steroid psychosis, myopathy. **Long-term adverse effects are significant; therefore, avoid prolonged use.** **Avoid concomitant use with NSAIDs.**
Dexamethasone	High Dose: 8 mg PO, SC once daily or twice daily	
	Low Dose: 2 to 6 mg PO, SC daily	
2. Superficial Somatic Pain		
Topical NSAIDs		**Do not apply on an open wound, or on areas of infection or rash.** Apply to affected area up to 4 times per day.
Diclofenac Sodium	Apply 1.5% cream topically	
Diclofenac Gel	Apply 1.16 to 5% cream topically	
Ketoprofen	Apply 5 to 20% cream topically	
Topical Opioids	Apply topical morphine 0.1% (1 mg per mL) in hydrogel once to twice daily	The amount of gel applied varies according to the size and the site of the inflammation or ulcer. The topical morphine is kept in place with gauze or a non-absorbable dressing.
3. Deep Somatic Bone Pain		
Bisphosphonates - bone modifying agent		Adverse effects include: osteonecrosis of the jaw, renal impairment, or hypocalcemia. Transient mild flu-like symptoms for 1 to 2 days may occur after administration. Monitor renal function and calcium with each treatment. Dental review is necessary before initiation. **Use with extreme caution in renal impairment, dose adjustment required.**
Clodronate	900 mg IV every 4 weeks	
	1600 to 2400 mg PO daily	
Pamidronate	60 to 90 mg IV every 3 to 4 weeks	
Zolendronic Acid	4 mg IV every 4 weeks	
Monoclonal Antibody - bone modifying agent		Monitor calcium levels prior to administration. Dental review is necessary before initiation. No dose adjustment required for renal impairment.
Denosumab	120 mg SC every 4 weeks	
4. Deep Somatic Soft Tissue Pain		
Skeletal Muscle Relaxant		
Diazepam	2 to 10 mg PO at night	Useful for painful muscle spasm. Adverse effects include drowsiness and ataxia. **Caution in elderly patients.**
Baclofen	5 mg PO q12h or q8h	Start at 5 mg daily and increase to 15 mg daily in divided doses. Maximum recommended dose 100 mg daily. Monitor liver function tests periodically. Abrupt cessation associated with seizures. Adverse effects include drowsiness.
Tizanidine	2 to 8 mg PO q8h or q6h	Start at 2 mg daily and increase by 2 mg every 3 to 4 days according to response. Maximum recommended total daily dose 36 mg.
5. Visceral Pain		
Anticholinergics		
Hyoscine butylbromide	20 mg SC q6h	Monitor for peripheral antimuscarinic effects which may include: blurred vision, dry mouth, constipation and urinary retention. Does not cross the blood brain barrier; therefore, does not cause sedation. Maximum recommended total daily dose 300 mg.
	60 to 120 mg CSCI daily	
6. Neuropathic Pain		
Antidepressants		**First line for neuropathic pain**
TCAs		Starting dose 10 to 25 mg at bedtime. Titrate slowly every 3 to 7 days by 10 to 25 mg as tolerated. Target therapeutic dose range 75 to 150 mg daily. Monitor for anticholinergic effects: drowsiness, constipation, dry mouth, urinary retention. **Avoid if poor cardiac function, severe prostatic hypertrophy, or glaucoma.** Positive effects on mood and sleep may be desirable.
Amitriptyline	75 to 150 mg PO at bedtime	
Nortriptyline	75 to 150 mg PO at bedtime	
SNRIs		
Duloxetine	60 to 120 mg PO daily	Safer and better tolerated than TCAs, but limited evidence of analgesic efficacy. Initiate venlafaxine at 37.5 mg daily for one week.
Venlafaxine	75 to 225 mg PO daily	
Anticonvulsants		**First line for neuropathic pain**
Gabapentin	300 to 800 mg PO every q8h to q6h	Starting dose 100 to 300 mg at bedtime. Titrate slowly every 1 to 7 days by 100 to 300 mg as tolerated. Target therapeutic dose ranges from 900 to 3600 mg daily in 3 to 4 divided doses. An adequate trial should include 1 to 2 weeks at the maximum-tolerated dose. Monitor for somnolence, dizziness, and ataxia. Slower titration for the elderly or medically frail. **Dose adjustment required for those with renal insufficiency.**
Pregabalin	150 to 300 mg PO q12h	Starting dose 75 mg twice daily. Titrate slowly every 3 to 7 days. Target therapeutic dose ranges from 50 to 150 mg daily in divided doses. Monitor for somnolence, dizziness, and ataxia. Slower titration for the elderly or medically frail. **Dose adjustment required for those with renal impairment.**
Analgesic Adjuvants for Consideration AFTER Specialist Consultation		
NMDA Blockers		**Second line for neuropathic pain**
Ketamine	10 to 50 mg PO q8h to q6h	Starting dose 10 to 25 mg q8h. Titrate in steps of 10 to 25 mg up to a maximum dose of 200 mg q6h.
	100 to 500 mg CSCI daily	Start with 100 mg over 24 hours. Increase after 24 hours to 300 mg over 24 hours and further increase to 500 mg over 24 hours if ineffective. Stop 3 days after last dose increment. **Monitor for psychomimetic effects.** Treat dysphoria with haloperidol, diazepam or midazolam.
Local Anesthetic		**Second line for neuropathic pain**
Lidocaine	5 to 12.5 mg per kg over 120 minutes IV or SC every 2 weeks **OR** by continuous infusion	Use with caution in patients with cardiac failure. **Dose adjustment required in hepatic or renal impairment.**

† Off-label. PO = by mouth IV = Intravenous, SC = Subcutaneous, TID = three times daily, QID = four times daily ODT = oral dissolving tablet CSCI = continuous subcutaneous infusion.

Prices for prescription drugs may be obtained from BC PharmaCare. The British Columbia Palliative Care Benefits Plan https://www2.gov.bc.ca/assets/gov/health/health-drug-coverage/pharmacare/palliative-formulary.pdfprovides province wide drug coverage for many of the recommended medications– check website to confirm coverage. **Consider price when choosing similarly beneficial medications, especially when the patient / family is covering the cost.**

Symptom Management- Dyspnea

- Identify and Treat Underlying Cause
- Control Symptoms
- Educate Patient, Family and Caregivers

Symptom Management- Dyspnea

- Identify and Treat Underlying Cause
  - **CHF-** optimize meds and Diuretics
  - **Liver failure-** diuretics, ascites management
  - **Effusion**- Therapeutic Thoracocenteses, tunneled pleural catheter (PleurX) or pleurodesis
  - **COPD**- optimize inhalers
  - **Pneumonia**- antibiotics
  - **Anxiety**- control symptoms/optimize treatment
  - **Airway obstruction-** steroids, stenting, radiation
  - **Severe Anemia-** Transfusion
  - **Muscular weakness (ALS/Kennedy's)-** Non-invasive ventilation
  - **Carcinomatosis**- Steroids

Symptom Management- Dyspnea

- Control Symptoms
  - Opioids are safe and effective, reduce sensation of Shortness of Breath
    - Administered and titrated as for pain- see above
  - Oxygen- generally only for hypoxemic patients, some others benefit but not routinely recommended- access early in remote areas (arrange with home care/palliative care nurse coordinator)
  - Benzodiazepines- Limit to panic and anxiety disorder, Consider Midazolam in dyspnea crisis
  - Adjuvants- Methotrimeprazine (2.5-12.5mg BID-TID po/subcut if severe), Steroids (COPD, lung Carcinomatosis), Bronchodilators (if wheezing)

Symptom Management- Dyspnea

- Educate Patient, Family and Caregivers
  - Differentiate breathing patterns from sensation of discomfort
  - Differentiate hypoxia and dyspnea which may be independent
  - Discuss treatment plan and counsel regarding normal breathing patterns at end of life

Symptom Management- Delirium

- Identify and Treat Underlying Cause
- Control Symptoms
- Educate Patient, Family and Caregivers

Delirium-Identify and Treat Underlying Cause

- Investigations should be based on goals of patient, disease and expected trajectory
- Common Causes: (30-50% are reversable) In Last days (10-15%)
  - Infection, metabolic disturbance, hypoxia, organ failure, medications
  - Withdrawal from alcohol, illicit drugs, benzodiazepines
  - Pain, constipation, dehydration, retention, urinary catheters, sleep deprivation
  - New/unfamiliar environments, psychosocial, psychiatric
- Most reversable: Drugs effects (OIN), Electrolytes disturbance, Physical discomfort

Delirium- Control Symptoms

Non pharmacologic measures for all (Preferred and more effective for Mild to Moderate delirium)

- Frequent reorientation, mentally engaging activities, mobilization, hearing aids and eyeglasses; adequate oral hydration, sleep hygiene, Promote One-to-One observation
- Avoid overstimulation, indwelling catheters, IV lines, immobility

Pharmacologic

- Review Med profile (taper steroids/benzodiazepines), consider opioid rotation
- When Moderate to Severe AND causing distress, unmanageable or risk of harm to pt/family:

  Haloperidol Start dose of 0.5-2mg mg (0.25 mg for elderly) SC, IV or PO Q1H until calm, then Q4-6H for severe delirium (can use PRN only) Methotrimeprazine (more sedating) 12.5 to 25 mg SC, IV or PO Q1-2H until calmin, then Q6-8H.

  Midazolam 2.5-5mg Subcut or IV for severe agitation (Consider consult with Palliative MD for severe Delirium)

Delirium- Educate Patient, Family and Caregivers

- Normalize delirium and behaviours associated with it
- Provide guidance of how to interact with patient
- Teach non pharmacologic preventative measures
- Advise of signs to be aware and have plan of action/point of contact if distress or safety concerns

Nausea and Vomiting

- Unknown or Multifactorial
  - 1- Metoclopramide 2- Haldol 3- Methotrimeprazine
- Chemical (Drugs, toxins, Chemo, infections)
  - 1- Haldol 2- Methotrimeprazine 3- Ondansetron
- Cortical (Anxiety, Pain, Emotions)
  - 1- Lorazepam 2- Methotrimeprazine 3- Cannabinoids
- Cranial (raised ICP, Meningeal, Brain radiation)
  - 1- Dimenhydrinate +Steroids (if ICP) 2- Haldol 3- Methotrimeprazine
- Vestibular (motion, drugs, Some CNS lesions)
  - 1- Dimenhydrinate 2- Scopolamine transdermal 3- Methotrimeprazine
- Visceral or serosal (bowel obs, constipation, mesenteric mets, liver capsule, ureteric obstruction)
  - 1- Haldol 2- Methotrimeprazine 3- Ondansetron
- Gastric Stasis (opioids, ascites, hepatomegaly, autonomic dysfunction)
  - 1- Metoclopramide 2- Domperidone

Nausea and Vomiting- Dosing

- Metoclopramide - 10 mg PO TID or QID before meals
- Haldol - 0.5 to 1.5 mg PO/SC Q8H
- Methotrimeprazine- 3.125 to 6.25 mg PO/SC Q8H
- Ondansetron- 4 to 8 mg PO/SC/IV Q8H
- Dimenhydrinate - 50 mg PO/SC/PR Q4H to Q8H
- Steroids (if raised ICP) -Dexamethasone 8 mg daily to 8 mg bid PO/ SC
- Domperidone- 10 mg PO TID
- Cannabinoids- Nabilone 0.25 to 2 mg PO BID or Medical Cannabis
- Scopolamine Transdermal- 1 to 2 patches applied to skin every 72 hours (Currently unavailable in Canada)

What challenges do you anticipate for a patient/family preparing for life at home?

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Preparing for Potential End of Life at Home

- Communication
  - Explore patient and family wishes and preferred place of death
  - Note that time/place of death is not always anticipated (pt desiring hospital care at end of life may pass at home prior) having documentation and preparations for this possibility is usually appropriate.
  - Involve care team- Palliative Care Nurse Coordinator can guide, facilitate
  - Address expectations for care at home and coordinate with available resources

Preparing for Potential End of Life at Home

- Documentation
  - Letter of Anticipated Death at Home (note ICD/Spinal chord stimulator if Present) – Copies to chart/EMR, Medical Examiner, patient Home, Patient chosen funeral home, (Palliaitve Care Coordinator can Assist)
    - In Manitoba Pronouncement of Death is not needed but Medical Certificate of Death will need to completed within 48 hrs (See college resource)
    - If not present Police/RCMP would need to be contacted at time of death.
    - Medical examiner still needs to be contacted if unexpected/reportable death/child
  - Advanced Care Plan- M or C AND/OR Health Care Directive indicating DNR
    - (needs to be present if EMS are called, LAD alone is insufficient)

Preparing for Potential End of Life at Home

- Care Plan
  - Symptom management- Anticipate symptoms
    - Pain and Dyspnea- see above, not always present but very often and should be planned for
      - Consider pain/dyspnea crisis plan if appropriate (often double BT dose repeated if necessary for relief, utilization of rapid agent such as fentanyl/sufentanil)
    - Delirium- agitated delirium is one of the most common reasons for acute care transfer
      - Anticipate and consider having Haldol/Methotrimeprazine available
    - Airway Secretions- educate, if severe/distressing glycopyrrolate 0.4mg subcut q 2 hr prn, Scopolamine 0.4mg subcut q 4 hr prn, Atropine 1% drops 1-4 Drops Subling q 2-4 hr prn
    - Bowel Regime, Nausea and Emesis
  - Prepare for possible emergencies according to disease (Severe bleeding, airway obstruction, bowel obstruction, Seizures) care plan based on patient and family goals and resources
  - Patient and Family should know how to access Medical care after hours if needed
  - Family should contact Funeral Home when patient passes NOT EMS.

Sources

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Resources

- Serious Illness Conversation Guide: https://bc-cpc.ca/wp-content/uploads/2018/08/SIC-Conversation-Guide-V3-April2017.pdf?pdf=SICConversationGuide%E2%80%8B
- BC Centre For Palliative Care: https://www.bc-cpc.ca/b-c-inter-professional-palliative-symptom-management-guidelines/
- Pallium App/Pocketbook: https://www.pallium.ca/mobile-app-pocketbook/
- https://www.virtualhospice.ca/
- https://wrha.mb.ca/files/palliative-care-spict-tool.pdf
- SPA-LTC https://spaltc.ca/ (Toolkit and Free e-modules available)
- College Expected Death at Home Resource: https://cpsm.mb.ca/assets/Standards%20of%20Practice/Information%20and%20Resources%20-%20Expected%20Death%20at%20Home.pdf

Summarizing Palliative Approach to Care- my lessons from patients/families

HONESTY- Give patients and families accurate information to make informed decisions

RESPECT- Recognize individuals/families know best what is important for them

COURAGE- Take ownership and walk through tough times together- be present whenever able

WISDOM- Seek wise people when decisions are hard or unclear

HUMILITY- Recognize when you have something to offer and when you don't

TRUTH- Be genuine all the time

LOVE- To care well you need to care first