

## Cancer pain management in adults

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**Guideline developer:**

Australian Adult Cancer Pain Management  
Guideline Working Party

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## Cancer pain management in adults

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Introduction

Summary of recommendations (Printable version)

Cancer pain assessment and management overview

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## 1 Introduction

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## 1.1 Introduction

### 1.1.1 Scope of this guideline

This guideline provides brief, point-of-care recommendations for screening, assessment and management of cancer-related pain in adults. It focuses on chronic pain rather than acute pain caused by cancer treatments or pain in cancer survivors (which is best addressed by referral to a specialist pain medicine physician). Future work is planned to develop guidelines for the management of acute pain in people with cancer.

The guideline makes recommendations about both pharmacological and non-pharmacological management as well as patient awareness and self-management. These recommendations are specific to adults and should not be used as a guide to pain management in children with cancer.

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### 1.1.2 Who this guideline is intended for

This guideline is intended for Australian health professionals of all disciplines caring for people with cancer. These recommendations are not intended to replace expert clinical judgment, but to enable those without specialist knowledge to provide the essentials of care.

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### 1.1.3 Background

An estimated 30–75% of people with cancer experience pain, and pain is under-treated in up to half of cases.<sup>[1]</sup><sup>[2]</sup><sup>[3]</sup><sup>[4]</sup><sup>[5]</sup> Failure to manage pain is due to barriers at all levels - patient, caregiver, health professional and healthcare system.<sup>[6]</sup><sup>[7]</sup><sup>[8]</sup><sup>[9]</sup><sup>[10]</sup><sup>[11]</sup><sup>[12]</sup><sup>[13]</sup><sup>[14]</sup> The first guideline to focus on management of cancer pain was released by the World Health Organisation in 1986.<sup>[15]</sup> Since then, a large number of guidelines have become available internationally. Research has demonstrated that implementation of evidence-based clinical practice guidelines for cancer pain can improve the processes of care and patient outcomes.<sup>[10]</sup>

### 1.1.4 The need for an Australian guideline

The management of cancer pain in Australia has been identified as an important area for improvement by both the National Institute of Clinical Studies (National Health and Medical Research Council) and the Cancer Institute New South Wales.<sup>[16][17]</sup> Timely access to best-practice, evidence-based assessment and care for patients in pain is one of six major goals identified by the Australian National Pain Strategy,<sup>[18]</sup> which was developed by clinicians and consumers at the 2010 National Pain Summit.<sup>[19]</sup> Painaustralia was formed in early 2011 to facilitate implementation of the NPS, with consumers included among its founding members and steering committee. Consumer input was invited with the Consumer Health Forum of Australia with representatives from Arthritis NSW and Palliative Care Queensland. Further consumer input was provided by individuals with cancer and caregivers.

The National Pain Summit's Cancer Pain and Palliative Care Working Group recommended that primary objectives should be the promotion of pain management guidelines and systems to ensure adequate assessment and management of cancer pain. As a starting point, the Cancer Pain and Palliative Care Working Group determined that existing international and overseas guidelines should be adapted for Australian clinical practice.

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### 1.1.5 Development of this guideline

An Organising Committee (Table 1) was formed in October 2010 to plan and oversee development of this guideline. To better understand clinician needs, a national survey of current practice was administered online from August 2011 to April 2012. Five hundred and twenty seven health professionals responded from a wide range of disciplines. Respondents were strongly supportive of Australian guidelines and implementation strategies but advocated for these to make use of existing international guidelines rather than allow local guidelines to proliferate unnecessarily.<sup>[20]</sup> The Organising Committee decided to use the ADAPTE approach<sup>[21]</sup> to adapt international guidelines to the Australian setting. ADAPTE specifies that guideline adaptation follow a three phase process of Set-up, Adaptation and Finalization.

During Set-up, the Organising Committee agreed that synthesis and adaptation of a number of guidelines would be required rather than selecting a single candidate guideline for adaptation. A Working Party was convened to provide expert guidance (Table 2) and held its inaugural meeting in January 2012. Meetings were held bi-monthly. Two panels of expert clinicians (Table 3) individually provided expert consultation to the Working Party on pharmacological management and management of adverse effects.

During the Adaptation phase, discussions were initially aimed at more clearly defining the focal Population, Intervention, Professionals, Outcomes and Health setting (PIPOH) for the adapted guideline. Existing guidelines were identified via the reference lists of previous reviews<sup>[22][23][24]</sup> and searches of online databases and clearing houses and were screened according to the following eight criteria:

- a primary focus on adults with chronic cancer pain
- relevance across tumour types and stages

- inclusion of recommendations for assessment and/or management of pain by means of either pharmacological or non-pharmacological intervention
- capacity to inform pain assessment and management across disciplines and settings
- published in the previous 3 years (i.e. 2008 or later)
- national or international (i.e., not centre-specific)
- available in English
- independently rated as 'recommended' or 'strongly recommended' by two members of the Working Party based on criteria of the Appraisal of Guidelines Research & Evaluation (AGREE) Instrument.<sup>[21]</sup>

The following guidelines met all criteria and were considered for adaptation:

- Scottish Intercollegiate Guidelines Network. Control of pain in adults with cancer. A national clinical guideline [Version amended 18 July 2011] Edinburgh: SIGN; 2008. Available from: <http://www.sign.ac.uk/pdf/SIGN106.pdf>
  - NHS Quality Improvement Scotland. Best practice statement. The management of pain in patients with cancer. Edinburgh: NHS Quality Improvement Scotland; 2009. Available from: [http://www.palliativecareguidelines.scot.nhs.uk/documents/PAINCANCERREV\\_BPS\\_NOV09.pdf](http://www.palliativecareguidelines.scot.nhs.uk/documents/PAINCANCERREV_BPS_NOV09.pdf)
  - National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology. Adult cancer pain. Version 1.2012: NCCN; 2012. Available from: <http://www.nccn.org>
  - Ripamonti CI, Bandieri E, Roila F, ESMO Guidelines Working Group. Management of cancer pain: ESMO clinical practice guidelines. *Ann Oncol* 2011; 22(Suppl 6): vi69-vi67. Available from: [http://annonc.oxfordjournals.org/content/22/suppl\\_6/vi69.long](http://annonc.oxfordjournals.org/content/22/suppl_6/vi69.long)
  - Caraceni A, Hanks G, Kaasa S, European Palliative Care Research Collaborative. Use of opioid analgesics in the treatment of cancer pain: evidence-based recommendations for the EAPC. *Lancet Oncol* 2012; 13: e58-e68. Web version available from: <http://www.eapcnet.eu/LinkClick.aspx?fileticket=i-bB4cvZyzg%3d&tabid=1794> and associated reviews.<sup>[25][26][27][28][29][30][31][32][33][34][35][36][37][38][39]</sup>
  - National Institute of Health and Care Excellence Guideline Development Group. Opioids in palliative care: safe and effective prescribing of strong opioids for pain in palliative care of adults. NICE clinical guideline 140. Manchester: NICE; 2012. Available from: <http://www.nice.org.uk/nicemedia/live/13745/59285/59285.pdf>
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The Working Party compared recommendations between the source guidelines and assessed each according to currency, the quality of evidence on which they were based, and applicability to the Australian setting. Recommendations identified as the most suitable were either directly adopted or modified as necessary.

In clinical situations where no recommendation applicable to the Australian setting was available, the Working Party developed recommendations based on members' clinical expertise and experience. Recommendations of this kind are distinguished from those adapted from existing guidelines by the term 'Consensus'.

Recommendations for pharmacological pain management and recommendations for management of adverse effects were referred to two panels of expert clinicians (Table 3).

The Working Party was guided throughout by principles of holistic person-centred care and a concern for potential inappropriate prescribing, especially in elderly patients.

For each of the recommendations in this Australia guideline, we cite as sources:

- one or more adapted guideline(s). To see the grade of each recommendation within its source guideline or the level of evidence on which recommendations are based, users should refer to the original guidelines (links provided).
- other Australian authorities.
- considerations taken into account by our Working Party and panels of Australian expert clinicians when developing consensus recommendations.

Where available, we refer readers to other Australian clinical practice guidelines for the management of specific clinical problems (e.g. psychosocial concerns).

**Table 1. The Australian Adult Cancer Pain Management Guideline Organising Committee**

Patricia Davidson (Co-chair)	Nurse Director, Centre for Cardiovascular and Chronic Care, University of Technology Sydney (UTS) Professor of Cardiovascular Research, St Vincent's Hospital, Sydney	Sydney, NSW
Melanie Lovell (Co-chair)	Palliative care physician, HammondCare Staff Specialist, Palliative Medicine, Greenwich Hospital Clinical Associate Professor, Sydney Medical School	Sydney, NSW
Meera Agar	Palliative care physician Director of Palliative Care, Braeside Hospital Conjoint Associate Professor, South Western Sydney Clinical School, University of New South Wales (UNSW) Conjoint Associate Professor, School of Medicine, The University of Notre Dame, Australia Director of Clinical Trials, Ingham Institute of Applied Medical Research	Sydney, NSW
Anna Green (Administrative support)	Research Administrative Coordinator, Centre for Cardiovascular and Chronic Care, UTS	Sydney, NSW
Tim Lockett (Project Manager)	Program Coordinator, Improving Palliative Care through Clinical Trials (ImPaCCT) Research Fellow, Faculty of Health, UTS and South Western Sydney Clinical School, UNSW	Sydney, NSW

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**Table 2. The Australian Adult Cancer Pain Management Guideline Working Party**

<b>Memeber</b>	<b>Position</b>	<b>Location</b>	<b>Conflict of interest statement</b>
Melanie Lovell (Chair)	Palliative care physician Staff Specialist, Palliative Medicine, Greenwich Hospital Visiting Medical Office, Mater Hospital Clinical Senior Lecturer, Northern Clinical School	Sydney, NSW	No conflict of interest (COI)
Meera Agar	Palliative care physician Director of Palliative Care, Braeside Hospital Conjoint Associate Professor, South Western Sydney Clinical School, University of New South Wales (UNSW) Conjoint Associate Professor, School of Medicine, The University of Notre Dame, Australia Clinical trials Director, Ingham Institute of Applied Medical Research	Sydney, NSW	No COI
Frances Boyle	Medical oncologist Director, The Patricia Ritchie Centre for Cancer Care and Research, The Mater Hospital North Sydney. Professor of Medical Oncology, Northern Clinical School, The University of Sydney Honorary Medical Officer, Royal North Shore and Greenwich Hospitals, Sydney Visiting Medical Oncologist, North Shore Private Hospital, Sydney Medical Oncologist, Melanoma Institute of Australia Medical Director, Pam McLean Centre, The University of Sydney	Sydney, NSW	Member of Advisory Board for Takeda Pharmaceuticals Australia Pty Ltd
Tim Lockett	Program Coordinator, Improving Palliative Care through Clinical Trials (ImPaCCT) Research Fellow, Faculty of Health, UTS		

<b>Memeber</b>	<b>Position</b>	<b>Location</b>	<b>Conflict of interest statement</b>
(Coordination and administrative support)	Research Associate, South Western Sydney Clinical School, UNSW	Sydney, NSW	No COI
Jane Phillips	Nurse Professor Palliative Nursing, School of Nursing, The Cunningham Centre for Palliative Care and The University of Notre Dame, Australia	Sydney, NSW	No COI
John Stubbs	Consumer Cancer Voices Australia (until June 2012) canSpeak (July 2012 onwards)	Sydney, NSW	No COI

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**Table 3. Expert panels of clinicians who provided consultation to the Working Party**

<b>Pharmacological management panel</b>		
David Currow	Palliative care physician Professor and Chair of Palliative and Supportive Services, Flinders University Chief Cancer Officer and Chief Executive Officer, the Cancer Institute NSW	Adelaide, South Australia
Jan Maree Davis	Director of Palliative Care, St George Hospital President, NSW Society of Palliative Medicine Senior Research Fellow, Faculty of Medicine, UNSW	Sydney, NSW
Janet Hardy	Palliative care physician Director of Palliative and Supportive Care, Mater Health Services Brisbane	Brisbane, Queensland
Christine Sanderson	Palliative care physician Staff Specialist, Palliative Medicine, Calvary Health Care Sydney Research Fellow, Palliative and Supportive Services, Flinders University	Sydney, NSW



Odette Spruyt	Palliative care physician Director of Pain and Palliative Care, Peter MacCallum Cancer Centre	Melbourne, Victoria
<b>Management of adverse effects panel</b>		
Melanie Benson	Palliative care physician Staff Specialist, Palliative Medicine, The Alfred	Melbourne, Victoria
Katherine Clark	Palliative care physician Director and Area Director of Palliative Care, Calvary Mater Newcastle Conjoint Professor, School of Medicine and Public Health, The University of Newcastle	Newcastle, NSW
Winston Liauw	Medical oncologist Clinical pharmacologist Staff Specialist, Medical Oncology, St George Cancer Care Centre Sydney Conjoint Associate Professor, Faculty of Medicine, UNSW Chair, Chair Cancer Institute NSW Clinical Research Ethics Committee Member of the Board, National Prescribing Service Visiting Medical Officer, Southern Oncology Specialists and St George Private Hospital	Sydney, NSW

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### 1.1.6 Conflicting interest statements and management

Working Party members were asked to declare any interests relevant to the guideline development, prior to commencement. Members were asked to update their information if they became aware of any changes to their interests.

All declarations were added to a register of interests as listed in the table above. The register was made available to the Working Party throughout the development of the guideline, allowing members to take any potential conflicts of interest into consideration during discussions, decision making and formulation of recommendations.

The guidelines have now entered the updating phase. Guideline Working Party members are responsible to update their conflict of interest statements if a new interest arises.

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### 1.1.7 Funding

Development of this guideline was funded by Improving Palliative Care through Clinical Trials (ImPaCCT) and HammondCare.

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### 1.1.8 Updating the guideline

This guideline will be updated each year from 2013 to include recommendations added to new editions of the source guidelines or any new guidelines that meet criteria for quality and applicability.

The developers of this guideline acknowledge that the recommendations in the first edition may not fully meet the information needs of Australian clinicians. Users are invited to use the blue buttons to submit clinical questions for consideration in the next edition. Selected clinical questions will be answered by systematic reviews or new Australian research.

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### 1.1.9 Acknowledgements

Jutta von Dincklage, Product Manager (Wiki Development), Cancer Council Australia

Jenni Harman, Medical writer, Meducation Australia

Mary-Rose Birch, HammondCare, for her role in developing the patient-held resources and pilot work

painaustralia (<http://www.painaustralia.org.au>)

The Working Party thanks Cancer Council Australia for hosting the online consultation draft of this guideline on their website.

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## 1.3 Notes

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\* ↑ NICE 2012 became available just as a draft of recommendations based on the other five guidelines was being finalised. Draft adapted recommendations for opioid use were checked against those of the NICE guideline for consistency.

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## 2 Summary of recommendations

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### 2.1 Summary of recommendations

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## 2.2 Cancer pain management in adults: Evidence-based clinical practice guidelines adapted for use in Australia

### 2.2.1 Patient-centred care

#### Recommendation

PCC1. Routinely establish a multidisciplinary team approach to pain management that involves allied care health professionals and primary care health professionals according to the person's pain management needs and preferences. (SIGN)

PCC2. Adopt a person-centred approach to pain management (NICE), which involves:

- taking into account the patient's needs and preferences
- enabling the person to make informed decisions about their care and treatment
- providing culturally appropriate care and information
- involving the person's partner, carer or family in treatment decisions, if the person wishes.

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### 2.2.2 Screening

#### Recommendation

S1. For all patients who are able to communicate their level of pain: At each clinical encounter, assess worst and average pain intensity during the previous 24 hours using a self-reported numerical rating scale from zero to 10, where zero represents 'no pain' and 10 represents 'worst pain you can imagine'. (NCCN)

S2. For people who cannot self-report due to cognitive impairment: At each clinical encounter, use the Abbey Pain Scale. (Consensus)

Recommended by the Australian Pain Society: Australian Pain Society. Residential Aged Care Facilities - Management Strategies. Sydney: Australian Pain Society; 2005. Available from: <http://www.apsoc.org.au/owner/files/9e2c2n.pdf> APS 2005.

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## 2.2.3 Assessment

### Recommendation

A1. Complete a comprehensive assessment if either of the following apply:

- a new patient reports a pain score of 2 or more on self-reported numerical rating scale of zero to 10 or pain score is 3 or more on the Abbey Pain Scale (see Screening)
- an existing patient reports a new pain or a sudden, unexpected change in intensity of pain. (Consensus)

Assess all the following to determine the individual's pain management needs:

- Disease status and treatment (Consensus)

The Working Group considered this information to provide necessary context for other assessments

- Pain severity (using a validated tool) (NCCN, SIGN)
- Pain experience (location, interference, timing, description, aggravating and relieving factors) (ESMO, NCCN, NHS, SIGN)
- Current and previous management of pain (ESMO, NCCN, NHS, SIGN) and other symptoms (Consensus)
- Pain meaning for the person and their beliefs and knowledge (NCCN, NHS, SIGN), including concern about pain and its treatment (e.g. perceived addictiveness of opioids) (NICE)
- Psychosocial status (ESMO, NCCN, NHS, SIGN), including risk factors for opioid misuse (NCCN)
- Cognitive functioning (Consensus)

The Working Group considered this information to provide necessary context for other assessments

- Physical examination and, where needed, further investigations (NCCN, NHS, SIGN)
- Functional status (ESMO)
- Risk factors for poorly controlled pain (NCCN)
- Patient and family preferences (goals and expectations for comfort, advance directives) (NCCN)
- Factors suggesting an oncological emergency. (NCCN)

Reassess whenever there is a change in pain or a new pain is reported.

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## 2.2.4 Self-management

### Recommendation

SM1. For all patients with pain, provide education about cancer-related pain and its management. (NCCN, SIGN)

SM2. Patients with pain should be provided with verbal and written information on pain and its management, including the following:

- pain causes
- common experiences of cancer pain (e.g. onset, timing)
- effective treatments (including medicines and non-pharmacological management strategies)
- effect of medicines including breakthrough analgesia (e.g. onset and duration of effect; when to take them)
- side-effects of medicines such as opioid-related constipation and how to prevent or manage them
- any safety concerns (e.g. mixing with alcohol, driving)
- ways to ensure patients have adequate access and supply to prescribed opioids
- how to work with health professionals to achieve the best pain control possible (e.g. the importance of reporting rather than concealing pain, side-effects and other concerns about medication)
- common attitudes and beliefs that may prevent people with cancer receiving effective pain control (e.g. fears that opioids are addictive and used only at the end of life, and that patients will develop tolerance over time requiring dose escalation)
- when to seek help (e.g. if vomiting and unable to keep down fluids for one day, bowels not open 3 days, new pain, change in pain or pain not relieved by medication, difficulty arousing the patient from sleep easily during the daytime, confusion, difficulty accessing the medications). (Consensus)

Systematic review by Koller et al (2012): Koller A, Miaskowski C, De Geest S, Opitz O, Spichiger E. A systematic evaluation of content, structure, and efficacy of interventions to improve patients' self-management of cancer pain. *J Pain Symptom Manage.* 2012 Aug;44(2):264-84.

SM3. Include the person's family, carers and significant others in education about pain and its management, if appropriate. (Consensus)

Carers are frequently involved in decision-making (e.g. to start and adhere to opioids) and management

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## 2.2.5 Pharmacological management

Recommendation
<p>P1. For patients with continuing pain, begin regular analgesia with paracetamol and/or a nonsteroidal anti-inflammatory drug (NSAID) if the patient has no contraindications. (ESMO, NCCN, SIGN)</p>
<p>P2. If pain is moderate or severe or continues despite treatment with paracetamol or NSAIDs, consider a regular oral opioid. (ESMO, NCCN, SIGN)</p>
<p>P3. If pain continues or recurs despite regular oral opioid analgesia and the patient feels that analgesia is inadequate, consider either of the following options:</p> <ul style="list-style-type: none"> <li>• Add a NSAID (if the person is not already taking and NSAID and has no contraindications). (EAPC)</li> <li>• Increase regular dose of opioid to incorporate the rescue doses taken in previous 24 hours (SIGN), then reassess pain severity and adverse effects within 48 hours. (Consensus)</li> </ul>
<p>P4. Methadone should be initiated and titrated only by specialists familiar with its use. (EAPC, ESMO, NCCN)</p>
<p>P5. The transdermal route of administration can be considered as an alternative to oral administration if required for patients unable to take oral medications, reduced risk of constipation or patient convenience. (EAPC) Due to the slow onset of effect and long duration of action, the transdermal route should only be considered when pain is stable. (ESMO, NCCN, SIGN)</p> <p>Use one of the following options, referring to the eviQ Opioid Conversion Calculator:</p> <ul style="list-style-type: none"> <li>• Switch to transdermal buprenorphine (suitable for patients with stable mild pain only). (NICE) Note: A 20 mcg/hour buprenorphine transdermal patch is equivalent to 30 mg morphine daily orally.</li> <li>• Switch to transdermal fentanyl. (NICE) Note: The lowest dose available (12 mcg/hour) for fentanyl transdermal patch is equivalent to 45 mg morphine daily orally.</li> </ul> <p>Due to long duration of action, the transdermal route should be considered only when pain is stable. (ESMO, NCCN, SIGN)</p>
<p>P6. For patients with renal impairment, carefully monitor for treatment-related adverse effects. If opioid-related adverse effects occur, consider the following options:</p> <ul style="list-style-type: none"> <li>• Reduce the total 24-hour dose of regular opioid (either by reducing dose and maintaining dose interval, or increasing dose interval and maintaining dose). (ESMO, SIGN)</li> <li>• Switch from sustained release to immediate release opioid at an appropriate regular dosing interval. (SIGN)</li> </ul>

### Recommendation

- Switch to a different opioid (e.g. consider buprenorphine or fentanyl instead of morphine, codeine or hydromorphone) or methadone under specialist supervision. (EAPC, ESMO, NCCN, SIGN)

P7. Morphine should be used with caution in patients with severe kidney disease (calculated creatinine clearance of less than 30 mL/min) in whom it may require reductions in dose and frequency. (EAPC, SIGN)

P8. In addition to regular opioids, routinely prescribe short-acting analgesia at a dose equivalent to one-sixth of total 24-hour dose, to be administered if breakthrough pain occurs. (NHS, SIGN) Rescue doses should be prescribed at 1-hourly intervals when required (NCCN) with advice given for the patient to seek health care professional advice if 3 consecutive doses have not relieved pain. (Consensus)

P9. If breakthrough pain occurs, monitor the number of breakthrough doses. If rescue analgesic doses have been effective with no adverse effects, re-titrate the regular opioid 24-hour dose by calculating the previous 24 hour opioid requirement including breakthrough doses. (SIGN) Note - if breakthrough analgesia is taken preemptively for incident pain, then the regular dose may not need to be increased.

P10. If the person experiences incident pain on a background of stable pain control while taking regular opioids, give additional oral short-acting opioids at a dose equivalent to one-sixth of total 24-hour dose. Transmucosal fentanyl preparations may be of use and require individual titration.(NHS, SIGN, EAPC)

P11. If the person experiences incident pain (e.g. movement-related pain or pain with dressing changes), advise him/her to take preemptive analgesia 30 minutes before activity that is likely to cause pain. (EAPC, NCCN, NHS, SIGN)

P12. For patients with neuropathic pain that persists despite non-opioid and opioid analgesia consider the following options (EAPC, ESMO, NCCN, SIGN):

- Anticonvulsant agents (gabapentin or pregabalin)
- Antidepressants (amitriptyline, nortriptyline or venlafaxine).

P13. For patients with bone metastases, consider bisphosphonates for prevention of bone pain. (ESMO, NCCN, NHS, SIGN)

P14. For patients with painful bone metastases, consider single-fraction radiotherapy or radioisotopes. (ESMO, NCCN, NHS, SIGN)

P15. Consider denosumab for preventing skeletal events and bone pain from metastatic breast or prostate cancer. (NCCN, NHS, SIGN)

P16. For patients with refractory pain despite carefully titrated doses of conventional medical therapies, consider whether a spinal route of administration may be indicated. (NCCN, NHS, SIGN)

### Recommendation

P17. Consider nerve blocks for selected pain syndromes (e.g. coeliac plexus block for pain in pancreas or upper abdomen). (NCCN)

P18. Consider intrathecal infusion of analgesic for patients with any of the following:

- difficult-to-control pain (EAPC)
- diffuse pain (NCCN)
- unacceptable opioid-related toxicity despite optimal use of adjuvants and a trial of switching opioids. (SIGN)

Refer to a specialist pain medicine physician or palliative medicine physician.

P19. Reduce the risk of constipation in non-terminal patients by using all of the following strategies:

- Maintain adequate hydration. (NCCN)
- Encourage physical activity (ambulant patients). (NCCN)
- Provide education on bowel hygiene routine (e.g. dietary fibre). (Consensus)
- Use a combination of stimulant and softening laxatives. (EAPC, NCCN, NICE, SIGN)
- Avoid other medicines that can aggravate constipation (e.g. 5HT3 antagonists) if possible. (Consensus)

P20. For an ambulant non-terminal patient with critical constipation caused by opioids that is not responding to oral stimulant and softening laxatives or polyethylene glycol (NCCN), consider one of the following options:

- Switch to less constipating opioid (e.g. fentanyl). (NICE)
- Switch to a combination of oxycodone hydrochloride with naloxone hydrochloride if the person's regular 24-hour opioid dose conversion is below maximum dose. (Consensus)

The combination of oxycodone hydrochloride and naloxone hydrochloride has not been compared with laxatives in this patient population. (NPS Radar. Oxycodone-with-naloxone controlled-release tablets (Targin®). 2011(December) [cited 2012 20th October]; Available from: [http://www.nps.org.au/\\_data/assets/pdf\\_file/0005/135869/oxycodone\\_with\\_naloxone.pdf](http://www.nps.org.au/_data/assets/pdf_file/0005/135869/oxycodone_with_naloxone.pdf))

- For patients receiving palliative care and for whom other laxative therapies are not indicated or effective, consider short-term use of methylnaltrexone. (NCCN, EAPC)

P21. When commencing an opioid and at each opioid dose increment, routinely prescribe 'as required' prophylactic antiemetic (e.g. prochlorperazine maleate, metoclopramide or haloperidol). (EAPC, NCCN, NICE)

P22. If nausea persists after symptom review, consider prescribing an antiemetic to be taken regularly.

### Recommendation

(ESMO, NCCN, NHS, NICE)

P23. If nausea is persistent or severe, investigate further to determine causes (e.g. constipation, central nervous system pathology, chemotherapy, radiation therapy). (NCCN)

P24. If opioid toxicity is suspected (Consensus):

- Review all medicines and consider whether medicines may be contributing to the signs and symptoms.
- Take a detailed history and consider whether the person's underlying disease (e.g. brain metastases, hepatic impairment) or other factors may be contributing to the signs and symptoms.
- Complete a thorough physical examination.
- Consider further investigations.

P25. When opioid-related toxicity of the central nervous system is suspected, consider the differential diagnosis of causes. Consider undertaking the following investigations as indicated by the clinical situation (Consensus):

- Ask about relevant history.
- Check electrolytes (sodium, potassium, chloride, serum calcium), urea, creatinine, calcium, glucose, oxygen saturations.
- Perform urine dipstick test.
- Order chest X-ray, CT of brain if indicated.

P26. If opioid-related toxicity of the central nervous system is a probable cause of confusion or other central nervous system symptoms (NHS):

- Consider supplemental hydration if the patient is dehydrated.
- Consider switching to a different opioid or reducing dose and retitrate according to response.

P27. For opioid-related confusion or delirium, treat the underlying aetiology and manage according to life expectancy (Consensus):

- If NOT last days of life, trial non-pharmacological management first to manage delirium symptoms (e.g. well lit, quiet environment). If the symptoms are not adequately improved consider reducing dose of opioid or switching to a different opioid.

P28. Manage opioid-related myoclonus according to life expectancy (Consensus):

- Manage reversible causes such as renal impairment, dehydration, very high doses of opioids.

**Recommendation**

- If NOT last days of life, consider reducing dose of opioid or switching to a different opioid.
- If last days of life, consider reducing dose of opioid if appropriate and/or a benzodiazepine in addition to reducing opioid dose or switching opioid.

P29. Respiratory depression is an uncommon adverse effect of opioid therapy for cancer pain.

If opioid-related respiratory depression is suspected (Consensus):

- Eliminate other causes such as effect of sedatives, hypercapnia and/or excessive oxygen flow.
- Check hydration status and renal function.
- For patients receiving methadone, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist familiar with its use.

P30. Manage opioid-related respiratory depression with all of the following (Consensus):

- Withhold opioid dose and recommence either at lower dosing frequency or reduced dose.
- Ensure the person is positioned properly.
- Rehydrate if dehydrated.

P31. Manage opioid-related respiratory depression according to severity of symptom:

- Withhold next opioid dose and recommence either at a reduced dose or less frequent dosing interval.
- Ensure the person is positioned to maintain airway and provide oxygen if appropriate.
- If respiratory rate  $\leq$  8/minute and patient unrousable, use appropriate dose of naloxone in frequent small doses that aim to improve consciousness without worsening pain (diluting ampoule to 10ml). (ESMO, NCCN)
- If patient rousable (despite low respiratory rate), monitor patient closely for decrease in rousability until respiratory rate improves. Encourage deep breathing.
- For patients receiving fentanyl transdermal patches or methadone, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist familiar with use of the agent.

P32. If opioid-related pruritis is suspected, exclude renal impairment and hepatic impairment as cause. (Consensus)

P33. Manage opioid-related pruritis with either or both the following:

### Recommendation

- Consider switching to a different opioid. (NCCN, NHS) If pruritis persists despite opioid switching after trialling more than one opioid, refer to a relevant specialist team (e.g. palliative care and/or pain medicine). (Consensus)
- Consider symptomatic management with an H1 antihistamine (choose one of the newer, less sedating agents). (Consensus)

P34. Consider urinary retention in patients with urinary symptoms. (Consensus)

P35. If opioid-induced hyperalgesia is suspected (e.g. pain is escalating despite pain management according to these guidelines), refer to palliative care team or palliative medicine specialist for urgent advice. (Consensus)

P36. Consider switching to a different opioid in either of the following situations:

- Optimal pain relief cannot be achieved despite appropriate dose. (ESMO, NCCN, NHS, NICE)
- The patient is experiencing unacceptable opioid-related adverse effects. (EAPC)

P37. If switching to a different formulation or route of administration with the same agent, look up conversion for total 24-hour opioid dose via the eviQ Opioid Conversion Calculator. (EAPC, ESMO, NCCN, NHS, NICE)

P38. If switching to a different agent because the previous route of administration is no longer possible, a starting dose lower than the equivalent total 24-hour opioid dose of the previous agent should be used. (EAPC)

P39. If switching to a different opioid agent due to unacceptable treatment-related adverse effects, despite optimal pain relief, start with a lower dose, then adjust dose carefully while monitoring for pain control and adverse effects. (EAPC, ESMO)

P40. If there is reason to suspect that a patient's prescribed opioids are being misused or diverted:

- Explain to the person that goal is pain relief without misuse. (Consensus)
- Assess for opioid dependency disorder. (Consensus)
- Establish a treatment agreement with the person, including an agreement to limit the supply of opioids to a single prescriber and pharmacy. (NCCN)

P41. Advise all patients and carers to ensure medicines are kept out of children's reach, out of sight and in a secure cupboard. (Consensus)

P42. For patients taking opioids, assess capacity to drive using current national guidelines and warn of impairment at higher doses. (Consensus)

### Recommendation

Austrroads Limited. Assessing fitness to drive. Medical standards for licensing and clinical management guidelines. Sydney: Austrroads Ltd; 2012. Available from: <http://www.austrroads.com.au>

P43. If pain is not adequately controlled despite recommended pain management strategies, including analgesic medication, consult a specialist pain medicine physician or palliative medicine physician. (NICE, NHS)

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## 2.2.6 Non-pharmacological management

### Recommendation

N1. Consider referral to a physiotherapist for assessment of functional ability and potential suitability of non-pharmacological pain management strategies. (NCCN, NHS, SIGN)

N2. Provide support for any psychosocial and spiritual concerns identified during comprehensive assessment.

(NCCN)

N3. Consider referral to an occupational therapist for assessment and management. (NCCN, NHS)

N4. Consider referral to a clinical psychologist for psychological therapies and support:

- Cognitive-behavioural therapy (NCCN, SIGN)
- Relaxation techniques (NCCN)
- Distraction techniques (NCCN)
- Guided imagery therapy. (NCCN)

N5. Consider music either prerecorded or with a music therapist (Consensus)

Systematic review by Bradt et al (2011): Bradt J, Dileo C, Grocke D, Magill L. Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database Syst Rev.* 2011 Aug 10;(8):CD006911. doi: 10.1002/14651858.CD006911.pub2.

N6. Offer to discuss any complementary therapies the person may wish to consider, and provide reliable information about the evidence for their effectiveness. (Consensus)

Principles of holistic management; Potential for drug-drug interactions

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## 3 Flowchart overview

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### Overview

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## 4 Patient-centred care

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### 4.1 Patient-centred care

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#### **Evidence-based recommendation**

PCC1. Routinely establish a multidisciplinary team approach to pain management that involves allied care health professionals and primary care health professionals according to the person's pain management needs and preferences. (SIGN)

#### **Evidence-based recommendation**

PCC2. Adopt a person-centred approach to pain management (NICE), which involves:

- taking into account the patient's needs and preferences
- enabling the person to make informed decisions about their care and treatment
- providing culturally appropriate care and information
- involving the person's partner, carer or family in treatment decisions, if the person wishes.

A resource kit is available from the Australian Department of Health and Ageing to assist with providing culturally appropriate palliative care to Aboriginal and Torres Strait Islander Peoples



## 4.2 References

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National Institute of Health and Care Excellence Guideline Development Group. Opioids in palliative care: safe and effective prescribing of strong opioids for pain in palliative care of adults. NICE clinical guideline 140. Manchester: NICE; 2012. Available from: <http://www.nice.org.uk/nicemedia/live/13745/59285/59285.pdf>

Scottish Intercollegiate Guidelines Network. Control of pain in adults with cancer. A national clinical guideline [Version amended 18 July 2011] Edinburgh: SIGN; 2008. Available from: <http://www.sign.ac.uk/pdf/SIGN106.pdf>

## 5 Screening

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### 5.1 Screening

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#### **Evidence-based recommendation**

S1. For all patients who are able to communicate their level of pain: At each clinical encounter, assess worst and average pain intensity during the previous 24 hours using a self-reported numerical rating scale from zero to 10, where zero represents 'no pain' and 10 represents 'worst pain you can imagine'. (NCCN)

#### **Numerical rating scale for pain intensity**

Verbal: What number describes your worst/average pain, where zero is no pain and ten is worst pain you can imagine.

Written: Please circle the number that best describes your worst/average pain over the past 24 hours:

#### **Evidence-based recommendation**

S2. For people who cannot self-report due to cognitive impairment: At each clinical encounter, use the Abbey Pain Scale. (Consensus)

Recommended by the Australian Pain Society: Australian Pain Society. Residential Aged Care Facilities - Management Strategies. Sydney: Australian Pain Society; 2005. Available from: <http://www.apsoc.org.au/owner/files/9e2c2n.pdf> APS 2005.

Complete a comprehensive assessment if either of the following applies:

- a new patient reports a pain score of 2 or more on self-reported numerical rating scale of zero to 10, or 3 or more on the Abbey Pain Scale
- an existing patient reports a new pain or a sudden, unexpected change in intensity of pain.

Some people find it easier to rate their pain using pictures rather than numbers. See the Wong-Baker FACES® Pain Rating Scale (a pictorial scale available for download).

## 5.2 References

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National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology. Adult cancer pain. Version 2.2015: NCCN; 2015. Available from: <http://www.nccn.org>

## 6 Assessment

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### 6.1 Assessment

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#### **Evidence-based recommendation**

A1. Complete a comprehensive assessment if either of the following apply:

- a new patient reports a pain score of 2 or more on self-reported numerical rating scale of zero to 10 or pain score is 3 or more on the Abbey Pain Scale (see Screening)
- an existing patient reports a new pain or a sudden, unexpected change in intensity of pain.(Consensus)

Assess all the following to determine the individual's pain management needs:

- Disease status and treatment (Consensus)

The Working Group considered this information to provide necessary context for other assessments

- Pain severity (using a validated tool) (NCCN, SIGN)

### Evidence-based recommendation

- Pain experience (location, interference, timing, description, aggravating and relieving factors) (ESMO, NCCN, NHS, SIGN)
- Current and previous management of pain (ESMO, NCCN, NHS, SIGN) and other symptoms (Consensus)
- Pain meaning for the person and their beliefs and knowledge (NCCN, NHS, SIGN), including concern about pain and its treatment (e.g. perceived addictiveness of opioids) (NICE)
- Psychosocial status (ESMO, NCCN, NHS, SIGN), including risk factors for opioid misuse (NCCN)
- Cognitive functioning (Consensus)

The Working Group considered this information to provide necessary context for other assessments

- Physical examination and, where needed, further investigations (NCCN, NHS, SIGN)
- Functional status (ESMO)
- Risk factors for poorly controlled pain (NCCN)
- Patient and family preferences (goals and expectations for comfort, advance directives) (NCCN)
- Factors suggesting an oncological emergency. (NCCN)

Reassess whenever there is a change in pain or a new pain is reported.

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2.9.1  Functional status

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2.12  Oncological emergencies

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4 Appendices

4.1 Appendix: The Eastern Cooperative Oncology Group (ECOG) Performance Status scale

4.2 Appendix: The Australia-modified Karnofsky Performance Status (AKPS) scale

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## 6.2 Assessment checklist

### 6.2.1 Disease status and treatment

Record the person's disease status:

- Cancer type
- Site/s

Record current cancer treatments, including:

- Chemotherapy (agents, doses)
- Radiotherapy (site, dose)
- Other treatments (including complementary and alternative)

Record previous and previous cancer treatments, including:

- Chemotherapy (agents, doses)
- Radiotherapy (site, dose)
- Other treatments (including complementary and alternative)

Record treatments for any health problems other than cancer.

#### **Anticancer treatments that may cause peripheral neuropathy**

Taxanes

Platinum agents

Eribulin

Vincristine

Navelbine

Lenolinamide

Bortezomib

Thalidomide

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### 6.2.2 [ ] Pain severity

[ ] Record pain severity in detail, using a self-reported validated pain assessment instrument (e.g. the Brief Pain Inventory short form (BPI-SF) recommended by NCCN and SIGN)

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### 6.2.3 [ ] Pain experience

If the person has more than one pain, number each and complete all assessments for each pain (including any pain not caused by cancer).

#### 6.2.3.1 [ ] Location

[ ] Assess and record:

- Location (see the Change Pain website for an interactive and printable body diagram)
- Presence of radiating pain

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#### 6.2.3.2 [ ] Interference with activities

[ ] Assess and record whether and how pain is interfering with the person's daily activities (e.g. walking , sleeping), using a validated assessment tool (e.g. the Brief Pain Inventory short-form (BPI-SF) recommended by NCCN and SIGN)

If pain is impairing the person's ability to perform activities of daily living, consider referral to a physiotherapist or occupational therapist for further assessment.

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### 6.2.3.3 [ ] Timing

[ ] Assess and record the timing of pain, including:

- Onset
- Duration
- Change in pain over time
- Pain during particular movements or activities
- Whether pain is persistent or intermittent
- Whether pain is generally controlled by medication but recurs at certain times or at end of dosing interval.

Aim to establish whether timing of pain is predictable or random and whether breakthrough analgesia might be needed preemptively.

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### 6.2.4 [ ] Description

[ ] Assess and record the quality of pain. Allow the patient to describe his/her pain, prompting with the descriptors listed below if needed.

#### **Characteristic of nociceptive pain**

Aching  
Cramping  
Gnawing  
Pressure  
Sharp  
Stabbing  
Throbbing

#### **Characteristic of neuropathic pain**

Hot-burning  
Cutting-lacerating  
Pins and needles  
Pricking  
Tingling  
Tight-stretched  
Numb  
Electric shocks  
Jumping-bursting  
Radiating  
Stabbing-shooting

Descriptive terms for neuropathic pain have been taken from: Bennett M. The LANSS Pain Scale: the Leeds assessment of neuropathic symptoms and signs Pain 2001 May;92(1-2):147-57. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/11323136>

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#### **6.2.4.1 [ ] Aggravating and relieving factors**

[ ] Assess and record factors that either make pain worse or relieve pain.

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#### **6.2.5 [ ] Current and previous management of pain and other symptoms**

[ ] Ask the patient which pain medications he or she:

- is currently taking
- has taken in the past.

[ ] Ask the patient which medications for other symptoms he or she:

- is currently taking
- has taken in the past.

[ ] For each medication, ask about:

- when it was taken (currently/ past month/before past month)
- duration of use
- dose
- efficacy
- adverse effects
- who prescribed it
- self-reported adherence
- reason for stopping (if applicable).

[ ] Ask the patient if he or she has used any non-pharmacological methods for managing pain (e.g. relaxation, massage, herbal medicine).

[ ] For each non-pharmacological pain management method, ask about:

- reason for use
- duration of use
- efficacy
- adverse effects
- reason for stopping (if applicable).

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### 6.2.5.1 [ ] Other symptoms

[ ] Assess and record the presence of other symptoms and attempt to diagnose the cause and mechanism of each.

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### 6.2.6 [ ] Pain meaning, beliefs and knowledge

[ ] Assess and record the meanings the person's pain has for them and their family or carers.

[ ] Assess and record any concerns the person has about the pain and its treatment such as fear of addiction, tolerance, side effects and fear that prescription of opioid means the final phase of illness.

Provide education tailored to patients' and families' knowledge, beliefs and attitudes about pain and pain treatment.

#### **Suggested questions to ask person:**

*What do you think is causing the pain?*

*Has someone else in the family had cancer pain?*

*Is there anything you are afraid of related to the pain or its management?*

*Is there anything that worries you about the treatment of pain?*

Source: Kissane D, Bultz B, Butow P, Finlay I, editors. Handbook of communication in oncology and palliative care. Oxford: Oxford University Press; 2010.

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## 6.2.7 [ ] Psychosocial assessment

- [ ] Assess and record psychosocial status, including anxiety and depression.
- [ ] Record psychiatric history, including previous or current substance abuse.
- [ ] Assess risk of opioid misuse.
- [ ] Assess and record relevant spiritual, religious or existential beliefs affecting pain and its management.

### **Suggested questions to assess risk of opioid misuse:**

At any time in your life, have you ever used alcohol, cannabis, other drugs, or any substance that can lead to dependence, including a medicine normally prescribed by a doctor?

[For each substance named]

Do you think your use of [substance] was out of control?

- Never or almost never
- Sometimes
- Often
- Always or nearly always

Did the prospect of missing a drink/fix/dose of [substance] make you anxious or worried?

- Never or almost never
- Sometimes
- Often
- Always or nearly always

Did you worry about your use of [substance]?

- Never or almost never
- Sometimes
- Often
- Always or nearly always

Did you wish you could stop?

- Never or almost never
- Sometimes
- Often
- Always or nearly always

How difficult did you find it to stop or to go without [substance]?

Not difficult

Quite difficult

Very difficult

Impossible

Has anyone in your immediate family (e.g. a parent, brother or sister) ever been addicted to or dependent on any substance, including alcohol, other substances (such as cannabis or other drugs), or a medicine normally prescribed by a doctor?

Adapted from: Gossop M, Darke S, Griffiths P, et al. The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction* 1995; 90: 607-14. Available from: [www.ncbi.nlm.nih.gov/pubmed/7795497](http://www.ncbi.nlm.nih.gov/pubmed/7795497)

### **Suggested questions to assess contribution of spiritual beliefs to pain and its management**

*Do you have spiritual beliefs that help you cope?*

*What importance does your faith or belief have in your life?*

*How does your faith or belief affect the way you think about your pain?*

Where psychosocial concerns are identified, refer to the following guideline for advice on further assessment, referral and management - National Breast Cancer Centre and National Cancer Control Initiative. Clinical practice guidelines for the psychosocial care of adults with cancer. Camperdown, NSW: National Breast Cancer Centre; 2003. Available from: <http://canceraustralia.gov.au/publications-resources/cancer-australia-publications/clinical-practice-guidelines-psychosocial-care>

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## 6.2.8 [ ] Cognitive functioning

[ ] Record whether cognitive impairment is present.

If self-reporting of pain intensity is difficult due to cognitive impairment, use a tool validated for this population such as the Abbey Pain Scale

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## 6.2.9 Physical examination and further investigations

- Perform a thorough physical examination
- Consider whether there are indications for imaging or laboratory studies.

A sudden change in the type or intensity of pain warrants further investigations.

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### 6.2.9.1 Functional status

- Assess and record functional status, using a systematic approach.

Consider using one of the following:

- The Eastern Cooperative Oncology Group (ECOG) Performance Status Scale
- The Australia-modified Karnofsky Performance Status (AKPS) scale

If pain is contributing to functional impairment, consider referral to physiotherapist, occupational therapist, social worker or palliative care team.

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## 6.2.10 Risk factors for poorly controlled pain

- Assess and record whether the person has any risk factors for poor pain control:
  - high pain score
  - cognitive impairment
  - elderly

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- history of substance use
- first language other than English
- membership of a cultural minority group
- neuropathic pain.

If self-reporting of pain intensity is difficult due to cognitive impairment, use the Abbey Pain Scale

For patients whose ability to communicate with the treating team may be affected by a language barrier, use a healthcare interpreter.

The Brief Pain Inventory is available in many community languages (listed on the MD Anderson Cancer Center website).

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### 6.2.11 [ ] Preferences for care based on individual's goals and expectations for comfort

[ ] Assess and record person's goals for comfort.

#### **Suggested questions to ask person**

*What are you hoping to do with improved pain relief which you can't do now? (e.g. sleep better, be more active)*

*What aspects of daily life are you most hoping pain management can help with?*

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## 6.2.12 [ ] Oncological emergencies

[ ] Consider whether pain is related to an oncological emergency, e.g:

- bone fracture (or high risk of imminent fracture)
- brain metastasis
- epidural metastasis
- leptomeningeal metastasis
- infection
- obstructed or perforated abdominal organ.

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## 6.3 References

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## 6.4 Appendices

### 6.4.1 Appendix: The Eastern Cooperative Oncology Group (ECOG) Performance Status scale

Grade	Person's function
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours
3	Capable of only limited self-care, confined to bed or chair more than 50% of waking hours
4	Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair
5	Dead

Source: Eastern Cooperative Oncology Group (Chair: Robert Comis) Oken MM, Creech RH, Tormey DC, et al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. *Am J Clin Oncol* 1982; 5:649-655. Available from: [http://www.ecog.org/general/perf\\_stat.html](http://www.ecog.org/general/perf_stat.html).

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### 6.4.2 Appendix: The Australia-modified Karnofsky Performance Status (AKPS) scale

Score (Category)	Person's function
100 (A)	Normal; no complaints; no evidence of disease
90 (A)	Able to carry on normal activity; minor signs or symptoms
80 (A)	Normal activity with effort; some signs or symptoms of disease
70 (B)	Cares for self; unable to carry on normal activity or to do active work
60 (B)	Requires occasional assistance but is able to care for most of his needs
50 (B)	Requires considerable assistance and frequent medical care
40 (C)	In bed more than 50% of the time
30 (C)	Almost completely bedfast
	Totally bedfast and requiring extensive nursing care by professionals and/or

<b>Score (Category)</b>	<b>Person's function</b>
20 (C)	family
10 (C)	Comatose or barely arousable
0	Dead

Source: Abernethy AP, Shelby-James T, Fazekas BS, et al. The Australia-modified Karnofsky Performance Status (AKPS) scale: a revised scale for contemporary palliative care clinical practice [SRCTN81117481]. *BMC Palliat Care* 2005; 4: 7. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1308820/?tool=pubmed>.

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## 7 Self-management

### 7.1 Patient communication and self-management

#### Evidence-based recommendation

SM1. For all patients with pain, provide education about cancer-related pain and its management. (NCCN, SIGN)

#### Evidence-based recommendation

SM2. Patients with pain should be provided with verbal and written information on pain and its management, including the following:

- pain causes
- common experiences of cancer pain (e.g. onset, timing)
- effective treatments (including medicines and non-pharmacological management strategies)
- effect of medicines including breakthrough analgesia (e.g. onset and duration of effect; when to take them)
- side-effects of medicines and how to prevent or manage them
- any safety concerns (e.g. mixing with alcohol, driving)
- ways to ensure patients have adequate access and supply to prescribed opioids

#### Evidence-based recommendation

- how to work with health professionals to achieve the best pain control possible (e.g. the importance of reporting rather than concealing pain, side-effects and other concerns about medication)
- common attitudes and beliefs that may prevent people with cancer receiving effective pain control (e.g. fears that opioids are addictive and used only at the end of life, and that patients will develop tolerance over time requiring dose escalation)
- when to seek help (e.g. if vomiting and unable to keep down fluids for one day, bowels not open 3 days, new pain, change in pain or pain not relieved by medication, difficulty arousing the patient from sleep easily during the daytime, confusion, difficulty accessing the medications). (Consensus)

Systematic review by Koller et al (2012): Koller A, Miaskowski C, De Geest S, Opitz O, Spichiger E. A systematic evaluation of content, structure, and efficacy of interventions to improve patients' self-management of cancer pain. *J Pain Symptom Manage.* 2012 Aug;44(2):264-84.

#### Evidence-based recommendation

SM3. Include the person's family, carers and significant others in education about pain and its management, if appropriate. (Consensus)

Carers are frequently involved in decision-making (e.g. to start and adhere to opioids) and management

### Educational resources for patients and families

#### *Overcoming cancer pain - booklet and DVD (Cancer Council NSW)*

Includes information, resources (e.g. helplines), a pain measurement scale and a prompt list of questions to ask medical staff.

Use of this resource has been shown to reduce pain by a randomised controlled trial (Lovell MR, Forder P, Stockler M, Butow PN, Briganti E, Chye R, et al. A randomised controlled trial of a standardised educational intervention for patients with cancer pain. *Journal of Pain and Symptom Management.* 2010; 40:49-59. [Available at: [www.ncbi.nlm.nih.gov/pubmed/20619212](http://www.ncbi.nlm.nih.gov/pubmed/20619212)])

#### *Managing pain with strong opioids in people with advanced, progressive disease (NICE)*

A booklet for people using opioid treatment is available from the UK National Institute of Health and Care Excellence (NICE) as part of their guideline on opioids via <http://guidance.nice.org.uk/CG140/PublicInfo/doc/English>

NICE also provide a training resource for health professionals on opioid prescribing in palliative care via <http://guidance.nice.org.uk/CG140/EducationResource/doc/English>



### *Safe storage and disposal of pain medication*

Advice for patients on safe storage and disposal of medication is available online and in printed fact-sheets from the American Society of Clinical Oncology (ASCO).

### **Self-management resources for patients and families**

The following self-management resources have been developed by the Guideline Working Group on the basis of systematic reviews by itself and others. (Luckett et al 2013, Marie N et al 2013, Bennett MI et al 2009, Cummings GG et al 2011, Sheinfeld Gorin S et al 2012, Koller A et al 2012)

Managing Cancer Pain: Planning for Success

The Cancer Council NSW provides a pain diary to help patients report their pain in a way optimal to its management.

### **Feedback**

We are currently seeking advice from patients and families on how these resources might be made more useful and user-friendly in future versions. Please use the comment function below to submit suggestions.

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## 7.1.1 References

Bennett MI, Bagnall AM, José Closs S. How effective are patient-based educational interventions in the management of cancer pain? Systematic review and meta-analysis *Pain* 2009 Jun;143(3):192-9 [Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/19285376>].

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Sheinfeld Gorin S, Krebs P, Badr H, Janke EA, Jim HS, Spring B, et al. Meta-analysis of psychosocial interventions to reduce pain in patients with cancer J Clin Oncol 2012 Feb 10;30(5):539-47 [Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/22253460>].

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## 8 Pharmacological Management

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### 8.1 Pharmacological management

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Please refer to Approved Product information before prescribing any agent discussed in this guideline

Perform comprehensive assessment and reassess efficacy and adverse effects

Exclude causes other than cancer before commencing opioid therapy for pain - see comprehensive assessment

Dose reduction and regular re-assessment may be needed for elderly or frail patients

Use the eviQ Opioid Conversion Calculator for calculating dose equivalents for opioid preparations available in Australia. Note that users need to set up a free account to access this tool

### 8.1.1 Regular analgesia

#### **Evidence-based recommendation**

P1. For patients with continuing pain, begin regular analgesia with paracetamol and/or a nonsteroidal anti-inflammatory drug (NSAID) if the patient has no contraindications. (ESMO, NCCN, SIGN)

#### **Evidence-based recommendation**

P2. If pain is moderate or severe or continues despite treatment with paracetamol or NSAIDs, consider a regular oral opioid. (EAPC,ESMO,NCCN)

- For patients with normal renal and hepatic function, start with a low dose (e.g. morphine 20–30 mg per day [10–15 mg sustained release every 12 hours or 5 mg immediate release every 4 hours] with 5 mg immediate release rescue doses 1 hourly as needed for breakthrough pain.
- In elderly or frail patients, starting doses should be half the above doses.

### Evidence-based recommendation

P3. If pain continues or recurs despite regular oral opioid analgesia and the patient feels that analgesia is inadequate, consider either of the following options:

- Add a NSAID (if the person is not already taking a NSAID and has no contraindications). (EAPC)
- Increase regular dose of opioid to incorporate the rescue doses taken in previous 24 hours (SIGN), then reassess pain severity and adverse effects within 48 hours. (Consensus)

Care should be taken when calculating a new regular dose for patients who are pain free at rest but have pain on movement (incident pain). If all the analgesia for this pain is incorporated into the new regular morphine dose, such patients could be rendered opioid toxic. In particular, they will be rendered excessively sleepy at rest. This is because pain is a physiological antagonist to the sedative and respiratory depressant side effects of opioids. In such cases, optimum analgesia is achieved by maximising background analgesia, pre-emptive analgesia for movement related pain, maximising non-opioid and adjuvant analgesics and consideration of other treatment modalities such as radiotherapy, anaesthetic nerve blocks, and stabilising surgery. (SIGN)

#### Sample calculation

A patient taking 5 mg morphine q4h requires three extra 5 mg rescue doses for breakthrough pain. The resulting total 24-hour dose is 45 mg morphine. The new regular analgesic regimen is morphine 7.5 mg q4h, with a new rescue dose of 7.5 mg.

Cyclooxygenase-2 selective inhibitors (eg celecoxib, etoricoxib, lumiracoxib and parecoxib) produce fewer gastrointestinal symptoms and clinically important ulcer complications than traditional NSAIDs although these can still cause serious and sometimes fatal GI reactions. (SIGN)

### Evidence-based recommendation

P4. Methadone should be initiated and titrated only by specialists familiar with its use. (EAPC, ESMO, NCCN)

### Evidence-based recommendation

P5. The transdermal route of administration can be considered as an alternative to oral administration if required, for patients unable to take oral medications, reduced risk of constipation with transdermal preparations, where lack of access to regular administration of other opioids acts as a barrier to pain management, or patient convenience. (EAPC) Due to the slow onset of effect and long duration of action, the transdermal route should be considered only when pain is stable. (ESMO, NCCN, SIGN)

Use one of the following options, referring to the eviQ Opioid Conversion Calculator:

#### Evidence-based recommendation

- Switch to transdermal buprenorphine (suitable for patients with stable mild pain only). (NICE) Note: A 20 mcg/hour buprenorphine transdermal patch is equivalent to 30 mg morphine daily orally.
- Switch to transdermal fentanyl. (NICE) Note: The lowest dose available (12 mcg/hour) for fentanyl transdermal patch is equivalent to 45 mg morphine daily orally.

In hot climates, the rate of transdermal absorption can be affected by fever, sweating and poor patch adherence to the skin

Before prescribing opioids, check renal function and titrate dose accordingly. See renal impairment for information about pain management where renal function is compromised.

NSAIDs are associated with gastrointestinal, cardiovascular and renal adverse effects and should be used with caution, particular in patients aged over 65 years. Gastrointestinal risk is increased in patients with a past history of upper gastrointestinal tract bleeding, NSAID-related ulcer or *Helicobacter pylori* infection. Cardiovascular risk is increased in patients with other cardiovascular risk factors. Risk of renal impairment is increased in patients with pre-existing renal impairment, chronic heart failure or cirrhosis and in those taking diuretics, angiotensin-converting-enzyme inhibitors, angiotensin II receptor blockers, aspirin or other nephrotoxic drugs, and in patients on a salt-reduced diet.

Provide information and education for patients and carers about cancer pain management, including the benefits and risks of opioid medicines. (Patients and health professionals commonly have concerns about addiction, tolerance and dependence that are disproportionate to the risks.) See also Self-management section.

If the prescribing clinician or other staff are unfamiliar with an analgesic agent under consideration, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist who are familiar with the use of the agent.

For all opioids listed on the PBS, one month's supply can be obtained via a telephone extended prescription authorisation from the PBS. Prescribing one month at a time is recommended once pain is stable.

For patients with a specific pain syndrome, consider an adjuvant.

Preventing, monitoring and managing adverse effects of opioids

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### 8.1.2 Renal impairment

#### **Evidence-based recommendation**

P6. For patients with renal impairment (calculated creatinine clearance 30-90ml/min), carefully monitor for treatment-related adverse effects. If opioid-related adverse effects occur, consider the following options:

- Reduce the total 24-hour dose of regular opioid (either by reducing dose and maintaining dose interval, or increasing dose interval and maintaining dose). (ESMO, SIGN)
- Switch from sustained release to immediate release opioid at an appropriate regular dosing interval. (SIGN)
- Switch to a different opioid (e.g. consider buprenorphine or fentanyl instead of morphine, codeine or hydromorphone) or methadone under specialist supervision. (EAPC, ESMO, NCCN, SIGN)

#### **Evidence-based recommendation**

P7. Morphine is not recommended for patients with severe (stage 4-5) kidney disease (calculated creatinine clearance of less than 30 mL/minute) due to accumulation of active metabolites and opioid toxicity. (EAPC, SIGN)

#### Evidence-based recommendation

Buprenorphine, fentanyl, hydromorphone or oxycodone are preferred opioids in severe kidney disease. Codeine, a weak opioid often chosen as step 2 on the World Health Organisation (WHO) Cancer Pain Ladder, is metabolised to morphine derivatives within the body and should therefore also be avoided in kidney disease. An alternative weak opioid, Tramadol, can be used with a maximal dose of 50-100mg bd in patients with a calculated creatinine clearance of 10-30ml/min or 50mg bd if creatinine clearance <10ml/min and undergoing dialysis. Tramadol is dialysed out, so doses should be given post-dialysis. (Consensus)

Davison SN, Koncicki H, Brennan F. Pain in Chronic Kidney disease- a Scoping review, Seminars in Dialysis 2014; 27: 188-204

Fentanyl can be used in patients with severe renal impairment, including patients on dialysis.

Switch to a different opioid under specialist advice (e.g. sufentanil, methadone).

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### 8.1.3 Additional prescribed analgesic for breakthrough pain

Breakthrough pain is pain of moderate or severe intensity arising on a background of controlled chronic pain. Breakthrough pain may be described as spontaneous (unexpected) or incident (expected or predictable). (SIGN)

#### Evidence-based recommendation

P8. In addition to regular opioids, routinely prescribe short-acting opioids at a dose equivalent to one-sixth of total 24-hour dose, to be administered if breakthrough pain occurs. (NHS, SIGN) Rescue doses should be prescribed at 1-hourly intervals when required (NCCN) with advice given for the patient to seek health care professional advice if 3 consecutive doses have not relieved pain. (Consensus)

#### Evidence-based recommendation

P9. If breakthrough pain occurs, monitor the number of breakthrough doses. If rescue analgesic doses have been effective with no adverse effects, re-titrate the regular opioid 24-hour dose by calculating the previous 24 hour opioid requirement including breakthrough doses. (SIGN) Note - if breakthrough analgesia is taken preemptively for incident pain, then the regular dose may not need to be increased.

##### Sample calculation

A patient taking 5 mg morphine q4h requires three extra 5 mg rescue doses for breakthrough pain. The resulting total 24-hour dose is 45 mg morphine. The new regular analgesic regimen is morphine 7.5 mg q4h, with a new rescue dose of 7.5 mg.

#### Evidence-based recommendation

P10. If the person experiences incident pain on a background of stable pain control while taking regular opioids, give additional oral short-acting opioids at a dose equivalent to one-sixth of total 24-hour dose. Transmucosal fentanyl preparations may be of use and require individual titration.(NHS, SIGN, EAPC)

#### Evidence-based recommendation

P11. If the person experiences incident pain (e.g. movement-related pain or pain with dressing changes), advise him/her to take preemptive analgesia 30 minutes before activity that is likely to cause pain. (EAPC, NCCN, NHS, SIGN)

##### Sample calculation

A patient taking 5 mg morphine q4h requires three extra 5 mg rescue doses for breakthrough pain. The resulting total 24-hour dose is 45 mg morphine. The new regular analgesic regimen is morphine 7.5 mg q4h, with a new rescue dose of 7.5 mg.

Nerve blocks can be considered for refractory incident pain.

Transmucosal fentanyl (i.e. lozenges) is not recommended as first-line treatment for breakthrough pain.

More information about re-titrating the opioid dose for breakthrough pain under #Regular analgesia.

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### 8.1.4 Adjuvants

#### **Evidence-based recommendation**

P12. For patients with neuropathic pain that persists despite non-opioid and opioid analgesia consider the following options (EAPC, ESMO, NCCN, SIGN):

- Anticonvulsant agents (gabapentin or pregabalin)
- Antidepressants (amitriptyline, nortriptyline or venlafaxine).

For anticonvulsants, start at a low dose and titrate according to benefit and adverse effects.

Pregabalin is available on the PBS. Gabapentin is not reimbursed by PBS for use in pain management. Self-funding may be expensive.

Carbamazepine is not registered for the management of neuropathic pain due to cancer, has haematological adverse effects and may interfere with chemotherapy.

If the prescribing clinician or other staff are unfamiliar with an adjuvant agent under consideration, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist who are familiar with the use of the agent.

If pain persists despite an adjuvant, refer for specialist advice as interventional techniques. may be of value.

### Evidence-based recommendation

P13. For patients with bone metastases consider bisphosphonates for prevention of bone pain. (ESMO, NCCN, NHS, SIGN)

Update

Systematic review by: Porta-Sales J, Garzon-Rodriguez C, Llorens-Torrone S, Brunelli C, Pigni A, Caraceni A. Evidence on the analgesic role of bisphosphonates and denosumab in the treatment of pain due to bone metastases: A systematic review within the European Association for Palliative Care guidelines project. Palliat Med. 2016 Mar 22.

Bisphosphonates should be prescribed with caution in patients with renal impairment.

Bisphosphonates have been associated with osteonecrosis of the jaw. The risk is increased after dental extractions and by periodontal disease. The Therapeutic Goods Administration (Australian Government Department of Health and Ageing) encourages health professionals prescribing bisphosphonates to:

- consider dental referral of the patient before starting treatment, especially for people at increased risk, such as the elderly
- reinforce the importance of good oral hygiene
- inform patients of the symptoms of osteonecrosis of the jaw that may occur while taking or after being given a bisphosphonates, such as "toothache" or pain, swelling or numbness of an area of the jaw or a discharge around a dental implant
- advise their patients that they should notify their dentist that they are taking or have been given a bisphosphonates. [See <http://www.tga.gov.au/safety/alerts-medicine-bisphosphonate-071211.htm>]

<b>Bisphosphonate</b>	<b>TGA-approved Australian indications include:</b>
Disodium pamidronate	Treatment of tumour-induced hypercalcaemia Treatment of predominantly lytic bone metastases from breast cancer, advanced multiple myeloma
Ibandronate sodium	Treatment of metastatic bone disease in patients with breast cancer (tablets, injection) Treatment of tumour-induced hypercalcaemia, with or without metastases (injection)
	Treatment of hypercalcaemia of malignancy

<b>Bisphosphonate</b>	<b>TGA-approved Australian indications include:</b>
Sodium clodronate	Treatment of osteolytic lesions (breast cancer metastases, multiple myeloma)
Zoledronic acid	Treatment of tumour-induced hypercalcaemia Prevention of skeletal related events in advanced malignancy involving bone

TGA: Therapeutic Goods Administration

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### 8.1.5 Anti-cancer treatment

#### **Evidence-based recommendation**

P14. For patients with painful bone metastases, consider single-fraction radiotherapy or radioisotopes. (ESMO, NCCN, NHS, SIGN)

#### **Evidence-based recommendation**

P15. Consider denosumab for preventing skeletal events and bone pain from metastatic breast or prostate cancer.

(NCCN)

Denosumab is associated with increased risk of hypocalcaemia. The starting dose should be low and reassessed after 1 week.

Denosumab is associated with osteonecrosis of the jaw. Dental review is recommended before and after starting denosumab treatment. Supplement with calcium and Vitamin D for patients who are not hypercalcaemic.

Denosumab (RANK ligand monoclonal antibody) is registered in Australia for the treatment of skeletal-related events in patients with bone metastases from solid tumours. It is listed on the PBS for the treatment of bone metastases in patients with breast cancer or hormone resistant prostate cancer.

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## 8.1.6 Interventional therapy

### **Evidence-based recommendation**

P16. For patients with refractory pain despite carefully titrated doses of conventional medical therapies, consider whether a spinal route of administration may be indicated. (NCCN, NHS, SIGN)

### **Evidence-based recommendation**

P17. Consider nerve blocks for selected pain syndromes (e.g. coeliac plexus block for pain in pancreas or upper abdomen). (NCCN)

### **Evidence-based recommendation**

P18. Consider intrathecal infusion of analgesic for patients with any of the following:

- difficult-to-control pain (EAPC)
- diffuse pain (NCCN)
- unacceptable opioid-related toxicity despite optimal use of adjuvants and a trial of switching opioids. (SIGN)

Refer to a specialist pain medicine physician or palliative medicine physician.

[More information about opioid switching.](#)

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## 8.1.7 Preventing, monitoring and managing adverse effects of opioids

### **8.1.7.1 Routine prevention of adverse effects and education**

Explain to patients starting opioids that constipation is a very common side effect, and provide education about preventative bowel care.

Provide patients with information about the prevalence of opioid-related emesis and education about non-pharmacological management (e.g. avoiding strong smells).

Ensure adequate mouth care for all patients receiving opioids.

Explain to patients starting opioid treatment that they may experience nightmares.

More information about Self-management

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### **8.1.7.2 Assessment and management of opioid toxicity and adverse effects**

#### **Evidence-based recommendation**

P19. Reduce the risk of constipation in non-terminal patients by using all of the following strategies:

- Maintain adequate hydration. (NCCN)
- Encourage physical activity (ambulant patients). (NCCN)
- Provide education on bowel hygiene routine (e.g. dietary fibre). (Consensus)
- Use a combination of stimulant and softening laxatives (EAPC, NCCN, NICE, SIGN)
- Avoid other medicines that can aggravate constipation (e.g. 5HT3 antagonists) if possible. (Consensus)

#### **Evidence-based recommendation**

P20. For an ambulant non-terminal patient with critical constipation caused by opioids that is not responding to oral stimulant and softening laxatives or polyethylene glycol (NCCN), consider one of the following options:

- Switch to less constipating opioid (e.g. fentanyl). (NICE)

#### Evidence-based recommendation

- Switch to a combination of oxycodone hydrochloride with naloxone hydrochloride if the person's regular 24-hour opioid dose conversion is below maximum dose. (Consensus)

The combination of oxycodone hydrochloride and naloxone hydrochloride has not been compared with laxatives in this patient population. (NPS Radar. Oxycodone-with-naloxone controlled-release tablets (Targin®). 2011(December) [cited 2012 20th October]; Available from: [http://www.nps.org.au/\\_data/assets/pdf\\_file/0005/135869/oxycodone\\_with\\_naloxone.pdf](http://www.nps.org.au/_data/assets/pdf_file/0005/135869/oxycodone_with_naloxone.pdf))

- For patients receiving palliative care and for whom other laxative therapies are not indicated or effective, consider short-term use of methylnaltrexone. (NCCN, EAPC)

If opioid-induced hyperalgesia is suspected (e.g. pain is escalating despite pain management according to these guidelines), refer to consult a specialist pain medicine physician, palliative medicine physician palliative care team or palliative medicine specialist for urgent advice. ( Consensus).

Rule out other causes of constipation such as obstruction or hypercalcaemia

For more information on management of constipation and bowel obstruction, refer to recommendations and guidance of the Palliative Care Clinical Studies Collaborative.

#### Evidence-based recommendation

P21. When commencing an opioid and at each opioid dose increment, routinely prescribe 'as-required' prophylactic antiemetic (e.g. prochlorperazine maleate, metoclopramide or haloperidol). (EAPC, NCCN, NICE)

#### Evidence-based recommendation

P22. If nausea persists after symptom review, consider prescribing an antiemetic to be taken regularly. (ESMO, NCCN, NHS, NICE)

#### Evidence-based recommendation

P23. If nausea is persistent or severe, investigate further to determine causes (e.g. constipation, central nervous system pathology, chemotherapy, radiation therapy). (NCCN)

<b>Recommended first-line anti-emetic agents</b>	
Haloperidol	0.5–1.5 mg orally twice per day
Metoclopramide hydrochloride	10–20 mg orally every 6-8 hours as needed
Prochlorperazine	5-10 mg orally every 6-8 hours as needed

Source: NCCN

For more information on management of emesis, refer to recommendations and guidance of the Palliative Care Clinical Studies Collaborative

#### **Evidence-based recommendation**

P24. If opioid toxicity is suspected (Consensus):

- Review all medicines and consider whether medicines may be contributing to the signs and symptoms.
- Take a detailed history and consider whether the person's underlying disease (e.g. brain metastases, hepatic impairment) or other factors may be contributing to the signs and symptoms.
- Complete a thorough physical examination.
- Consider further investigations.

#### **Signs and symptoms of severe opioid toxicity**

Sedation

Respiratory depression

Myoclonus

Pinpoint pupils

Seizures

#### **Opioid-related toxicity of the central nervous system**

Cognitive impairment

Confusion

Delirium

Hallucinations

Myoclonus

Sedation

#### **Evidence-based recommendation**

P25. When opioid-related toxicity of the central nervous system is suspected, consider the differential diagnosis of causes. Consider undertaking the following investigations as indicated by the clinical situation (Consensus):

- Ask about relevant history.
- Check electrolytes (sodium, potassium, chloride, serum calcium), urea, creatinine, calcium, glucose, liver function and oxygen saturations.
- Perform urine dipstick test.
- Order chest X-ray, CT of brain if indicated.

#### **Evidence-based recommendation**

P26. If opioid-related toxicity of the central nervous system is a probable cause of confusion or other central nervous system symptoms (NHS):

- Consider supplemental hydration if the patient is dehydrated.
- Consider switching to a different opioid or reducing dose and retitrate according to response.

#### **Evidence-based recommendation**

P27. For opioid-related confusion or delirium, treat the underlying aetiology and manage according to life expectancy (Consensus):

- If NOT last days of life, trial non-pharmacological management first to manage delirium symptoms (e.g. well lit, quiet environment). If the symptoms are not adequately improved consider reducing dose of opioid or switching to a different opioid.



#### Evidence-based recommendation

P28. Manage opioid-related myoclonus according to life expectancy (Consensus):

- Manage reversible causes such as renal impairment, dehydration, very high doses of opioids.
- If NOT last days of life, consider reducing dose of opioid or switching to a different opioid.
- If last days of life, consider reducing dose of opioid if appropriate and/or a benzodiazepine in addition to reducing opioid dose or switching opioid.

#### Evidence-based recommendation

P29. Respiratory depression is an uncommon adverse effect of opioid therapy for cancer pain.

If opioid-related respiratory depression is suspected (Consensus):

- Eliminate other causes such as effect of sedatives, hypercapnia and/or excessive oxygen flow.
- Check hydration status and renal function.
- For patients receiving methadone, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist familiar with its use.

#### Evidence-based recommendation

P30. Manage opioid-related respiratory depression with all of the following (Consensus):

- Withhold opioid dose and recommence either at lower dosing frequency or reduced dose.
- Ensure the person is positioned properly.
- Rehydrate if dehydrated.

#### Evidence-based recommendation

P31. Manage opioid-related respiratory depression according to severity of symptom:

- Withhold next opioid dose and recommence either at a reduced dose or less frequent dosing interval.
- Ensure the person is positioned to maintain airway and provide oxygen if appropriate.
- If respiratory rate  $\leq 8$ /minute and patient unrousable, use appropriate dose of naloxone in frequent small doses that aim to improve consciousness without worsening pain (diluting ampoule to 10mL). (ESMO, NCCN)

#### **Evidence-based recommendation**

- If patient rousable (despite low respiratory rate), monitor patient closely for decrease in rousability until respiratory rate improves. Encourage deep breathing.
- For patients receiving fentanyl transdermal patches or methadone, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist familiar with use of the agent.

In patients receiving methadone it may be difficult to investigate the cause of respiratory depression for because of the variable half-life of methadone (1-120 hours).

#### **Evidence-based recommendation**

P32. If opioid-related pruritis is suspected, exclude renal impairment and hepatic impairment as cause. (Consensus)

#### **Evidence-based recommendation**

P33. Manage opioid-related pruritis with either or both the following:

- Consider switching to a different opioid. (NCCN, NHS) If pruritis persists despite opioid switching after trialling more than one opioid, refer to a relevant specialist team (e.g. palliative care and/or pain medicine). (Consensus)
- Consider symptomatic management with an H1 antihistamine (choose one of the newer, less sedating agents). (Consensus)

#### **Evidence-based recommendation**

P34. Consider urinary retention in patients with urinary symptoms. (Consensus)

#### **Evidence-based recommendation**

P35. If opioid-induced hyperalgesia is suspected (e.g. pain is escalating despite pain management according to these guidelines), refer to palliative care team or palliative medicine specialist for urgent advice. (Consensus)

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### 8.1.7.3 Opioid rotation

#### Evidence-based recommendation

P36. Consider switching to a different opioid in either of the following situations:

- Optimal pain relief cannot be achieved despite appropriate dose. (ESMO, NCCN, NHS, NICE)
- The patient is experiencing unacceptable opioid-related adverse effects. (EAPC)
- If the oral route is no longer possible, switch to subcutaneous morphine, hydromorphone, oxycodone or fentanyl. Transdermal fentanyl is another alternative in stable pain. (NHS)

#### Evidence-based recommendation

P37. If switching to a different formulation or route of administration with the same agent, look up conversion for total 24-hour opioid dose via the eviQ Opioid Conversion Calculator. (EAPC, ESMO, NCCN, NHS, NICE)

#### Evidence-based recommendation

P38. If switching to a different agent because the previous route of administration is no longer possible, a starting dose lower than the equivalent total 24-hour opioid dose of the previous agent should be used. (EAPC)

#### Evidence-based recommendation

P39. If switching to a different opioid agent due to unacceptable treatment-related adverse effects, despite optimal pain relief, start with a lower dose, then adjust dose carefully while monitoring for pain control and adverse effects. (EAPC, ESMO)

Use the eviQ Opioid Conversion Calculator for calculating dose equivalence of transdermal fentanyl. Note that users need to set up a free account to access this tool

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#### **8.1.7.4 Preventing misuse of opioids**

##### **Evidence-based recommendation**

P40. If there is reason to suspect that a patient's prescribed opioids are being misused or diverted:

- Explain to the person that goal is pain relief without misuse. (Consensus)
- Assess for opioid dependency disorder. (Consensus)
- Establish a treatment agreement with the person, including an agreement to limit the supply of opioids to a single prescriber and pharmacy. (NCCN)

In Victoria, when opioids are suspected of being misused, it is a legal requirement that they be prescribed by a single prescriber and notification of the Department of Health, Drugs and Poisons Unit is mandatory.

##### **Evidence-based recommendation**

P41. Advise all patients and carers to ensure medicines are kept out of children's reach, out of sight and in a secure cupboard. (Consensus)

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#### **8.1.7.5 Assessing capacity to drive a vehicle**

##### **Evidence-based recommendation**

P42. For patients taking opioids, assess capacity to drive using current national guidelines and warn of impairment at higher doses. (Consensus)

Austrroads Limited. Assessing fitness to drive. Medical standards for licensing and clinical management guidelines. Sydney: Austrroads Ltd; 2012. Available from: <http://www.austrroads.com.au>

Cognitive performance is reduced early in treatment with opioids (mainly due to sedation) but the brain readily adapts. Therefore, a stable dose of opioid may not affect driving performance, provided the person is not taking other medicines that impair driving. (Austroads)

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### 8.1.8 Review and referral

#### **Evidence-based recommendation**

P43. If pain is not adequately controlled despite recommended pain management strategies, including analgesic medication, consult a specialist pain medicine physician or palliative medicine physician. (NICE, NHS)

If the prescribing clinician or other staff are unfamiliar with any agent under consideration, consult a specialist pain medicine physician, palliative medicine physician, clinical pharmacist or clinical pharmacologist who are familiar with the agent.

Refer for specialist review if:

- opioid-related adverse effects persist despite opioid switching after trialling more than one opioid
- opioid-induced hyperalgesia is suspected.

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## 8.2 References

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Porta-Sales J, Garzon-Rodriguez C, Llorens-Torrome S, Brunelli C, Pigni A, Caraceni A. Evidence on the analgesic role of bisphosphonates and denosumab in the treatment of pain due to bone metastases: A systematic review within the European Association for Palliative Care guidelines project. *Palliat Med.* 2016 Mar 22

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Scottish Intercollegiate Guidelines Network. Control of pain in adults with cancer. A national clinical guideline [Version amended 18 July 2011] Edinburgh: SIGN; 2008. Available from: <http://www.sign.ac.uk/pdf/SIGN106.pdf>

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## 9 Non-pharmacological Management

### 9.1 Non-pharmacological management

#### **Evidence-based recommendation**

N1. Consider referral to a physiotherapist for assessment of functional ability and potential suitability of non-pharmacological pain management strategies. (NCCN, NHS, SIGN)

Consider complementary therapies (see table below)

#### **Evidence-based recommendation**

N2. Provide support for any psychosocial and spiritual concerns identified during comprehensive assessment.

**Evidence-based recommendation**

(NCCN)

**Evidence-based recommendation**

N3. Consider referral to an occupational therapist for assessment and management. (NCCN, NHS)

Occupational therapists can assess activities of daily living, energy conservation, anxiety management, relaxation and lifestyle impact management, and assess potential benefits of diversional therapy, splints, role support, advice on functional ability, positional and seating assessment and advice, wheelchair, and assistive equipment.

**Evidence-based recommendation**

N4. Consider referral to a clinical psychologist for psychological therapies and support:

- Cognitive-behavioural therapy (NCCN, SIGN)
- Relaxation techniques (NCCN)
- Distraction techniques (NCCN)
- Guided imagery therapy. (NCCN)

**Evidence-based recommendation**

N5. Consider music either prerecorded or with a music therapist (Consensus)

Systematic review by Bradt et al (2011): Bradt J, Dileo C, Grocke D, Magill L. Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database Syst Rev.* 2011 Aug 10;(8):CD006911. doi: 10.1002/14651858.CD006911.pub2.

### Evidence-based recommendation

N6. Offer to discuss any complementary therapies the person may wish to consider, and provide reliable information about the evidence for their effectiveness. (Consensus)

Principles of holistic management; Potential for drug–drug interactions

### Complementary therapies for cancer pain management

Modalities recommended in international guidelines	
Modality	Source(s)
Bed/bath/walking aids	NCCN
Cognitive-behavioural therapy	SIGN, NCCN
Distraction therapy	NCCN
Heat/ice therapy	NCCN
Imagery/hypnosis	NCCN
Massage	NCCN, SIGN
Transcutaneous electrical nerve stimulation (TENS)	NCCN
Reflexology	SIGN
Reiki	SIGN
Relaxation	NCCN

## 9.2 References

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## 10 Practice improvement

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### Practice improvement and quality control

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**Notice:** Recommendations and resources for audit will be added to the next draft of this guideline

Relevant Australian initiatives include:

Palliative Care Australia National Standards Assessment Program

Palliative Care Outcomes Collaboration

## 11 Resources

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### Contents

- 1 Resources
  - 1.1 International guidelines for cancer pain management
  - 1.2 Other relevant guidelines
  - 1.3 Health professional education
  - 1.4 Prescribing information
  - 1.5 Other resources

### 11.1 Resources

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#### 11.1.1 International guidelines for cancer pain management

Caraceni A, Hanks G, Kaasa S, European Palliative Care Research Collaborative. Use of opioid analgesics in the treatment of cancer pain: evidence-based recommendations for the EAPC. *Lancet Oncol* 2012; 13: e58-e68. Available from: <http://www.eapcnet.eu/LinkClick.aspx?fileticket=i-bB4cvZyZg%3d&tabid=1794>.

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### 11.1.2 Other relevant guidelines

National Breast Cancer Centre and National Cancer Control Initiative. Clinical practice guidelines for the psychosocial care of adults with cancer. Camperdown, NSW: National Breast Cancer Centre; 2003. Available at: <http://canceraustralia.gov.au/publications-resources/cancer-australia-publications/clinical-practice-guidelines-psychosocial-care>.

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### 11.1.3 Health professional education

CareSearch

National Institute of Health and Care Excellence

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### 11.1.4 Prescribing information

NPS (formerly National Prescribing Service)

eviQ (Cancer treatments online: a service of Cancer Institute NSW)

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### 11.1.5 Other resources

Austrroads guidelines for assessing fitness to drive

Australian Pain Society recommendations on pain assessment in people with cognitive impairment

eviQ Opioid Conversion Calculator

Palliative Care Australia National Standards Assessment Program

Palliative Care Outcomes Collaboration

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## 12 Opioid formulations

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### Opioid formulations

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Please refer to the PBS A-Z Medicine Listing for up to date information about opioid formulations available in Australia.

## 13 References

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