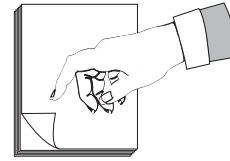


Analgesics in persistent pain

Objectives

- Assess dosing of paracetamol and place in therapy
- Review use of NSAIDs (COX-2 selective and conventional)
- Review use and dosage of tramadol
- Assess use of opioids and adverse-effect management
- Identify potential drug interactions.

Please tear off each section. Submission cover sheet and clinical audit forms to be returned to NPS. Please tear off forms carefully.



How to participate

1. Select patients

Patients must be:

- 18 years or older, and
- presenting for ongoing management of persistent (≥ 3 months) non-malignant pain (exclude neuropathic pain or migraine alone), and
- taking analgesic(s): paracetamol, NSAID (including aspirin > 300 mg/day and topical or COX-2 selective NSAIDs), tramadol or other opioid.

Patients may be selected as they present, or from a search of medical records.

Note: Searching by the drug class 'Analgesics' in some prescribing software (e.g. Medical Director v 2.87) will only find patients using simple analgesics and/or opioids. To find patients using NSAIDs, search for the drug classes 'NSAIDS systemic' and 'NSAIDS topical' separately.

2. Obtain patient consent

You must inform patients that data from their medical records may be used for clinical audits, and obtain their verbal consent. Display the *Quality assurance in this practice and your privacy* poster and give your patient a copy of the *Patient information and consent* leaflet (you will need to make copies of this leaflet).

3. Record patient data (first data collection)

Use the *Patient list* to record the patients included. DO NOT send to NPS — keep this list to identify patients for the review phase (see No. 6).

Complete a clinical audit form for each patient, using this *Guide*.

Please note:

- patient information must only be collected and recorded by the participating GP
- both full-time and part-time GPs must submit 20 completed clinical audit forms.

4. Submit the clinical audit forms

Return the 20 clinical audit forms and *Submission cover sheet* to:

**NPS Clinical Audit: Analgesics in persistent pain
Locked Bag 4888
STRAWBERRY HILLS NSW 2012**

**To be received at NPS not later than
10 November 2006.**

Note: Late submissions cannot be accepted.

5. When you receive your results

You will receive:

- your original clinical audit forms
- feedback on your individual results
- aggregate results of all participants' management practices plus commentary
- a *Review phase pack* to complete and return.

6. Complete the clinical audit cycle (second data collection)

You are required to:

- review your individual and aggregate results in the *Feedback report*
- identify which of your original 20 patients require follow-up
- record additional patient data
- reflect on changes in management
- submit the *Review phase pack*.

Professional development and PIP

NPS has applied for clinical audit points in the 2005–2007 triennium of the Royal Australian College of General Practitioners (RACGP) Quality Assurance & Continuing Professional Development (QA&CPD) Program (category 1 activity) and the Australian College of Rural and Remote Medicine (ACRRM) Professional Development Program (practice improvement category — includes mandatory points).

The *Review phase pack* **must** be completed and returned to NPS for RACGP and/or ACRRM clinical audit points to be allocated and for the clinical audit to qualify for the Quality Prescribing Initiative (QPI) of the Practice Incentives Program (PIP). You will then be sent a certificate of completion.

Guidelines for practice

You can use the points marked (▶) as guidance to assess areas of your own practice. The guidance is based on the evidence presented under each point.

Co-existing conditions

- ▶ **Check for contraindications and precautions with analgesics (paracetamol, NSAIDs, tramadol, opioids)¹ (Q5, Q6)**

Drug or drug class	Contraindications ¹⁻⁴	Precautions ¹⁻⁴
paracetamol		Chronic liver disease: risk of liver damage may be increased, but evidence is lacking.
NSAIDs (COX-2 selective and conventional)	<p>Active peptic ulcer disease or GI bleeding</p> <p>Hypersensitivity to aspirin or other NSAID (e.g. asthma, anaphylaxis)</p> <p>Moderate to severe renal impairment: avoid use of NSAIDs</p>	<p>Renal impairment: can worsen renal function and may lead to acute renal failure, especially in those with pre-existing renal impairment, heart failure, those taking diuretics and elderly. Monitor plasma sodium, potassium and creatinine levels, blood pressure, oedema and urinalysis. Use short half-life NSAID for elderly patients or those with renal impairment e.g. diclofenac, ibuprofen.</p> <p>Hepatic impairment: liver function test abnormalities may worsen with rare, but severe hepatic reactions possible.</p> <p>Asthma: may increase risk of bronchospasm.</p> <p>Coagulation disorders: e.g. haemophilia, von Willebrand's disease, severe thrombocytopaenia (platelet count < 50 000/mm³): risk of bleeding and thrombosis.</p> <p>Crohn's disease: condition may worsen.</p> <p>Heart failure: may be exacerbated.</p> <p>High cardiovascular risk: (e.g. angina, previous stroke, transient ischaemic attack (TIA) or MI, heart failure, angioplasty, diabetes, peripheral vascular disease): risk of thrombotic events.</p> <p>History of GI bleeding or peptic ulcer: only use NSAIDs with extreme caution.</p> <p>Hypertension: may be exacerbated.</p> <p>Women planning pregnancy: fertility may be temporarily impaired.</p>
tramadol	<p>MAOIs contraindicated within 14 days of tramadol (2 days for moclobemide)</p> <p>Uncontrolled epilepsy</p> <p>Acute intoxication with alcohol, hypnotics, analgesics, opioids or psychotropic drugs</p> <p>Severe renal impairment</p>	<p>Increased risk of seizures: e.g. history of seizures, taking other medicines that lower the seizure threshold, head injury.</p> <p>Renal impairment: reduce dose or frequency in moderate renal impairment (see page 5).</p> <p>Hepatic impairment: reduce dose of tramadol in cirrhosis and do not use controlled release formulation in severe hepatic impairment.</p> <p>Elderly: do not exceed 300 mg/day in patients > 75 years of age.</p> <p>Respiratory depression: use with caution in patients at risk of respiratory depression.</p>
opioids	<p>Significant respiratory disease (e.g. severe COPD)</p> <p>Phaeochromocytoma</p> <p>MAOIs contraindicated within 14 days of pethidine. Monitor patients on other opioids for adverse response (rare).</p>	<p>Uncorrected endocrine abnormalities, hypothyroidism, adrenocortical insufficiency, acute alcoholism, myasthenia gravis: careful titration of dose required.</p> <p>Epilepsy or a recognised risk for seizure: increased risk of seizure.</p> <p>Renal impairment: continued use of codeine, dextropropoxyphene, hydromorphone, morphine and pethidine may lead to accumulation of active/toxic metabolites. Adjust dose or use fentanyl or oxycodone. Oxycodone dosage may need to be reduced in moderate to severe renal impairment.</p> <p>Hepatic impairment: dose adjustment may be required. Avoid morphine in severe hepatic impairment.</p> <p>Elderly: increased risk of adverse effects including cognitive impairment and falls; use a lower initial dose and titrate to effect.</p> <p>Pregnancy: ADEC category C except codeine (category A).</p> <p>Asthma (during acute attack, unless ventilated): opioids depress respiration and cough reflex and dry secretions.</p>

Co-existing conditions (cont'd)

- ▶ **Reduce analgesic dose or avoid, in renal or hepatic impairment as recommended¹ (Q6)**

Renal impairment ¹	Creatinine clearance ^{1*}
Mild	25–50 mL/min
Moderate	≥ 10 and < 25 mL/min
Severe	< 10 mL/min

* These definitions are specifically for dosage adjustment and **not** for classification of renal disease.

Calculate creatinine clearance from the Cockcroft–Gault equation as follows¹ (this may be available as a calculator in your prescribing software):

Creatinine clearance (mL/min) = $\frac{(140 - \text{age in years}) \times \text{weight (kg)}}{72 \times \text{serum creatinine (mmol/L)}}$

For males

Multiply result by 0.85 for females.

Estimated glomerular filtration rate (eGFR) is not recommended for use in drug dosing determinations but can be used to classify levels of renal impairment.⁵

Paracetamol

- ▶ **Use paracetamol first line in mild to moderate persistent pain²**

Q7. When taken regularly in therapeutic doses, paracetamol has few adverse effects or drug interactions.²

Modified release paracetamol (Duatrol SR, and Panadol Osteo which has a brand price premium) allows less frequent dosing (every 6–8 hours), which patients may prefer. This preparation is subsidised under the Pharmaceutical Benefits Scheme (PBS) for relief of persistent pain associated with osteoarthritis.⁶

- ▶ **Use safe and effective doses of paracetamol**

Q8. Advise patients not to take more than 4 g paracetamol per day (including all sources of paracetamol e.g. over-the-counter cold and flu preparations).¹

Where patients report insufficient pain control with paracetamol, check the dose and frequency used. Dosing in persistent pain should be regular (by the clock) rather than as needed.⁷

Recommended paracetamol doses in adults:

- 1–2 × 500 mg immediate-release tablets every 4–6 hours; maximum 8 tablets (4 g) per day
- 2 × 665 mg modified-release* tablets every 6–8 hours; maximum 6 tablets (3 990 mg) per day.^{1,8}

* For the purposes of this clinical audit and all included drugs, the term 'modified-release' includes 'controlled-release', 'slow-release' and 'sustained-release'.

NSAIDs

Drug name	Brand names
aspirin > 300 mg/day	Many brands
celecoxib	Celebrex
diclofenac	e.g. Voltaren, Clonac, Diclohexal, Fenac
diflunisal	Dolobid
ibuprofen	e.g. Butalgin, Tri-Profen, Nurofen, Rafen, Brufen, Advil
ibuprofen + codeine	Nurofen Plus, Panafen Plus
indomethacin	Arthrexin, Indocid
ketoprofen	Orudis/SR, Oruvail SR
ketorolac	Toradol
lumiracoxib	Prexige
mefenamic acid	Mefic, Ponstan
meloxicam	Mobic, Movalis
naproxen	e.g. Inza, Naprosyn/SR, Proxen/SR, Aleve, Naprogesic, Anaprox
piroxicam	Feldene/D, Mobilis/D, Pirohexal/D
sulindac	Aclin
tiaprofenic acid	Surgam

Q10. If NSAIDs are required and potential benefits outweigh the risks, use the lowest effective dose for the shortest possible length of time.¹ Choose an NSAID to minimise the risk of harm.

There is no benefit in using more than one NSAID concurrently — this significantly increases the risk of gastrointestinal toxicity.^{1,8,9}

Topical NSAIDs are more effective than placebo in chronic pain conditions but their efficacy has not been compared with paracetamol or equivalent oral NSAIDs.¹ Topical NSAIDs cause fewer adverse effects than oral NSAIDs, but may be less effective.⁸

NSAIDs (cont'd)

- ▶ **Use an adequate trial of paracetamol before initiation of an NSAID where appropriate**

In some circumstances, paracetamol may not be the most appropriate choice (e.g. more severe pain, previous trial ineffective) and an NSAID should be initiated instead of, or at the same time as, paracetamol.⁷ Use a stepwise approach to analgesia with maximum daily doses before considering a move to the next step of substituting or adding a different analgesic.⁷

Q11. A trial of paracetamol with daily doses of 4 g for 2–4 weeks is considered adequate. Use paracetamol with either an NSAID or an opioid to allow smaller doses of the other agent to be used, reducing the risk of adverse effects.²

- ▶ **Check for contraindications and precautions in patients using NSAIDs (Q5, Q6)**

Patients using more than one NSAID or high doses of NSAIDs, those with a history of peptic ulcer or gastrointestinal (GI) bleed, or aged over 65 years are at increased risk of **GI toxicity**.⁸ Enteric-coated and rectal formulations do not reduce the risk of GI ulceration.¹

Listed below are some NSAIDs, with their risk of GI toxicity.^{10–12}

Low GI risk: celecoxib, diclofenac, ibuprofen \leq 1200 mg daily, lumiracoxib

Medium GI risk: sulindac, diflunisal, naproxen, indomethacin

High GI risk: piroxicam, ketoprofen

COX-2 selective NSAIDs (e.g. celecoxib, lumiracoxib) do not reduce platelet aggregation and may increase prothrombotic activity and **cardiovascular events** (e.g. MI, stroke).¹ Possible prothrombotic effects of conventional NSAIDs have not been ruled out.

- ▶ **Avoid concomitant use of potentially interacting drugs in patients using NSAIDs**

Q12. NSAIDs may interact with many drugs, including ACE inhibitors, diuretics, angiotensin II-receptor antagonists, lithium, methotrexate, warfarin and corticosteroids.¹ Avoid concurrent use of other drugs with high risk of GI effects (e.g. corticosteroids, anticoagulants) and educate patients on the signs of GI toxicity and what to do if these occur.

All NSAIDs can cause renal impairment, oedema, hypertension and congestive heart failure.² Avoid the combination of an ACE inhibitor or angiotensin II-receptor antagonist, diuretic and NSAID (including COX-2 selective NSAID) — the ‘triple whammy’ — as this is implicated in drug-induced renal failure.^{8,13}

Avoid the combination of an ACE inhibitor and NSAID in patients with renal impairment or in the elderly, due to risk of a further decrease in renal function, hyperkalaemia and reduced antihypertensive effect of ACE inhibitor.¹ If the combination cannot be avoided, monitor blood pressure, renal function, serum potassium concentration and weight.¹

Tramadol

- ▶ **Cease postoperative tramadol after appropriate interval (Q14)**
- ▶ **Use an adequate trial of paracetamol and/or an NSAID before initiating tramadol**

Q15. Consider adding or substituting tramadol when the patient is unresponsive to a 2–4 week trial of therapeutic doses of paracetamol and/or an NSAID.⁷ Potential adverse effects and serious drug interactions make tramadol unsuitable for some patients.

- ▶ **Avoid concomitant use of potentially interacting drugs with tramadol¹ (Q16)**

Drugs ¹	Potential interaction with tramadol ¹
MAOIs (monoamine oxidase inhibitors)	Risk of serotonin syndrome increased; MAOIs (i.e. moclobemide, phenylzine, tranylcypromine) contraindicated with tramadol; do not use tramadol within 2 days of moclobemide or 14 days of irreversible MAOIs due to risk of CNS excitation or depression, hypertension or hypotension
serotonergic agents	Risk of serotonin syndrome increased with: SSRIs, mirtazapine, venlafaxine, St John's wort, MAOIs, moclobemide, tricyclic antidepressants, pethidine, dextromethorphan, phentermine, diethylpropion, hallucinogenic amphetamines, sibutramine, sumatriptan, naratriptan, zolmitriptan, illicit drugs (e.g. 'ecstasy', LSD, cocaine), selegiline, tryptophan, buspirone, lithium, linezolid
carbamazepine	May reduce tramadol activity; monitor response and adjust tramadol dose if necessary
warfarin	Anticoagulant effect may be increased; monitor INR and decrease warfarin dose as needed

- ▶ **Do not exceed recommended doses of tramadol in the elderly and in patients with renal or hepatic impairment¹ (Q17)**

Recommended dosage¹

Immediate-release formulation 50–100 mg every 4–6 hours (max. 400 mg/day)

Modified-release formulation 100–200 mg every 12 hours (max. 400 mg/day)

Severe renal impairment

Avoid tramadol

Tramadol (cont'd)

Moderate renal impairment

Immediate-release formulation 50–100 mg every 12 hours (max. 200 mg/day)

Modified-release formulation 100–200 mg every 24 hours (max. 200 mg/day)

Severe hepatic impairment/cirrhosis

Do not use modified-release formulation

Immediate-release formulation 50 mg every 12 hours (max. 100 mg/day)

Elderly (> 75 yrs)

Max. 300 mg/day

Opioids

▶ Trial:

1. non-opioids before initiating a weak opioid, and/or
2. a weak opioid before initiating a strong opioid

Q18, 19. Consider adding or substituting a weak opioid when a trial of paracetamol and/or NSAID gives insufficient pain control.⁷ Take into account that weak opioids produce the same adverse effects as strong opioids but with lower efficacy. If insufficient pain control on other analgesics, review and consider trialling a strong opioid.⁷

Before prescribing a strong opioid, refer the patient to a multidisciplinary pain clinic or pain specialist for assessment, and if the appointment is delayed, seek telephone advice from a specialist.

Codeine is a short-acting opioid and has a limited role in long-term management of persistent pain.⁷ About 10% of Caucasian people and 1–2% of Asian people are poor metabolisers of codeine. In these patients, codeine is an ineffective analgesic but may still cause adverse effects.⁸

Doses of codeine > 30 mg are usually recommended and combination products containing lower doses are unlikely to be more effective than paracetamol alone.^{1,7,9}

Morphine is the preferred strong opioid analgesic for moderate to severe pain because of familiarity, availability and cost. Oxycodone may be used where patients cannot tolerate adverse effects of morphine.¹

Use the oral route and a long-acting drug wherever possible with regular rather than as needed dosing.⁷ The appropriate dose is that which achieves satisfactory functioning with adequate pain control and tolerable adverse effects. Agree on treatment goals with the patient and if not reached, taper the dose over a few days before stopping.^{7,9}

▶ Pethidine should not be used in the treatment of persistent pain

Q18. Pethidine has a short duration of action and is no more effective than other opioids, with a similar adverse-effect profile. Metabolism of pethidine produces norpethidine, which can cause seizures especially in renal impairment. Pethidine can lead to potentially serious drug interactions e.g. with serotonergic drugs. Pethidine is also more likely to be abused than other opioids.⁷

▶ Avoid dextropropoxyphene due to adverse effects and a toxic metabolite

Q18. Avoid the combination of paracetamol and dextropropoxyphene (Capadex, Di-Gesic, Paradex, Doloxene) as this is no more effective than paracetamol alone.¹⁴ These products are often used at a frequency that increases the risk of serious adverse effects from accumulation of dextropropoxyphene and its cardiotoxic metabolite.⁸

▶ Consider transdermal opioids when other opioids are not tolerated

Q18. Transdermal opioid patches have a limited role in persistent, non-malignant pain. Fentanyl patches should be reserved for opioid-tolerant patients when other opioids are inappropriate or not tolerated.¹

Transdermal buprenorphine is an alternative to more familiar opioids (e.g. morphine, oxycodone) in severe pain when lower doses of strong opioids are indicated, particularly for patients who are vomiting or having difficulty swallowing.¹

▶ Monitor patients using an opioid for adverse effects and use appropriate prevention and treatment

Q20. Adverse effects with opioids are common and sometimes persistent.

Constipation is almost universal and may persist with long-term opioid use. Unless contraindicated, use a stimulant laxative (e.g. docusate with senna) and/or an osmotic laxative (e.g. sorbitol) prophylactically and continuously while taking regular opioids.¹ Increased fluid intake, dietary changes and increased mobility are also essential.

Nausea and vomiting are also common initially.¹ An antiemetic may be given prophylactically, but review use within a few days as nausea often improves with continued opioid use.¹

Dry mouth is common and may be helped by taking frequent sips of water or sucking on sugar-free lozenges.

Sedation may occur especially in the first few days and is exacerbated by other central nervous system depressants (e.g. sedatives, hypnotics, phenothiazines, alcohol).⁸ Advise patients not to drive or use machinery if feeling drowsy or mentally cloudy (most common a few days after starting or increasing dose).

Physical dependence (withdrawal syndrome when the drug is stopped suddenly or an antagonist is given) is common.¹

Other management

Q21. Evidence for adjuvant or co-analgesics varies in quality but they may be added if pain control is inadequate on tramadol or paracetamol/NSAID or paracetamol/codeine.⁷

Q22. Non-drug treatment should be used as part of a multimodal pain management plan including patient education, self management and physical and psychological therapies.⁷

If the patient does not already have a pain management plan, introduce a program designed to reduce stress, enhance physical functioning and improve coping skills and quality of life.⁷

Confidentiality and privacy

You must sign and date the **Submission cover sheet** to participate in this audit.

By participating you agree to aggregation of your de-identified patient data and use of your personal data. Individual results of your clinical audit are kept confidential by NPS.

What will happen to your patient data

- Your de-identified patient data forms are scanned and returned to you.
- Your individual results are provided to you only.
- Your data are aggregated with those of other participants and the de-identified aggregate results:
 - are provided to all participants
 - may be used in NPS evaluation and reports
 - are provided to the RACGP and ACRRM.

The RACGP has advised that program information may be shared with researchers and interested general practitioners for the purpose of continuing education coordination at the discretion of the QA&CPD Program.

What will happen to your personal details

Your personal details:

- are provided to a mail house for processing
- are provided to the RACGP QA&CPD Program and/or ACRRM Professional Development Program for point allocation (if applicable)
- are recorded for the purpose of the PIP and NPS evaluation
- can be obtained from NPS by request in writing.

Individual clinical audit results will not be available after potentially identifying data are removed from NPS records at the close of the clinical audit cycle.

Please note: You are responsible for advising NPS of any changes of address during the audit cycle.

Further information

Therapeutic enquiries

Contact Holly Parsons at NPS:
phone (02) 8217 8700

Audit and QPI enquiries

Chun Yu at NPS: phone (02) 8217 8700

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September 2006

The information contained in this material is derived from a critical analysis of a wide range of authoritative evidence. Any treatment decisions based on this information should be made in the context of the clinical circumstances of each patient.



National Prescribing Service Limited

NPSA0356

National Prescribing Service Limited ACN 082 034 393
An independent, non-profit organisation for Quality Use of Medicines,
funded by the Australian Government Department of Health and Ageing.

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Clinical audit: Analgesics in persistent pain

Please see *Guide* for help with completing this double-sided form. Only participating GPs can collect and record patient information.

Use a **black biro** to mark a **cross (X)** in the box beside your response. If you make a mistake, use white correction fluid.



NPS office use only

Patient details

- Your patient code:**
(Do not use name/s)
- Gender:** female male
- Age range (years):** 18–65 66–75 > 75

Diagnosis

- Does the patient have (mark all that apply):**
 - low back pain
 - osteoarthritis
 - other bone, hip, neck or spinal pain
 - rheumatoid arthritis
 - visceral/organ pain
 - not known
 - other _____

Co-existing conditions

- Patient's relevant co-existing conditions:**
 - none
 - asthma
 - biliary colic
 - coagulation disorder
 - Crohn's disease
 - epilepsy or at risk of seizures
 - heart failure
 - hypertension
 - pregnancy or planning pregnancy
 - peptic ulcer/GI bleeding:
 - active
 - history of
 - hypersensitivity to aspirin or NSAID (e.g. asthma, anaphylaxis)
 - high cardiovascular risk
- Renal or hepatic impairment (See *Guide* p3):**
 - normal renal function
 - mild renal impairment
 - moderate renal impairment
 - severe renal impairment
 - renal function not known
 - mild, moderate or no hepatic impairment
 - severe hepatic impairment or cirrhosis
 - hepatic function not known

Paracetamol

- Current paracetamol use:**
 - paracetamol alone ► go to Q8
 - paracetamol + codeine ► go to Q8
 - paracetamol + dextropropoxyphene ► go to Q8
 - nil ► go to Q9
 - not known ► go to Q9

If used in combination with opioid, complete opioid section as well.

- Oral paracetamol dosing (include combination and OTC products):**

Formulation	Total daily dose	Frequency
<input type="checkbox"/> immediate release (max. 4 g/day)	<input type="checkbox"/> below maximum	<input type="checkbox"/> regular (by the clock)
<input type="checkbox"/> modified release (max. 3.99 g/day)	<input type="checkbox"/> at maximum	<input type="checkbox"/> as needed (prn)
	<input type="checkbox"/> above maximum	<input type="checkbox"/> not known
	<input type="checkbox"/> not known	

NSAIDs

- Current NSAID use (including all formulations, COX-2 selective NSAIDs and high dose aspirin):**
 - yes ▼
 - no ► go to Q13
 - not known ► go to Q13
- NSAID(s) currently used (mark all that apply):**
 - aspirin (high dose)
 - aspirin + codeine
 - celecoxib
 - diflunisal
 - diclofenac
 - ibuprofen
 - ibuprofen + codeine
 - indomethacin
 - ketoprofen
 - ketorolac
 - piroxicam
 - lumiracoxib
 - mefenamic acid
 - meloxicam
 - naproxen
 - sulindac
 - tiaprofenic acid
 - oral
 - topical
 - rectal
 - oral
 - topical
 - oral
 - rectal
 - oral
 - topical
 - rectal
 - oral
 - IV/IM
 - oral
 - topical

- Was NSAID initiated after an adequate trial of paracetamol (i.e. 4 g/day for 2–4 weeks)?**
 - yes
 - no ▼
 - not known

If no, reason for no adequate trial of paracetamol:

- anti-inflammatory effect required
- both initiated together
- NSAID used for breakthrough pain
- pain considered too severe for paracetamol alone
- previous trial ineffective
- not known
- other _____

- Use of any potentially interacting drug(s):**

- none
- ACE inhibitor
- alendronate (Fosamax)
- angiotensin II-receptor antagonist
- anticoagulant (e.g. warfarin)
- beta blocker
- corticosteroid
- cyclosporin
- diuretic
- lithium
- methotrexate
- potassium
- tacrolimus (Prograf)

Tramadol (weak opioid)

- Current tramadol use:**
 - yes
 - no ► go to Q18
 - not known ► go to Q18

- Tramadol initiated for postoperative pain:**

- yes ▼
 - no
 - not known
- Did you review need for continued use at last prescription?
- yes
 - no
 - not applicable
 - not known

continue next column

Please turn over to continue

15. Just prior to initiating tramadol, patient was using:

- | | |
|---|--|
| <input type="checkbox"/> no other analgesic | <input type="checkbox"/> other weak opioid |
| <input type="checkbox"/> paracetamol | <input type="checkbox"/> not known |
| <input type="checkbox"/> NSAID | <input type="checkbox"/> other _____ |

16. Use of any potentially interacting drug(s) (see Guide):

- | | |
|--|--|
| <input type="checkbox"/> carbamazepine | <input type="checkbox"/> serotonergic agent(s) |
| <input type="checkbox"/> irreversible monoamine oxidase inhibitor (MAOI) | <input type="checkbox"/> warfarin |
| <input type="checkbox"/> moclobemide | <input type="checkbox"/> none |

17. Total daily dose of tramadol:

- | | |
|--|---|
| <input type="checkbox"/> ≤ 100 mg per day | Route:
<input type="checkbox"/> IV/IM |
| <input type="checkbox"/> 101 mg – 200 mg per day | <input type="checkbox"/> oral (immediate-release formulation) |
| <input type="checkbox"/> 201 mg – 300 mg per day | <input type="checkbox"/> oral (modified-release formulation) |
| <input type="checkbox"/> 301 mg – 400 mg per day | |
| <input type="checkbox"/> > 400 mg per day | |

Opioids (excluding tramadol)

18. Current opioid use (including fixed-dose combinations):

- yes ▼ no ► go to Q21 not known ► go to Q21

Weak opioids	
<input type="checkbox"/> codeine +/- non-opioid (e.g. paracetamol, ibuprofen, aspirin)	
<input type="checkbox"/> codeine 30 mg + non-opioid (e.g. Panadeine Forte, Prodeine Forte)	
<input type="checkbox"/> codeine 15 mg + paracetamol (e.g. Panadeine-15, Prodeine-15)	
<input type="checkbox"/> codeine < 15 mg + non-opioid (e.g. Codalgin, Panadeine)	
<input type="checkbox"/> dextropropoxyphene +/- paracetamol (e.g. Di-Gesic, Doloxene)	
<input type="checkbox"/> dihydrocodeine +/- aspirin (Codox)	
Strong opioids	Route
<input type="checkbox"/> buprenorphine (e.g. Norspan, Temgesic)	<input type="checkbox"/> sublingual <input type="checkbox"/> IV/IM <input type="checkbox"/> transdermal
<input type="checkbox"/> fentanyl (e.g. Durogesic, Sublimaze)	<input type="checkbox"/> oral lozenge <input type="checkbox"/> IV/IM/SC <input type="checkbox"/> transdermal
<input type="checkbox"/> hydromorphone (Dilaudid)	<input type="checkbox"/> oral <input type="checkbox"/> IV/IM/SC
<input type="checkbox"/> methadone (e.g. Physeptone)	<input type="checkbox"/> oral <input type="checkbox"/> IM/SC
<input type="checkbox"/> morphine (e.g. MS Contin, Kapanol)	<input type="checkbox"/> IV/IM/SC <input type="checkbox"/> oral immediate-release <input type="checkbox"/> oral modified-release
<input type="checkbox"/> oxycodone (e.g. Endone, OxyContin)	<input type="checkbox"/> rectal <input type="checkbox"/> oral immediate-release <input type="checkbox"/> oral modified-release
<input type="checkbox"/> pethidine	IV/IM/SC

19. Just prior to initiating current opioid, patient was using:

- | | |
|---|---|
| <input type="checkbox"/> no other analgesic | <input type="checkbox"/> weak opioid (not tramadol) |
| <input type="checkbox"/> paracetamol | <input type="checkbox"/> strong opioid |
| <input type="checkbox"/> NSAID | <input type="checkbox"/> not known |
| <input type="checkbox"/> tramadol | <input type="checkbox"/> other _____ |

20a. Adverse effects currently experienced using an opioid:

- | | |
|---|--------------------------------------|
| <input type="checkbox"/> sedation | <input type="checkbox"/> dry mouth |
| <input type="checkbox"/> nausea and/or vomiting | <input type="checkbox"/> pruritis |
| <input type="checkbox"/> dizziness | <input type="checkbox"/> none |
| <input type="checkbox"/> constipation | <input type="checkbox"/> not known |
| <input type="checkbox"/> respiratory depression | <input type="checkbox"/> other _____ |

20b. Actions planned/taken to manage adverse effect(s):

- | | |
|---|--|
| <input type="checkbox"/> decrease opioid dose | <input type="checkbox"/> dietary and exercise advice |
| <input type="checkbox"/> withdraw opioid | <input type="checkbox"/> change route of opioid |
| <input type="checkbox"/> anti-emetic agent | <input type="checkbox"/> none |
| <input type="checkbox"/> laxative(s) | <input type="checkbox"/> not applicable |
| <input type="checkbox"/> sucking ice/lozenges | <input type="checkbox"/> other _____ |

Other management

21. Current adjuvant analgesic use (including OTC products):

- yes ▼ no ► go to Q22 not known ► go to Q22
- | | |
|---|--------------------------------------|
| <input type="checkbox"/> antispasmodic | <input type="checkbox"/> lignocaine |
| <input type="checkbox"/> anticonvulsant | <input type="checkbox"/> chondroitin |
| <input type="checkbox"/> baclofen | <input type="checkbox"/> glucosamine |
| <input type="checkbox"/> benzodiazepine | <input type="checkbox"/> fish oil |
| <input type="checkbox"/> corticosteroid | <input type="checkbox"/> capsaicin |
| <input type="checkbox"/> tricyclic antidepressant | <input type="checkbox"/> other _____ |

22. Current non-pharmacological therapy:

- yes ▼ no ► go to Q23 not known ► go to Q23
- | | |
|---|--|
| <input type="checkbox"/> physical therapies
e.g. physiotherapy, exercise | <input type="checkbox"/> psychological therapies
e.g. cognitive behavioural therapy (CBT) |
|---|--|

23. Was patient referred to a pain specialist or pain clinic/centre during this chronic episode?

- yes no not known

Follow up

24. Is pain control adequate on current therapy?

- yes no ▼ not known

- If no, action planned (mark all that apply):
- | | |
|---|--|
| <input type="checkbox"/> continue current therapy | <input type="checkbox"/> treatment for mood/anxiety disorder |
| <input type="checkbox"/> cease current agent | <input type="checkbox"/> change to 'regular' dosing |
| <input type="checkbox"/> adjust dose of current agent | <input type="checkbox"/> physical therapies |
| <input type="checkbox"/> add paracetamol | <input type="checkbox"/> referral to pain clinic/centre |
| <input type="checkbox"/> add NSAID | <input type="checkbox"/> referral to addiction specialist |
| <input type="checkbox"/> add tramadol | <input type="checkbox"/> referral to surgeon |
| <input type="checkbox"/> add opioid | <input type="checkbox"/> psychological therapies |
| <input type="checkbox"/> add adjuvant therapy | <input type="checkbox"/> other _____ |



Clinical audit: Analgesics in persistent pain

Aims of this clinical audit

- assess doses of paracetamol for safety and effectiveness and use as first-line analgesic
- review use of NSAIDs (COX-2 selective and conventional)
- review use of tramadol including dosage adjustment in renal impairment
- assess appropriate initiation of opioids and management of adverse effects
- identify potential drug interactions with analgesics.

Professional development and PIP

- NPS has applied for clinical audit points in the 2005–2007 triennium of the RACGP QA&CPD Program and ACRRM PD Program.
- This is the final clinical audit for the Quality Prescribing Initiative (QPI) of the Practice Incentives Program (PIP) for May 2006 to April 2007.

What this audit involves

1. Data collection phase

- Identify **20** eligible patients.
- Complete a clinical audit form for each patient.
- Submit completed forms by 10 November 2006.

Participation in this clinical audit requires your agreement to aggregation of de-identified patient data.

2. Review phase

- Review results, record patients' progress and identify where improvement in patient management has occurred.

To see a sample audit form before enrolling, visit www.nps.org.au/healthpro

Enrol by Friday 6 October 2006.

**Fax this form to: 02 9211 7579 OR Telephone: 02 8217 8700
OR Post to: PO Box 1147, Strawberry Hills NSW 2012**

Your free audit pack will be forwarded by mail.

This section is for GPs to enrol in the audit:

Please use BLOCK LETTERS

Family name			
Given names			
Postal address			
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State or Territory		Postcode	
Phone no.	()		Prescriber no.
Fax no.	()		Provider no.

NPS adheres to the National Privacy Principles contained in the Privacy Act 1988 (Cwth). All personal information collected by NPS will be used only for mailing of NPS materials relating to this audit and/or evaluation purposes.