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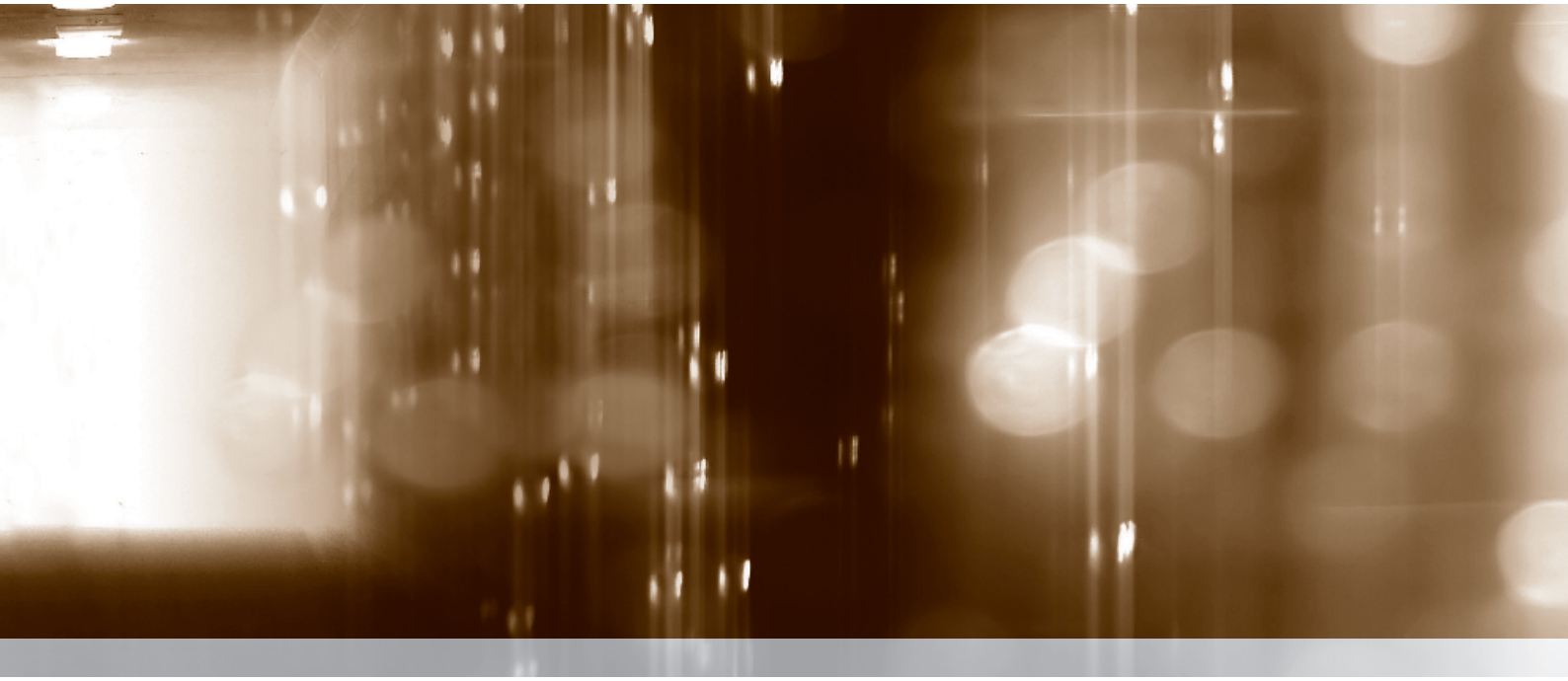
DRUG & ALCOHOL SERVICES SOUTH AUSTRALIA



OPIOID PRESCRIPTION *in* CHRONIC PAIN CONDITIONS

GUIDELINES *for* SOUTH AUSTRALIAN GENERAL PRACTITIONERS (GPs)

Supported by:

Drug & Alcohol Services South Australia

Faculty of Pain Medicine, Australia & New Zealand College of Anaesthetists

Flinders Medical Centre Pain Management Unit

Royal Australian College of General Practitioners (SA)

Royal Adelaide Hospital Pain Management Unit

South Australian Divisions of General Practice Incorporated

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Further copies of this document, and updates, can be downloaded from: www.dassa.sa.gov.au/goto/ddu

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Disclaimer: *These guidelines reflect a consensus view of experts in the prescribing of opioids for chronic pain conditions. However, lack of strict adherence to these guidelines does not imply that a particular practice is outside the scope of legitimate medical practice. These guidelines do not describe specific opioid regimens, and are not intended to replace clinical judgment in specific situations. While these guidelines provide assistance in the appropriate prescription of opioids in chronic pain, it is the responsibility of the treating medical practitioner to ensure opioids are prescribed or supplied in a safe, effective, and legally compliant manner.*

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BACKGROUND


The goal is to achieve a better balance in addressing the treatment of pain while minimising abuse, addiction, and diversion of these pain medicines.

BACKGROUND

It is recognised that General Practitioners (GPs) are seeing large numbers, probably the majority, of patients with chronic pain. The emphasis in pain management is to improve the function of patients living with pain. Pain relief alone may do little to enhance the capacity of some patients and their families to do more. These patients may require the input of pain management specialists working with their GP. Once an appropriate diagnosis has been made, many therapeutic options can be considered including pharmacological, surgical and those provided by allied health professionals (physiotherapy, clinical psychology, occupational therapy). In a percentage of cases, oral opioid therapy may be commenced. Not infrequently, the duration of therapy is open-ended with a tendency towards the long-term prescription of oral opioid drugs. This tendency is increasing and can provide successful outcomes for certain patients.

In some patients, this approach can create a multitude of problems. Problems surrounding maladaptive behaviour can interfere with, or make unsafe, the prescription or supply of opioid analgesics in the chronic pain setting. Such patients may create significant management problems for all involved in their care. These patients typically require a disproportionate time commitment from GPs. Consequently, there is a need for guidelines that will assist GPs to better:

- select patients for opioid drugs
- manage opioid drug therapy
- determine which patients require referral to appropriate pain management specialists
- prescribe within a legislative framework that controls the prescription of opioids

Within the South Australian state government authority (Drugs of Dependence Unit) there is a willingness to work with and support general practice, to help minimise the impact of legislative requirements on opioid prescription to appropriately worked-up patients. However, in other countries, most notably the United States of America, there exists a much more adversarial relationship between the key players. Moderate voices in America that represent the relevant stakeholders have come together to promulgate guidelines to guide opioid prescription in that country. Those guidelines have been adapted and expanded to assist South Australian GPs manage this difficult group of patients.

Working Group: Royal Adelaide Hospital (RAH) and Flinders Medical Centre (FMC) Pain Management Units, Drugs of Dependence Unit (DDU), Drug & Alcohol Services South Australia (DASSA), and representatives of the South Australian Divisions of General Practice Incorporated (SADI) and Royal Australian College of General Practitioners (SA) (RACGP).

The Process: The working group has adapted and expanded the American guidelines for South Australian application. A draft of the South Australian Guidelines was posted on the Australian Pain Society's website for Australia-wide public consultation as well as for comments from leading interested professionals. The Guidelines were modified by the inclusion of relevant material and uploaded on the DASSA Legal Control over Medicines website with extensive links to other appropriate websites to ensure widespread availability. The aim was to make the website and hard-copy versions of the Guidelines as useful as possible to South Australian GPs. Results from a South Australian survey showed that a hard-copy guideline is the preferred information medium for GPs.

Development of USA guidelines

The Last Acts Partnership and the Pain & Policy Studies Group at the University of Wisconsin joined forces in 2001 to develop a consensus statement, *Promoting Pain Relief and Preventing Abuse of Pain Medications: A Critical Balancing Act.* This consensus statement, which was joined by numerous other health care organisations, called for a balanced policy addressing both the necessity of medical access to prescription pain medications and active approaches to stem abuse, addiction and diversion. After the statement was released, the group (see: Appendix A) met to discuss the need for education of both the health care community and the law enforcement and regulatory community. The group reviewed existing educational material and ultimately decided to produce *Prescription Pain Medications – Frequently Asked Questions and Answers for Health Care Professionals and Law Enforcement Personnel,* that would cover the clinical and regulatory issues surrounding the prescribing of controlled drugs.

The goal is to achieve a better balance in addressing the treatment of pain while minimising abuse, addiction, and diversion of these pain medicines.

INTRODUCTION

SECTION 1

INTRODUCTION

The purpose of this document is to provide information to GPs about the medical treatment of chronic pain using opioid drugs. The goal is to achieve a better balance in addressing the treatment of pain while minimising abuse, addiction, and diversion of these pain medicines.

Controlled opioid analgesics (Schedule 8 (S8) – also legally referred to as Controlled Drugs or Drugs of Dependence) are useful for the optimum care of some patients, but carry a disproportionate risk exceeding the usual clinical concern about toxicity. These drugs can become the object of abuse, dependence and addiction, or be a target for diversion to black markets. This potential should raise a heightened awareness regarding prescription of opioids by GPs.

When medically-necessary drugs have a high abuse potential, assessment and management of drug-related problems can be complex.

Problematic drug-related behaviour takes many forms and has many causes in the clinical setting. Even relatively severe drug-seeking behaviours in the context of a legitimate medical need, such as uncontrolled pain, cannot immediately be ascribed to addiction. The desperate search for pain relief, and the complex psychosocial disturbances accompanying chronic pain, may influence the phenomenology of drug use and greatly complicates the assessment of drug-related problems.

At the same time, however, even patients with severe pain can develop patterns of abuse or addiction, or engage in criminal activity. GPs who encounter such patients must be able to recognise the behaviours (on occasions this will be detected by other prescribers, pharmacists, or the DDU before the prescribing GP is aware there is a problem), then work with the patient to control the behaviours. This may involve re-assessing the patient, diagnosing comorbidities, and reacting in a way that is both medically appropriate and consistent with the laws that apply to the medical use of controlled drugs.

Drug abuse exacts a huge social cost, and some have been tempted to address prescription drug abuse by greatly limiting access. When drugs are needed for legitimate medical purposes, such as pain management, this action may have unintended consequences that could be just as harmful to the public. Surveys have found that chronic pain is highly prevalent and exacts a huge toll in terms of lost productivity, health care costs, and human suffering. As the population ages, people will live longer with chronic, often painful, diseases.

Even if opioids are appropriate for only a small proportion of these patients, only very rarely should access to the drugs be limited when they are needed. Nothing should be done to increase the reluctance of prescribers to recommend opioids. Society has a compelling interest in ensuring both the ready access to controlled prescription drugs when medically needed and ongoing efforts to minimise their abuse and diversion. These two goals are not in conflict; they coexist and must be balanced.

TERMS AND RESOURCES

SECTION II

TERMS AND RESOURCES

Key pain and addiction-related terms

It is imperative to use clear terminology when discussing medical matters. Terms such as abuse, addiction, physical dependence, pseudo-addiction, and tolerance are often used incorrectly. This contributes to misunderstanding about the risk of addiction when opioids are used to manage pain. Definitions of these and other terms (see: Appendix B) are provided to:

- encourage accurate and consistent use of addiction-related terms
- promote communication and better care of patients with pain when the use of S8 opioids is appropriate

Other pain-related terms can be found at the International Association for the Study of Pain website (See: http://www.iasp-pain.org/terms-p.html)

Educational material on prescribing S8 opioid analgesics

There is significant educational material available on prescribing opioid analgesics. Further to material available on the internet, there are a variety of educational activities organised through Australian Universities, the South Australian Divisions of General Practice Inc. and the Royal Australian College of General Practitioners.

Educational Activities

Pain Management Multidisciplinary Short Course (two weeks)

Graduate Studies in Pain Management (Grad. Cert., Grad. Dip., Masters, Masters (Hons))

The University of Sydney/Royal North Shore Hospital

Pain Management Research Institute

(02) 9926 7386

Continuing Professional Development Workshops/Activities

South Australian Divisions of General Practice Inc: (08) 8271 8988

South Australian Postgraduate Medical Association: http://www.sapmea.asn.au

Royal Australian College of General Practitioners: http://www.gplearning.com.au

Online Resources

New South Wales Therapeutic Advisory Group Inc

http://www.ciap.health.nsw.gov.au/nswtag/guidelines.html

Hunter Integrated Pain Service

http://www.hnehealth.nsw.gov.au/pain

Virtual Pain Centre

http://www.virtualpaincentre.com

Rural Health Education Foundation.

http://www.rhef.com.au/programs/601/601.html

American Academy of Pain Management

http://www.painmed.org

American Academy of Pain Medicine

http://www.painmed.org/cme

American Medical Association

http://www.ama-assn.org/ama/pub/category/11541.html

Beth Israel Department of Pain Medicine & Palliative Care

http://www.stoppain.org

PAIN AND ITS TREATMENT

SECTION III

PAIN AND ITS TREATMENT

Why is pain management important?

Uncontrolled pain is an enormous public health problem in Australia and other Western industrialised countries, already accounting for many tens of billions of dollars of lost productivity and needed health care. It is expected that these costs will grow dramatically as the population ages and people live longer with chronic pain. Equally important, unrelieved pain appears to be commonly reported among chronic pain sufferers and has a devastating impact on the physical, emotional, social, and economic well-being of these patients and their families. Diagnosing and treating pain is, therefore, fundamental to public health. It may be considered encouraging that in South Australia the number of patients on extended opioid treatment for chronic pain has increased about 10 fold over 15 years.

Relevant Resources:

American Pain Society (2002). *Guideline for the Management of Pain in Osteoarthritis, Rheumatoid Arthritis, and Juvenile Chronic Arthritis. Clinical Practice Guideline Number 2.* Glenview, IL: American Pain Society.

Breivik H, Collett B, Ventafridda V, Cohen R, and Gallacher D (2006). Survey of chronic pain in Europe: Prevalence, impact on daily life, and treatment. *European Journal of Pain,* 10:287–333.

Maniadakis N and Gray A (2000). The economic burden of back pain in the UK. *Pain* 84: 95–103.

What are the goals of pain management?

The goals of pain management are to increase the ability to function, reduce pain and suffering, enhance quality of life, and minimise the risk of adverse effects. These goals are the same for all pain patients regardless of history, including a history of substance misuse. To accomplish these goals, pain management most often requires a broad array of interventions, only one of which is S8 opioid prescription. There are numerous options for analgesic drug prescription, including opioids. In prescribing S8 opioids the aim is to reduce pain without causing distressing side-effects thus enabling functional restoration in the patient who is then able to achieve the outcomes and specific goals of treatment. These latter outcomes may require a team approach and the services of clinical psychology, graded physiotherapy, and a practice nurse with the focus on patient self-management rather than endless visits to medical practitioners. Clinical decisions about the ongoing use of S8 opioids typically require a careful assessment of all outcomes.

Specific goals of S8 opioid treatment will vary according to the patient's circumstances; however these should be documented prior to an opioid trial. The goals of therapy may be as simple as 'being able to hang out the washing', or as significant as 'being able to return to work full-time'. It is important that any goals of treatment are realistic, achievable, and are regularly reviewed by the patient and GP. Goals should be identified, documented and agreed between GP and patient before opioid treatment starts and each time goals of treatment are modified.

How can a GP assess a patient's pain?

Pain assessment is a critically important component of effective pain management because it aims to yield a pain diagnosis (usually described in terms of aetiology, pathophysiology and/or syndrome) that may clarify the need for further evaluation, guide the selection of treatments, suggest prognosis, and indicate the status of coexisting diseases. A documented pain assessment provides a clinical basis for prescribing S8 opioids, and a recorded baseline

against which to measure progress during treatment. The measurement of pain intensity is an important aspect of the pain assessment. Self-report is the gold standard for pain measurement. This should be done with a tool appropriate for the patient's cognitive development, language, culture, and preferences; the same tool should be used in subsequent assessments to allow for reliable evaluation of change. Pain measurement tools include numeric scales, visual analogue scales, and verbal rating scales.

In addition to pain measurement, the assessment should describe the pain in terms of location, temporal characteristics (onset, duration, course, and fluctuation), quality, and factors that increase and decrease pain. The assessment also should evaluate the impact of the pain on physical and psychosocial functioning. Other tools, such as body maps, daily diary records, and multidimensional pain scales may be used to capture some of this additional information.

A comprehensive pain assessment also includes a physical examination, which can help define the aetiology and pathophysiology of the pain. The need for a physical examination is most compelling when a patient with pain is initially evaluated. The extent of this examination is considered to be a matter of clinical judgment and is determined by the nature of the clinical problem, the GP's discipline, and the availability of previously documented examinations, imaging, and laboratory findings relevant to the pain problem. At the end of an examination, the GP should have sufficient information about the physical status of the patient to support a reasonable diagnostic formulation and decide on next steps.

Whether further physical examination is required on subsequent visits is also a matter of clinical judgment, based on the need to confirm or monitor specific findings, track specific treatment effects, or assess comorbidities.

A Structured Pain Questionnaire (you can find a Photocopy Master inside the back cover) can be very useful to provide a consistent basis for the clinical assessment of chronic pain patients.

When should a GP refer to a pain management specialist for advice on patient management?

Treatment of pain is an expected part of good medical practice and all GPs should address the problem to the best of their abilities. GPs have an obligation to:

- know about the range of therapies used to manage acute and chronic pain
- recognise their own level of expertise in pain assessment, treatment selection, and management
- understand the nature of the consultative resources in their community
- refer appropriately

Referral may be needed to obtain a more comprehensive evaluation:

- to clarify the optimal therapeutic strategy
- to implement treatment that is outside of the referring GP's expertise
- to respond to the patient's desire for another opinion when the GP is unable to control opioid use or other maladaptive behaviours
- to prescribe unusually high doses of opioids
- to ascertain apparent need for short acting or injectable opioids

Regulatory authorities may require referral and a second opinion or periodic review to authorise or continue to authorise treatment in cases of poorly defined pathology, a young patient, high levels of distress, previous or ongoing substance abuse, comorbid psychiatric or psychological disorder, unusual opioid requirements or

suspicions of drug diversion.

If the use of S8 opioids is considered to be a potentially useful element in the therapeutic strategy, the GP may consider referral for any of a variety of specific reasons. Referral is considered a vital part of good medical practice. Specialist pain management input may be helpful to:

- Clarify the appropriateness of therapy.
- Define the optimal regimen or monitoring approach.
- Assist in the evaluation of problematic behaviour.
- Evaluate specific recommendations, such as switch from PRN to fixed scheduled dosing, or from a short-acting to a long-acting drug, or the role of spinally administered opioids in particular situations.

In all cases, the decision to refer a patient should be based on both a critical self-evaluation on the part of the GP and an assessment of the clinical challenges posed by the patient. The GP's self-evaluation should define which types of patients and S8 opioid treatments can be coupled without additional help and which can be coupled with guidance through referral, and which are better left to a pain management specialist only. Where these lines are drawn depends on existing knowledge and skills, and the availability of support systems for monitoring. Ideally, most patients who undergo evaluation by a pain management specialist will then return to their GP for ongoing treatment.

The timing of a referral to a pain management specialist varies according to the information needed by a GP. The identified specialist should have current knowledge about pain management, including the use of S8 opioids. In consulting with a pain management specialist, a GP may seek confirmation that prescriptions are being provided to improve the function of the patient rather than providing palliative therapy, and that the care being provided is within the bounds of professional practice. There is considerable misunderstanding by patients and doctors about the meaning of pain management, particularly at the interface of pain treatment, addiction, and the therapeutic role for S8 opioids. Consequently, GPs are encouraged to refer to, or at least contact, a pain management specialist or addiction medicine specialist whenever significant doubt-raising questions arise about their prescription of S8 opioids to treat chronic pain.

The following questions are examples:

Does this patient have a clear chronic pain diagnosis?
Is there justification for the drugs that have been prescribed?
Are the prescribed amounts appropriate?
If a patient is displaying drug-seeking behaviours, is this a sign of under-treated pain, addiction, or involvement in abuse or diversion of S8 opioids?

In some situations, pain management specialist referral prior to, or during, opioid treatment may be legally required by the DDU under the *Controlled Substances Act 1984* (SA). This typically occurs in patients who:

- are relatively young (e.g. <35 years old)
- have a comorbid psychiatric or psychological disorder
- have previous or current opioid, or other substance, use disorders
- are treated with high doses (e.g. >200mg per day of morphine or equivalent)
- are treated only with, or mainly with, injectable or short acting opioids
- have indeterminate pathology

If the patient is referred to a pain management specialist, the referring GP should understand the variety of

possible interventions that might be advocated including psychological or rehabilitative treatments, and close supervision of dispensed S8 opioids. The referring GP should understand that recommended interventions may be legally enforced by the DDU through the state Authority process if the patient is to continue to access S8 opioids. Therefore these interventions, as far as reasonably known and understood, should be raised by the GP and discussed with the patient.

How can GPs assess for risks of abuse, addiction, and diversion and manage their patients accordingly?

Some patients engage in aberrant drug-related behaviour during opioid therapy. In some cases, this abuse is relatively minor and transitory, but in others, it is serious and persistent. GPs should recognise that these behaviours may have a number of causes, including addiction. It is recommended that GPs adopt a *universal precautions* approach to the use of S8 opioids. The approach monitors behaviours over time and structures prescribing, consistent with the degree of risk of abuse, addiction, and diversion. By establishing treatment expectations for each patient, and structuring therapy appropriately, GPs can identify these patients who are at risk, help those who may need controls to manage the therapy responsibly, and provide monitoring necessary for safe and effective prescribing.

GPs should consider the following approaches in developing a *universal precautions* approach:

1. In assessing patients for opioid therapy, take a detailed history and perform an appropriate physical examination. The medical history should include a history of opioid, alcohol, cannabis, and nicotine use. Consider addictive behaviours of other family members. Take into consideration any social, psychological, or work-related factors that may indicate a potential for abuse, addiction, or diversion. Identify concurrent psychiatric illness, especially where poor impulse control is a feature, or if the patient suffers from PTSD, anxiety or depression.
2. Establish diagnoses for the pain problem and for relevant comorbidities, and record these in the patient notes. Base the diagnosis on appropriate evaluations and review of patient records, if available. A patient's unwillingness to allow contact with previous medical practitioners, including those interstate, should be evaluated and documented. GPs may wish to contact the DDU for further background information.
3. Consider multiple approaches to the treatment of chronic pain. Non-pharmacological and non-opioid analgesic approaches should be tried first.
4. Consider opioid treatment for all patients with chronic moderate to severe pain, but question critically whether opioids are the most appropriate drugs of choice for this patient's pain.
5. Recognise that opioid treatment is like a therapeutic trial for any other treatment. If the benefits are not clear, or the risks of adverse effects are not easily managed, the treatment can be modified but preferably stopped. Ceasing opioid treatment altogether may be a successful outcome of an opioid trial.
6. One practitioner should have primary responsibility for management of chronic pain in any one patient to help minimise the possibility of the patient obtaining opioids from multiple sources. In South Australia only one medical practitioner will be granted an Authority at any one time to prescribe or supply drugs of dependence to a particular patient. Typically, all prescribing must be done by this one GP, however other GPs in the same practice may prescribe when the usual GP is on leave etc. This does not apply when a patient is regularly running short of S8 opioids and needs to see another GP to cover the discrepancy.
   Ideally, the prescribing GP and the patient will be working together to monitor changes in pain and function. This is most easily achieved if the patient is seen regularly. Prescriptions should be given to the patient at the time of consultation.

7. When a patient has a known history of abuse, addiction, or diversion, it is particularly important that the GP is clear from the beginning about expectations of the treatment plan. The treatment plan may include a written agreement or consent with the patient describing obligations surrounding S8 opioid prescription (Refer examples inside the back cover), such as frequent collection from a patient-nominated pharmacy, routine blood and/or urine screens, referral to an appropriate pain management/drug dependence specialist, and the consequences of not adhering to the agreement.

A treatment plan should be developed addressing the presenting problem, and documented in patient notes. The plan should consider different treatment modalities depending on the physical and psychosocial impairment relating to the pain, e.g. formal rehabilitation program, use of behavioural strategies, non-invasive techniques, and use of medicines. Documentation should support the evaluation, reason for opioid prescribing, the overall pain management treatment plan, any consultations received and periodic review status of the patient.

If the GP decides to initiate opioid therapy, it is appropriate to titrate the amount of opioid to ensure maximum therapeutic effect can be reached; this effect should be an improvement in function rather than simple palliation of symptoms. Continuation of therapy is only justified if the benefit (improvement in function) is demonstrably greater than the adverse outcomes; this should be clearly documented. Once adequate pain relief and improvement in function has been achieved, a successfully treated patient is one who remains responsible over time, follows the agreement for use of the opioids, exhibits neither drug abuse behaviours nor indications of addiction or diversion, and experiences improved function and a greater quality of life.

At the other extreme, patients who manifest the disease of addiction exhibit a range of maladaptive behaviours and experience a decreased quality of life and function. Such patients do not follow the agreement for use of opioids, do not conform to the agreed-upon dosing schedule, and may lose prescriptions, repeatedly seek early prescriptions, or obtain additional supplies from other sources (including black-markets). They continue or escalate opioid use despite adverse consequences; appear unaware of, or in denial about, abuse of the prescribed drug, and may always 'have a story'.

A *universal precautions* approach to the prescribing of opioids does not mean that all patients who have the capacity to engage in abuse or diversion will be identified, or prevented from these behaviours over time. Nevertheless, the approach emphasises the value of ongoing assessment and close monitoring, which are essential aspects to the appropriate, safe and effective use of S8 opioids over time.

Relevant Resources:

Compton P, Darakjian J, and Miotto K (1998). Screening for addiction in patients with chronic pain and "problematic" substance use: Evaluation of a pilot assessment tool. *Journal of Pain and Symptom Management,* 16 (6): 355–363.

Gourlay D, Heit H and Almahrezi A (2005). Universal Precautions in Pain Medicine: A Rational Approach to the Treatment of Chronic Pain, *Pain Medicine,* 6 (2), 2005.

Savage S R (2002). Assessment for addiction in pain-treatment settings. *Clinical Journal of Pain,* 18: S28–S38.

CLINICAL USE OF S8 OPIOID ANALGESICS

SECTION IV

CLINICAL USE OF S8 OPIOID ANALGESICS

How are opioids used to manage chronic pain?

There are many approaches to treating chronic pain that should be considered based on a comprehensive assessment of the pain syndrome and its impact, the level of disability, and the existence of medical and psychiatric comorbidities. In some cases, specific treatment targeting the cause of the pain is available and appropriate. For example, good glycemic control is central to the treatment of painful diabetic neuropathy, and joint replacement can eliminate pain due to severe osteoarthropathy. When pain becomes chronic, there are numerous specific therapies that may be appropriate to lessen discomfort or address the need for functional restoration. On the basis of the assessment, pain treatment may emphasise or de-emphasise pharmacotherapy and incorporate any of a variety of non-drug treatments. These may include physical therapy or other rehabilitative approaches; cognitive and behavioural strategies; hypnotherapy; interventional treatments such as injections or implantation of spinal cord stimulators and pumps; or numerous complementary approaches such as acupuncture and massage.

Drug treatments include non-opioid medicines, such as paracetamol, aspirin and the non-steroidal anti-inflammatory drugs (NSAIDs); numerous drugs known collectively as the adjuvant medications (including antidepressants, anticonvulsant, membrane-stabilising drugs and others); and S8 opioids. Like the decision to use any other treatment, the decision to try an opioid, or to continue opioid therapy on a long-term basis, should be based on a careful evaluation of the issues specific to this approach.

Opioid therapy is accepted around the world as the most important approach to managing severe, acute pain (such as pain after surgery), moderate to severe chronic cancer pain, and moderate to severe chronic pain caused by other life threatening diseases (such as AIDS). The use of opioid therapy to treat chronic non-malignant pain has been more controversial and is still being actively discussed by medical experts. The consensus now is that some patients with chronic pain should be considered as candidates for long-term opioid therapy, and some will gain great benefit from this approach.

The controversy over the use of opioid drugs to treat chronic pain is multifaceted. To some extent, it is related to limited scientific literature that does not yet clearly define the most appropriate patient subpopulations, best treatments, and range of outcomes – the evidence that is available supporting long-term opioid prescription in chronic pain is generally of low quality. More research, particularly evidence-based studies are needed to address the questions of efficacy, withdrawal from studies because of an unacceptable profile of adverse events, whether there is either increased or decreased function and quality of life associated with this therapeutic approach and does it lead to abusive behaviours (to the patient or significant others). The evidence so far supports the evidence-based conclusion of the modest efficacy of opioids in the short-term treatment of chronic pain, say up to six months or so. The evidence for the longer term use of opioids in chronic pain from randomised controlled trials is currently lacking. Perhaps not surprisingly, the evidence supporting the benefit of intrathecal opioids is greater, but this intervention is exceedingly costly, requires a surgical procedure and, because it has more potential for serious adverse events, including meningitis, the role of this modality is extremely limited.

Controversy also stems from a lack of education about these drugs on the part of GPs, regulators, policy makers, patients, and the public at large. The scientific literature that does exist is often poorly recognised. This literature is generally viewed by pain management specialists as having established the efficacy of opioid treatment in selected

patients. It has also helped define the risks and range of benefits that are associated with opioid prescribing in chronic non-malignant pain.

There is also substantial confusion about the meaning of, and the true risks associated with, drug-related phenomena such as physical dependence, tolerance, and addiction (see: Appendix B). This confusion may lead to the withholding of S8 opioids because of a mistaken belief a patient is addicted when he or she is merely physically dependent. A correct understanding of terminology allows resolution of the important medical questions relating to patient selection, treatment goals, dosing, and monitoring.

Ideally, the GP's decision about how to treat a patient's pain is based on a full understanding of the likelihood of both benefit and harm from reasonable treatment alternatives. However, there is little data on risks and benefits for many treatments, including the long-term use of opioids. Nevertheless, it is widely agreed that opioids are an option for long-term pain treatment and that a trial may be a reasonable step for patients who have moderate to severe chronic pain.

To make this decision, the assessment should attempt to answer the following questions:

What is conventional medical practice in the treatment of this type of pain?

If there is widespread acceptance of an approach, such as trials of non-steroidal anti-inflammatory drugs in painful osteo-arthropathy, then the decision to use an opioid may require documentation that the accepted approach has been tried and failed, or carries an unacceptably high risk in the specific patient.

Are there other treatments that may be effective and feasible, and have a risk-to-benefit profile as good as, or better than, the S8 opioids?

This question is difficult to resolve, given the lack of comparative data from clinical trials. Nonetheless, the GP who is considering the administration of an opioid, particularly long-term administration, should carefully consider whether there are other treatment options that are likely to work as well in the specific case, at the level of risk associated with opioid therapy.

Is the patient particularly vulnerable to S8 opioid side-effects?

The analysis of risk-to-benefit shifts in those who are predisposed to severe S8 opioid side-effects.

Is the patient likely to take medicine responsibly or, if problems seem likely, could a plan for structuring treatment and monitoring be successful?

Risk assessment and management should be considered a fundamental aspect to long-term S8 opioid treatment. An assessment that reveals characteristics, such as a history of substance abuse in the recent past, that suggest a relatively high risk of problematic drug-related behaviours may influence the decision to initiate treatment or lead to more intensive monitoring if S8 opioid therapy is still indicated.

Based on the answers to these questions, the GP should be able to make an informed judgment about the potential value of an opioid trial in a particular patient.

Opioid treatment options to be avoided after initiation include short-acting opioids, such as, hydromorphone, morphine, or oxycodone (codeine should be avoided because it is a very weak analgesic but nevertheless has the complete spectrum of opioid side-effects). Long-acting opioids, such as one of the modified-release preparations or the long half-life opioid methadone are preferred for chronic pain because they are more convenient and may provide more consistent pain relief through generally more stable opioid serum concentrations. Less frequent dosing with long-acting or controlled-release opioids also can improve adherence to the therapy (fewer missed

doses). In appropriate patients, a short-acting opioid may be prescribed on a PRN basis in combination with fixed scheduled administration of a long-acting drug to assist in the management of breakthrough or incident pain. There is no indication for S8 injections to manage breakthrough pain and morphine can on occasions be ineffective for incident or movement-related pain.

Further Information:

NSW Therapeutic Advisory Group: http://www.ciap.health.nsw.gov.au/nswtag/guidelines.html

Hunter Integrated Pain Service: http://www.hnehealth.nsw.gov.au/pain

Australian Prescriber Magazine: http://www.australianprescriber.com/magazine/25/1/12/3/

Therapeutic Guidelines – Analgesic (Therapeutic Guidelines Limited): http://www.tg.com.au/?sectionid=18

American Academy of Pain Medicine: http://www.painmed.org

American Board of Pain Medicine: http://www.abpm.org/index.htm

American Medical Association: http://www.ama-assn.org/ama/pub/category/11541.html

American Pain Society: http://www.ampainsoc.org

Beth Israel Department of Pain Medicine & Palliative Care: http://www.stoppain.org

Relevant Resources:

American Society of Addiction Medicine (1997). *Rights and Responsibilities of GPs in the Use of Opioids for the Treatment of Pain*. Chevy Chase, M D: American Society of Addiction Medicine. (Available at http://www.asam.org/ppol/opioids.htm)

Gourlay G K (2002). Clinical pharmacology of opioids in the treatment of pain. In M A Giamberadino (ed), *Pain 2002–An Updated Review: Refresher Course Syllabus*. Seattle: IASP Press, pp. 381–394.

Graven S, deVet H C W, van Kleef M,and Weber W E J (2000). Opioids in chronic nonmalignant pain: a criteria-based review of the literature. In Devor M, Rowbotham M C, and Wiesenfeld-Hallin Z (eds). *Proceedings of the 9th World Congress in Pain Research and Managemen*t,16 Seattle: IASP Press.

Kalso E., (2000). Opioids for chronic noncancer pain. In Dostrovsky J O, Carr D B, and Koltzenburg M (eds). *Proceedings of the 10th World Congress on Pain*, Seattle: IASP Press, pp. 751–765.

Savage S R (2003). Opioid medications in the management of pain. In Graham A W, Schultz T K, Mayo-Smith M F, et al. (eds). *Principles of Addiction Medicine* (3rd ed). Chevy Chase, M D: American Society of Addiction Medicine, Inc, pp.1451–1463.

Tedeschi M (2006). Chronic nonmalignant pain – The rational use of opioid medication, *Australian Family Physician*, 35 (7), 509–512.

Zacny J, Bigelow G, Compton P, et al. (2003). College on Problems of Drug Dependence taskforce on prescription opioid non-medical use and abuse: Position statement. *Drug and Alcohol Dependence* 69: 215–232.

What outcomes should be assessed when judging whether opioid therapy is successful?

Improved comfort through opioid treatment may be associated with better physical and psychosocial functioning, and enhanced quality of life in some patients. Of course, opioids also have the potential to cause side-effects and adverse-effects (including abuse, addiction, or diversion). Therefore, given the variation in the responses associated with this therapy, management should include ongoing evaluation of a range of outcomes. These outcomes, in order of importance, include:

- functioning, both physical and psychosocial (and overall quality of life)
- pain relief
- side-effects
- maladaptive behaviours (which may suggest misuse, abuse, addiction, or diversion)

A valid outcome of an opioid trial is the decision not to proceed with treatment.

Pain intensity, or the extent of pain relief, should be measured over time and documented in the medical record. This may involve questions using a simple verbal rating scale (none, mild, moderate, severe), a numeric scale (0 to 10), or some other type of measure. Medico-legally, documentation in the medical record that pain is being followed over time is important evidence of the appropriateness of treatment. Although opioids can provide significant pain relief, complete pain relief is uncommon during the treatment of chronic pain. With this in mind, patients should not be put under the illusion that pain scores will be eroded to zero out of ten with the introduction of opioids. Pain measurements during the treatment of chronic pain are seldom zero, and in some cases, can fluctuate at relatively high levels.

In the clinical setting, the overall benefit or success of opioid therapy often cannot be determined by pain scores alone. Although clinical studies have suggested that meaningful pain relief is associated with defined reductions in pain scores (e.g. two points on a 0 to 10 scale or 30% on a visual analogue scale), these values are helpful in research but do not capture the complexity of the clinical situation.

An improvement in function may be demonstrated by improved sleep patterns, and ability to relieve incident pain by resting and waiting for the pain to ease over time. It is rare for complete pain relief to occur. For some patients, pain relief may be meaningful when specific tasks can be performed, mood improves, sleep is better, or relationships with others can occur. The monitoring of pain intensity is important but the GP needs to assess all activities of daily living in an effort to understand the overall effects of therapy.

Side-effects are common during treatment with opioids. The potential for side-effects should be explained to the patient and anticipated, assessed, and managed. With the exception of constipation, side-effects are usually of short duration and can be expected to lessen with time as the body adapts to the opioid.

Although a large clinical experience suggests that most patients use opioid drugs responsibly, follow instructions, accurately communicate with the GP, and avoid actions that would be worrisome to the prescriber—some patients engage in problematic drug-related behaviours. These problematic behaviours are very diverse and may reflect any of a wide array of clinical disorders (including addiction); they could potentially reflect diversion as well. GPs who prescribe opioids should monitor drug-related behaviour. This may be done through history-taking, or if indicated, through a more structured plan that includes behavioural assessments. Such a structured approach is most clearly indicated if the patient has a known history of addiction or significant substance abuse.

In summary, pain treatment with opioids should be evaluated over time by assessing improvement in pain and the extent to which this outcome is associated with side-effects, gains in function and quality of life, and the occurrence of any problematic behaviour. These outcomes are important to assess in all cases, regardless of their history.

Relevant Resources:

Gourlay G K (2002). Clinical pharmacology of opioids in the treatment of pain. In Giamberadino M (ed). *Pain 2002–An Updated Review: Refresher Course Syllabus*. Seattle: IASP Press, pp. 381–394.

McQuay H J (1999). How should we measure the outcome? Opioid Sensitivity of Chronic Noncancer Pain. In Kalso E., McQuay H J, and Weisenfeld-Hallin Z (eds.). *Progress in Pain Research and Management* 14. Seattle: IASP Press, pp. 371–383.

Rowbotham M C (2001). Editorial: What is a "clinically meaningful" reduction in pain? *Pain,* 94: 131–132.

What information do patients need about using opioids for chronic pain?

Informing patients about issues surrounding pain management and the use of opioid analgesics is good medical practice. Sometimes, this is accomplished as part of informed consent.

GPs can provide information through discussions with the patient or by distributing a handout, booklet, or medicine agreement. Patients and their caregivers can also gain access to valuable information by using the internet to reach a number of organisations listed in *relevant resources* on page 28.

Although not a complete list, patients should be made aware of the following:

Patients' responsibilities

- Talk to their GP or health care professional involved in their pain management; and keep notes and write down questions to ask about their pain.
- Talk to their GP if the medicine is not working.
- Talk to their GP if there are problems with side-effects.
- Talk to their pharmacist openly about their therapy and ask whether they could potentially help with information about the pain or the management of side-effects.
- Seek a second opinion from another GP or request a referral to a pain management specialist if they feel their pain management is not being taken seriously.
- It is important to have only ONE GP prescribing so that pain levels and function can be monitored and opioids adjusted to maximise the efficacy of treatment.
- Use the medicine only as it is prescribed and to handle it with a high level of responsibility.
- Notify the GP if they are planning to become pregnant or are already pregnant.
- Never allow others to use their prescribed medicine; the patient is the only person who is legally permitted to use the medicine prescribed for them.

Patients' rights

- Patients have the right to have their pain assessed and treated, and accredited medical facilities should recognise this right.

Diagnosis and treatment plan

Patients should be informed of:

- The diagnosis and, as much as possible, about reasons for the pain.
- The goals of treatment and how the GP will measure progress to achieve the goals.
- Why S8 opioids are part of the treatment plan and how and when to take them.
- The realistic expectations for sustained pain relief and improved functioning, and that it will be unlikely to relieve all their pain.

- The fact that opioids are only one part of a treatment plan that may include other treatments such as physical therapy or psychological techniques.
- Decisions about starting, changing, or stopping opioid treatment; these decisions should be made with patient input.
- Their right to ask for changes in treatment or a referral to a specialist if pain relief is not adequate.

Side-effects

Patients should:

- Know what side-effects to expect and how to manage them.
- Understand that most side-effects are transitory, but any effect can persist and potentially compromise the long-term value of the therapy.
- Recognise that concurrent therapies for side-effects may be recommended.
- Know that the occurrence of intolerable and untreatable side-effects means that the therapy is not appropriate and must be changed.
- Know that opioids may impair thinking and alertness at first and, if this occurs, the patient should avoid driving or other similar activities until these effects dissipate (see: *What are the issues surrounding opioid therapy and driving?* page 31).

Abuse, addiction, physical dependence, and tolerance

Patients should:

- Broadly understand the concepts of physical dependence, tolerance, and addiction.
- Understand that the use of an opioid in a manner outside what has been prescribed is a form of drug abuse, and that their GP must continually assess whether this is occurring and take steps to prevent it or, should it be identified, stop it.
- Know that the use of alcohol and any other prescribed drugs during opioid therapy must be assessed by their GP, and should the use of these substances be perceived to be problematic, the situation must be assessed and appropriate action taken.
- Recognise that the use of illicit drugs can be a significant problem, and that their GP will monitor the patient for this occurrence and act appropriately if it is discovered.
- Know that addiction is a serious illness, and that their GP will monitor drug-related behaviours in part to make sure that this problem is not developing; if there is a possibility that problematic behaviours surrounding medicines are due to an addiction, the GP must treat this, or refer to a practitioner who can.
- Know that true addiction is believed to be a rare occurrence in patients who receive opioids for a medical reason and have no history of drug abuse or addiction.
- Know that physical dependence, which is the capacity for withdrawal, is normal during opioid therapy, does not prevent discontinuation of the therapy if the pain stops, and, most importantly, is not addiction.
- Know that analgesic tolerance occurs when a stable dose of opioid has a decreasing effect over time and does not indicate addiction.
- Know that there are legal obligations relating to S8 opioid therapy and the GP will be required to notify health authorities (including DDU) who will likely place restrictions or conditions on such therapy.

Family and friends, or health care providers who are not directly involved in the treatment, may express concerns about the use of S8 opioids. These concerns may result from a poor understanding of the role of this therapy in pain management or from an unfounded fear of addiction.

Relevant Resources:

American Pain Society (2003). *Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain* (5th ed). Glenview I L: American Pain Society.

Fohr S A (1998). The double effect of pain medication: Separating myth from reality. *Journal of Palliative Medicine,* 1 (4): 315–328.

Leavitt S, Pain Treatment Topics: http://www.pain-topics.com

Arthritis Australia: http://www.arthritisaustralia.com.au/

People in Pain: http://www.painworld.zip.com.au/articles/pips.html

Osteoporosis Australia: http://www.osteoporosis.org.au

Headache Australia: http://www.headacheaustralia.org.au/

Department of Veteran's Affairs, Living with Chronic Illness & Pain:

http://www.dva.gov.au/health/menshealth/12_chronic_illness.htm

Chronic Pain & Anxiety Management: http://www.anxietyaustralia.com.au/chronic_pain_management.shtml

Can more than one opioid at a time be prescribed to a patient?

A GP may determine that it is beneficial for the patient to use more than one opioid at a time. In the treatment of cancer pain, the typical approach involves the prescription of a long-acting opioid to relieve baseline pain plus a short-acting opioid (known as the rescue dose) to be taken as needed for episodes of breakthrough pain. Many pain management specialists now apply this approach to the management of chronic non-cancer pain. The use of these rescue doses should be considered on a case-by-case basis. Some patients appear to be good candidates because their pain fluctuates, opioids help, and there is a reasonable expectation of responsible drug use; others may benefit more from administration of a single drug according to a fixed schedule.

What is opioid rotation, and when is it appropriate?

Opioid rotation refers to a switch from one opioid to another. It is a common strategy to address the problem of tolerance, achieve increased analgesic response, and help manage side-effects during opioid therapy. When a switch is made, the starting dose of the new drug is selected based on the information in an *equianalgesic dose table*. Versions of this table are widely available, and the values it contains should be considered a broad guide to selecting the dose. In most cases, the dose of the new opioid is reduced from the calculated equianalgesic dose because cross-tolerance between opioids may be incomplete and there is substantial variation in the dose-response relationship across individuals. This reduction reduces the risk of side-effects from a calculated dose that may be, in effect, too high for the patient. The extent of the dose reduction varies with the specific drug and the clinical situation of the patient. After treatment with the new drug is initiated, the dose usually must be adjusted, often repeatedly, to optimise the balance between pain relief and side-effects. The patient may be switched between two opioids every twelve months, with a week-long crossover period of tapering the old agent while increasing the new.

Relevant Resources:

Anderson R et al. (2001). Accuracy in equianalgesic dosing. Conversion dilemmas. *Journal of Pain and Symptom Management,* 21 (5): 672–687.

Arnold R and Weissman D E (2003). Calculating opioid dose conversions #36. *Journal of Palliative Medicine,* 6 (4): 619–620.

Pereira J et al. (2001). Equianalgesic dose ratios for opioids. A critical review and proposals for long-term dosing. *Journal of Pain and Symptom Management,* 22 (2): 672–687.

Hunter Integrated Pain Service, (June 2005). Guideline for Opioid Use in Persistent Pain.

What do the terms tapering and drug holiday mean?

Tapering (or weaning) is when the GP discontinues a pain patient's opioid therapy by progressively reducing the dose to prevent withdrawal symptoms. If opioid therapy must be stopped, the dose should be tapered rather than being discontinued abruptly. The observation that opioid treatment can be discontinued without uncomfortable abstinence by carefully tapering the dose supports the view that opioid treatment can be initiated as a trial. If the patient benefits, treatment can be continued; if the patient does not benefit, or benefits for a time but then develops problems, the treatment can be stopped without risk of the significant physiological perturbations associated with withdrawal. A generally accepted and reasonable guide in practice is a reduction of 10% of the total dose per week.

A drug holiday usually means the cessation of opioid treatment for reasons other than inadequate pain relief, unacceptable adverse effects, or decreased quality of life.

Is written consent between the GP and patient required before instituting treatment with an S8 opioid?

Although not a legal requirement, written consent regarding opioid therapy can be an important part of treatment for some patients. These consent forms clearly spell out patient obligations for continued opioid treatment. They are particularly useful in those patients who may subsequently deny specific directions given by the prescribing GP. Pain management specialists have differing opinions about the contents and use of consent forms, but some believe they should be used whenever long-term opioid treatment is instituted. Some specialists use agreements as routine office policy for every patient receiving chronic opioid therapy. The opposing view is that they interfere with the doctor-patient relationship by implying that the patient cannot be trusted. Consent forms should advance a positive therapeutic relationship, reflect a willingness to have an open dialogue about the responsibilities and risks associated with opioid therapy, and contain clear and accurate information and instructions for the patient. Such consent forms (a copy of which is kept by both GP and patient) may be useful to:

- describe the treatment goals and plan
- clarify the responsibilities and expectations of both GP and patient
- serve as a reference point if there is any disagreement about expectations and responsibilities
- serve as written informed consent regarding the possible side-effects and risks of opioid treatment
- establish parameters for opioid use and consequences for misuse
- aid in the diagnosis of problematic drug-related behaviour, should it occur

Consent form examples are provided with these guidelines (Refer inside back cover). Other examples are available though the American Academy of Pain Medicine – http://www.painmed.org/productpub/statements

Relevant Resources:

Gitlin M C (1999). Contracts for opioid administration in the management of chronic pain: a reappraisal. *Journal of Pain and Symptom Management,* 18: 6–8.

Tedeschi M (2006). Chronic nonmalignant pain – The rational use of opioid medication, *Australian Family Physician*, 35 (7), pg 511.

What should be documented when prescribing S8 opioids?

Requirements for documentation when prescribing opioids for the treatment of pain are an extension of the normal obligations, but with a particular emphasis on the reasons for opioid therapy and the expected improvements in pain, function and quality of life. The medical record should:

- have evidence that the treatment is taking place within the standards of medical practice
- include a history and physical examination, a pain assessment, and a treatment plan which forms an initial evaluation
- include an appropriate interim history and focused examination when indicated, pain reassessment, and reevaluation of the treatment plan for follow-up visits
- reveal evidence that the GP has evaluated the nature of the pain complaint, earlier treatments, impact of the pain, important comorbidities, and alcohol and drug history
- show that a range of outcomes have been repeatedly assessed and recorded during the course of opioid treatment, including:
    - pain intensity
    - physical and psychosocial functioning
    - side-effects of therapy
    - drug use behaviours (that is, whether any problematic behaviours occur)

What is the clinical role of a serum opioid assay?

A minimum effective blood opioid level has been established in both acute and chronic pain management. Prior to these research findings, some physicians claimed that there was no relationship between the blood level of opioids and effects. The listed relevant resources below show this to be fallacious.

By taking into consideration the many blood morphine and methadone levels measured in patients with chronic pain prescribed either morphine or methadone, the Pain Management Unit at Flinders Medical Centre has developed a therapeutic range for both morphine and methadone of 50 to 150 nanograms per ml.

Morphine and methadone have varying pharmacokinetic profiles resulting in widely differing half-lives and different oral bio-availability. However, at a molecular level they are similar and hence the therapeutic range for these agents is the same.

By estimating the blood morphine/methadone level at the same time as a patient states their current pain score, it is possible to determine whether the patient's pain behaviour is opioid sensitive. If the pain score is high and the blood morphine/methadone level below 50 ng/ml then it is a relatively simple matter to increase the oral dose of the opioid. If the blood level is greater than 150 ng/ml and at that time the patient claimed their pain score was high, then it is reasonable to state that the patient's pain behaviour is no longer opioid sensitive. Another reason for performing blood opioid levels is to confirm that the patient is taking the opioid in the prescribed manner.

An assay is now available for oxycodone and it is estimated that a therapeutic range should be available for this drug within 2 years.

Relevant Resources:

Austin K L, Stapleton J V, and Mather L E (1980). Relationship between blood meperidine concentrations and analgesic response: a preliminary report, *Anesthesiology*, 53 460–466.

Gourlay G K, Cherry D A, and Cousins M J (1986). A comparative study of the efficacy and pharmacokinetics of oral methadone and morphine in the treatment of severe pain in patients with cancer. *Pain*, 25 297–312.

What are the issues surrounding opioid therapy and driving?

Driving a motor vehicle can be considered an activity of daily living for many people living with chronic pain (Galski et al). Driving may be especially important for chronic pain patients rejoining the workforce, and for those residing in rural South Australia.

The *Motor Vehicles Act 1959* (SA) under section 148 obliges GPs to report to the Registrar of Motor Vehicles the fact that a chronic pain patient may likely danger the public if that patient drove a motor vehicle.

An opioid patient's ability to drive a motor vehicle is best determined by clinical and, if necessary, formal driving assessment (see: AustRoads link under relevant resources below). As at 2002, the Australian Medical Association (AMA) suggests GPs take responsibility for determining medical fitness to drive – rather than a licensing body.

Patients should be counselled about the sedative effects of S8 opioids (and other centrally-acting medicines). Literature documents that **stable** doses of opioids are not associated with significant impairments in psychomotor and cognitive performance in relation to driving. It has been suggested that neuropsychological side-effects due to opioid therapy usually decrease during the first weeks of that therapy (Sabatowski et al). Caution therefore should be exercised where the chronic pain patient's treatment is not considered stable, for example at titration of dose or when using short-acting preparations (e.g. parenteral administration). It is recommended that patients on doses of oral morphine of 200mg/day, or equivalent, undertake a formal driving assessment, especially if other factors could be interacting to impair the patient's functioning.

Relevant Resources:

AustRoads, Assessing Fitness to Drive (2003) http://www.austroads.com.au/aftd/hp.html

Drug & Alcohol Services South Australia (2006). *Benzodiazepines, Opioids and Driving*; (Prescriber Resource Kit).

Fishbain D, Cutler R, Rosomoff H, and Rosomoff R (2003). Are Opioid-Dependent/Tolerant Patients Impaired in Driving-Related Skills? A Structured Evidence-Based Review, *J Pain and Symptom Management*, 25 (6).

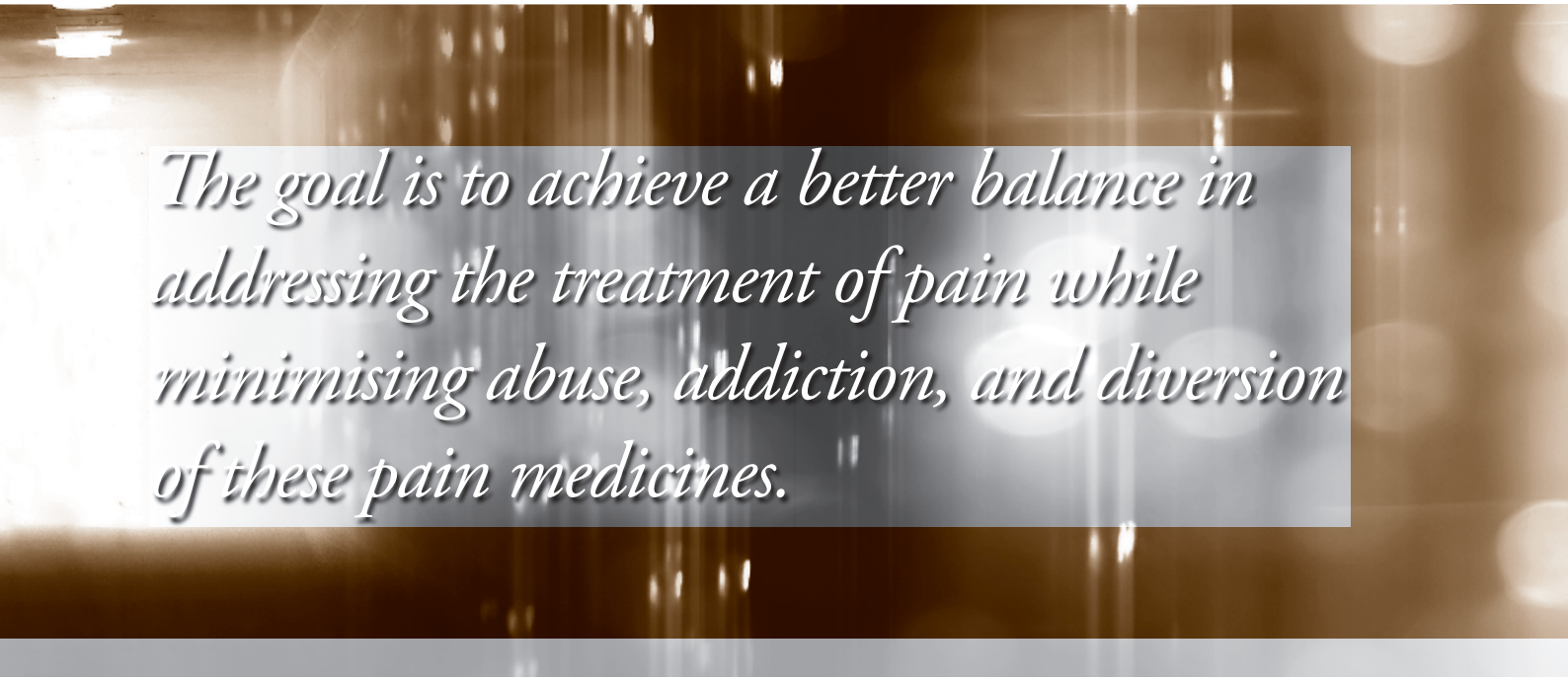
Galski T, Williams J and Ehle H (2000). Effects of opioids on driving ability, *J Pain and Symptom Management*, 19 (3).

Heddle W, AMA (SA) Road Safety Committee, (2002). Assessing fitness to drive – New guidelines to tackle a vexing issue, *SA Medical Review*.

Sabatowski R, Schwalen S, Rettig K, Herberg K, Kasper S and Radbruch L, (2003). Driving Ability Under Long-Term Treatment with Transdermal Fentanyl, *J of Pain and Symptom Management*, 25 (1).

OPIOID CLINICAL PHARMACOLOGY

SECTION V



OPIOID CLINICAL PHARMACOLOGY

Common opioid analgesics available, dosing guidelines, and equivalencies

LONG-ACTING PREPARATIONS (preferred agents for chronic pain)		
OPIOID	**STRENGTHS**	**Suggested Dosing Intervals**
MORPHINE		
Kapanol®	10, 20, 50, 100mg capsules	1–2 times a day
MS Mono®	30, 60, 90, 120mg capsules	Once a day
MS Contin®	5, 10, 15, 30, 60, 100, 200mg tablets	2–3 times a day
OXYCODONE		
OxyContin®	5, 10, 20, 40, 80mg tablets	2 times a day*
METHADONE		
Physeptone®	10mg tablets	2–3 times a day
FENTANYL		
Durogesic®	12, 25, 50, 75, 100 mcg/hr patches	Applied every 72 hours
BUPRENORPHINE		
Norspan®	5, 10, 20mg patches	Applied weekly

* The standard dosing interval is 12-hourly, although in a minority of patients an 8-hourly dosing may have some utility.

SHORT-ACTING PREPARATIONS	
OPIOID	**STRENGTHS**
MORPHINE	
Anamorph®	30mg tablets
Sevredol®	10, 20mg tablets
Ordine®	1, 2, 5, 10mg/mL oral liquid
OXYCODONE	
Endone®	5mgm tablets
Oxynorm®	5, 10, 20mg capsules 1mg/mL oral liquid
HYDROMORPHONE	
Dilaudid®	2, 4, 8mg tablet

The following maximum doses are to be used as a guide only and are not intended to override clinical judgment in specific cases. In chronic non-malignant pain, higher opioid doses need to be approached with increasing levels of caution and supervision. Ongoing daily doses above 100mg morphine or equivalent (see table overleaf) are usually only prescribed by GPs after second opinion, specialist support or pain management unit review. Daily doses higher than morphine 200mg or equivalent are only rarely utilised.

OPIOID	SUGGESTED MAXIMUM DOSE
MORPHINE	
Kapanol®	200mg per day
MS Mono®	200mg per day
MS Contin®	200mg per day
OXYCODONE	
Oxycontin®	120mg per day
METHADONE	
Physeptone®	60mg per day
FENTANYL	
Durogesic®	50mcg/hr
BUPRENORPHINE	
Norspan®	40mcg/hr (two 20mg weekly patches)
BREAKTHROUGH DOSES	1/12–1/6 of daily dose. If more than 3 breakthrough doses are required per day, the total daily dose of long-acting opioid should be increased by the total of the breakthrough doses being required each day.

EQUIANALGESIC TABLE – Per Oral				
MORPHINE	:	OXYCODONE	1.5 :	1
MORPHINE	:	METHADONE*	3 :	1
OXYCODONE	:	METHADONE*	2 :	1
MORPHINE	:	HYDROMORPHONE	7.5 :	1
MORPHINE	:	FENTANYL	90mg per day :	25mcg/hr patch
MORPHINE	:	BUPRENORPHINE	30 :	1

* Converting patients from a strong mu opioid to methadone is difficult because the half-life of methadone is extremely variable and not predictable. Thus there is no conversion ratio that holds between methadone and any strong opioid. It is best to assume that the patient has a long half-life and err on the conservative side by slowly increasing the dose of methadone from a small initial dose of, for example, 5 mgs nocte. This can take weeks, but in chronic non-malignant pain this is usually not a concern.

Relevant Resources:

AMH, (2006). *Australian Medicines Handbook*.

Hunter Integrated Pain Service (June 2005). *Guideline for Opioid Use in Persistent* Pain.

Victorian Drug Use Advisory Committee (2000). *Therapeutic Guidelines: Analgesic*, Therapeutic Guidelines Limited.

Woodruff R (1999). *Cancer Pain*, 2nd Edition, Melbourne.

Pereira J, Lawlor P, Vigano A, Dorgan M and Bruera E (2001). Equianalgesic Dose Ratios for Opioids: A Critical Review and Proposals for Long-Term Dosing, *J Pain and Symptom Management*, 22 (2).

What are the common side-effects associated with opioid treatment, and how can they be managed?

It is very important that GPs anticipate, recognise, and treat side-effects when patients are receiving opioids for pain. Common side-effects at the start of therapy or after dose escalation include somnolence, mental clouding, nausea, and constipation. Uncommon side-effects include fatigue, itching, adverse mood changes, dry mouth, loss of appetite, bloating, heartburn, urinary hesitancy, sweating, sexual dysfunction, headache, fluid retention, and sometimes significant weight gain. Although any side effect can persist, the most common long-term side effect is constipation. With overdose, opioids can cause serious respiratory depression, the risk of which is highest in the patient with limited or no ongoing opioid treatment.

GPs should periodically enquire about side effects. If side effects are present and not well tolerated, treatment should be adjusted. This discussion assumes that the patient indicates that the opioid regimen does produce acceptable pain relief. The drug or how it is administered can be changed, or a specific treatment can be given for the side-effects. Typically, successful treatment depends on achieving and maintaining a favourable balance between analgesia and side-effects.

Constipation is very common during opioid therapy, particularly among those patients who are predisposed (the elderly, patients taking other constipating drugs, patients with diseases that affect the gastrointestinal tract). Tolerance may not develop to opioid-induced constipation, and laxative therapy, attention to diet, and other bowel hygiene initiatives may be needed throughout the course of therapy.

Somnolence and mental clouding are common when therapy is initiated or the dose is increased. Although these effects typically decline over time, some patients experience persistent impairment. The risk presumably is higher among those who are concurrently using other CNS depressants and those with diseases associated with encephalopathy.

Nausea and vomiting may be treated with antiemetics such as phenothiazines, butyrophenones, or metoclopramide. When nausea is due to motion-related vestibular effects, a trial of an antihistamine, such as meclizine or scopolamine, should be considered. If opioid-induced gastroparesis is suspected (postprandial nausea, bloating, reflux symptoms), metoclopramide is a preferred drug because of its positive effects on gastrointestinal motility. To help manage nausea, it may be worthwhile to consider switching to a non-oral route of administration, at least for a time.

Itching, which results at least in part from the release of histamines triggered by opioids, usually resolves within a few days. If itching persists, it may be treated with an antihistamine. Itching or skin reactions can occur with the use of transdermal patch systems. Please refer to the manufacturers' instructions on recommendations should this problem arise.

Respiratory depression is a rare adverse effect during chronic opioid treatment and will mainly occur in major overdose situations. Respiratory depression is possible if dose escalation occurs very quickly, beyond the ability of compensatory mechanisms to adjust; if some intercurrent cardiopulmonary event occurs (for example, pulmonary embolism or pneumonia), or if something happens to eliminate the source of the pain (for example, a nerve block). Except in rare circumstances, respiratory depression is preceded by somnolence and slowed breathing. Respiratory depression that occurs from some intercurrent cardiopulmonary event may be partially reversed by naloxone. Accordingly, a response to naloxone does not mean that the opioid was the primary problem. When patients develop respiratory depression in the setting of stable dosing, a prompt search for another cause usually is indicated, even if the patient improves with naloxone.

Because the administration of naloxone carries substantial risks in the physically dependent patient (severe

withdrawal), it should not be used unless clinically significant respiratory depression is feared. Naloxone should not be given for somnolence in the absence of existing or impending respiratory effects. If the time of peak effect of the drug has passed, and the patient has adequate respirations, it is safer to observe for a period of hours than to treat with naloxone. If naloxone must be given, it is safer to give small doses repeatedly and monitor effects.

Endocrine effects may occur with opioid treatment. This may include hypopituitarism. Studies of intrathecal opioid administration by Abs and Roberts have shown that hypogonadotrophic hypogonadism is common in men (85% prevalence). Secondary amennorhoea is similarly common in pre-menopausal women. Hypoadrenalism (ACTH deficiency) and growth hormone deficiency are less common (15% prevalence of both). TSH deficiency is rare. All patients on intrathecal opioids should be assessed for hypopituitarism.

The prevalence of endocrine abnormalities in those on oral opioid therapy is not known although cases have been reported. Men should be questioned about libido and erectile dysfunction prior to initiation of opioids and also while on treatment. If a problem exists then it is recommended to check morning levels (08:00–09:00) of LH, FSH, testosterone, sex hormone binding globulin, cortisol, DHEAS, TSH, FT3, FT4 and prolactin. Pre-menopausal women who stop menstruating while on opioid treatment should have morning measurement of LH, FSH, oestrogen, progesterone, cortisol, DHEAS, TSH, FT3, FT4 and prolactin. Replacement therapy with testosterone or oestrogen/progesterone can be considered in a general practice setting if a deficiency develops on opioid treatment. Testosterone therapy may be required for life once started. Referral to an endocrinologist is recommended for hypoadrenalism, secondary hypothyroidism or multiple endocrine deficiencies.

Dental caries may be caused, or exacerbated, by extended treatment with opioids – given that these drugs reduce saliva flow. All patients being treated with opioids should be encouraged to adopt good dental hygiene practices (frequent brushing and flossing), and have regular reviews by a dental surgeon.

Relevant Resources:

Abs R, Verhelst J, Maeyaert J et al.,(2000). Endocrine consequences of long-term intrathecal administration of opioids. *Journal of Clinical Endocrinology and Metabolism*; 85(6):2215–2222.

Mendelson J H, Mello N K (1975). Plasma testosterone levels during chronic heroin use and protracted abstinence. A study of Hong Kong addicts. *Clinical Pharmacology & Therapeutics*; 17:529–533.

Roberts L J, Finch P M, Pullan P T et al. (2002). Sex hormone suppression by intrathecal opioids: a prospective study. *The Clinical Journal of Pain*; 18(3):144–148.

Spring W D, Willenbring M L, Maddux T L (1992). Sexual dysfunction and psychological distress in methadone maintenance. *International Journal of the Addictions*; 27:1325–1334.

Common routes of administration

Oral dosage

Immediate Release Formulations: The peak opioid concentration usually occurs within 30–60 mins following the oral administration of opioid drugs as an immediate release solution or tablet. The oral bioavailability (proportion of opioid drug absorbed following oral administration compared to a standard parenteral, usually intravenous, dose) for opioid drugs displays both significant inter-patient and absolute variability. The oral bioavailability is the most variable of all pharmacokinetic parameters for some opioids, for example, morphine where the range varies from 10–50% (Gourlay et al. 1986) which means the range in oral:parenteral dose ratios varies from 2–10 with most clinicians using an average value of 3–4.

GPs should carefully titrate the dose to achieve optimum balance between analgesia and side-effects, thus overcoming

inter-patient variability in the bioavailability of opioids. Thus, this technique to obtain an effective opioid dose accounts both for that patient's oral bioavailability and analgesic requirements.

Sustained or Modified Release Formulations and Bioequivalence: Many of these modified release morphine formulations are NOT bioequivalent which indicates either the rate and/or extent of morphine absorption is different between the formulations (Gourlay 1998). The clinical implications of a lack of bioequivalence between formulations is that care should be exercised if GPs change modified release formulations in individual patients as dosage adjustments may be necessary to re-optimise pain control. Some of the modified release morphine formulations (e.g. Kapanol® and MS Mono®) can be administered once every 24 hours with equivalent outcomes with respect to analgesia and side-effects to that seen with morphine formulations administered every 12 hours (Gourlay et al. 1997; Gourlay 1998).

Some modified release morphine formulations consist of identical pellets administered as a capsule (e.g. Kapanol®, MS Mono®). These formulations can be effectively administered as a sprinkle on soft food (ice cream, yoghurt etc.) or added to a glass of water for the small percentage of patients with dysphagia or other reasons why swallowing solid dosage forms is problematic (ideally taken within 30 mins of sprinkle). Another option for these patients is the use of granules that may be reconstituted in water (e.g. MS Contin® Suspension).

Buccal Formulations

Fentanyl has been successfully administered via the buccal mucosa in a unique formulation (termed a hardened lozenge on a stick or the fentanyl 'lollipop' – the latter term is now actively being discouraged for obvious reasons) as a non-invasive treatment of acute pain in paediatric patients (Schecter et al. 1995) and also for incident or unpredictable breakthrough pain in adult patients with severe cancer pain.

Other Routes of Administration

Parenteral Administration: The absorption of all opioids following intravenous, intramuscular, or subcutaneous administration has been well characterised over a prolonged period. The problems associated with the regular use of these parenteral routes in the treatment of chronic pain are obvious; for example, creating the expectation that only injections of opioids are effective in the treatment of chronic pain, the short duration of pain relief associated with parenteral routes requiring regular administration with associated reinforcing qualities, possible tissue damage at the injection site, significant inconvenience for practitioners, and risks of overdose, misuse and diversion.

Transdermal Formulations: Fentanyl (Durogesic®) and buprenorphine (Norspan®) have desirable physiochemical properties and intrinsic potency that enable analgesic blood concentrations to be achieved following transdermal administration (Gourlay, 1999; Gourlay, 2001). The pharmacokinetics of these formulations are characterised by a slow absorption through the skin, but a long duration of effect, up to 3–7 days. A reservoir in the stratum corneum immediately below the patch is established over 12–24 hours once a system is applied and then constant blood opioid concentrations are maintained for the rest of the dosing interval. Studies in cancer pain suggest Durogesic® has similar pain control to MS Contin®, but a lower incidence of constipation (Ahmedzai et al. 1997; Gourlay 2001; Nugent et al. 2001). Durogesic® has also been used to treat non-cancer (Milligan et al. 2001) and pain related to AIDS (Newshan and Lefkowitz 2001). The more recent product, Norspan®, has been indicated to treat osteo-arthritic pain (particularly in the elderly), back pain and other non-cancer pain requiring opioid analgesia.

Rectal Administration: The rectal route is frequently used in patients who have difficulty swallowing or have significant vomiting despite optimised anti-emetic therapy. The absorption of drugs from the rectum is notoriously

variable and depends greatly on the nature of the formulation used. Liquid rectal formulations (solutions or suspensions) frequently have reasonable, rapid and predictable absorption, but meet with generally low patient acceptance because the solution is difficult to hold in the rectum, particularly in ambulant patients. While the rectal bioavailability of opioids from solid dosage forms can be extensive (actually greater than oral bioavailability of the same dose), it is highly variable and the precise anatomical location of the suppository in the rectum is a crucial factor governing the extent of avoidance of hepatic first pass metabolism and hence the rectal bioavailability (Gourlay 1998).

Various modified release oral formulations have also been administered rectally with variable clinical outcomes (Wilkinson et al. 1992; Darke et al. 1995; Gourlay 1998). While vaginal pessaries can also be used to administer opioid drugs, this route of administration is not greatly favoured by most female patients.

Spinal Administration: While spinally (i.e. epidural or intrathecal) administered opioids (and other drugs and drug combinations) are primarily considered in the treatment of severe pain in cancer patients when optimised orally administered drugs no longer provide adequate analgesia (Plummer et al. 1991), this route of administration is increasingly being used in chronic non-malignant pain (Bennett et al. 2000; Rainov et al. 2001). The spinal route of administration is used because of a perceived favourable balance between improved pain relief and the incidence and severity of adverse effects when compared to oral opioids due to a selective spinal action. The small opioid doses administered intrathecally (in comparison to oral doses of the same opioid) result in negligible and sub-therapeutic blood opioid concentrations. However, the initiation spinal opioid therapy is the province of specialised pain management units and is only included here for completeness sake.

Intranasal Administration: The absorption of opioid drugs from the nasal mucosa has been used in the treatment of breakthrough or incident pain, for pre-operative sedation, and emergency trauma treatment. Nasal spray bottles that deliver an accurate volume of solution (and therefore dose) as a spray per activation are used for this route of administration. Fentanyl (Zeppetella 2000), oxycodone (Takala et al. 1997) and sufentanil (Helmers et al. 1989) have been effectively administered in this manner. The intranasal bioavailability for oxycodone and sufentanil was 45% and 78% respectively. The administration of intranasal sufentanil as either drops or a spray had essentially the same effect on the degree of pre-operative sedation (Vercauteren et al. 1988).

Pulmonary Administration using Aerosol or Nebulised Solutions: While the lung is not considered to be a normal route of administration for opioid drugs (as opposed to volatile anaesthetic agents), evidence suggests that there is rapid, extensive but variable absorption of both morphine (Ward et al. 1997) and fentanyl (Mather et al. 1998) following the inhalation of drug solutions that have been aerosolised. In fact, the mean blood concentration-time profiles following pulmonary administration were similar to that seen with intravenous administration and raise the possibility of a non-invasive option for breakthrough or incident pain. While these studies used specialised apparatus to create the small droplets that constitute the aerosol, the absorption of opioid drugs from traditionally nebulised solutions is less efficient and results in lower bioavailability and a more variable post-operative analgesia (Higgins et al. 1991).

Malabsorption Considerations: For patients with chronic pain and gastrointestinal malabsorption, for example due to rapid gut transit times or dysmotility, a referral to a relevant specialist may be appropriate for advice on alternative routes of administration. Effective pain relief may be achieved by using, for example, the transdermal or sublingual routes of administration.

Methadone tablets – special consideration for effective use

Methadone clearance depends on the amount of functional cytochrome P450 isoform 3A4 in the liver. Consequently, methadone metabolism can be either stimulated or inhibited by environmental factors and the concurrent administration of other drugs that influence 3A4 activity; for example, anticonvulsants (notably phenytoin) and rifampicin markedly stimulate methadone metabolism (Plummer et al. 1988) while fluconazole (Cobb et al. 1998), HIV-1 protease inhibitors (Iribarne et al. 1998) and some of the SSRI's (fluvoxamine) competitively inhibit methadone clearance.

The terminal half-lives for most opioids varies between 2 and 7 hours, the notable exception being methadone where the extremes are as short as 6 hours and as long as 150 hours although most patients will be in a range of 12–60 hours (Plummer et al. 1988). The effective use of methadone in the treatment of pain requires that the GP has an understanding of the impact that the variable terminal half-life can have on the pharmacodynamic response, mainly pain relief. For example, most methadone dosage regimens assume that the patient will have mean methadone pharmacokinetics, namely a terminal half-life of approximately 24 hours. This will be true in many patients. However, if a particular patient has a short methadone half-life (e.g. 6 hours) and complains of severe pain, traditional dosage regimens will most probably fail to provide pain relief as methadone will be cleared rapidly and very large and more frequent doses (probably larger than the GP would normally prescribe) will be necessary to provide pain relief. Alternatively, if the patient had a very long methadone half-life (e.g. 90 hours), significant sedation may be seen in the second week of treatment as it will take 15 days to reach the steady state of blood methadone concentrations under these conditions (5 times the terminal half-life). So effective methadone prescribing does require detailed insights into opioid pharmacokinetics and drug interactions.

Transdermal Buprenorphine – special consideration for effective use

Norspan® (buprenorphine) is indicated for management of moderate to severe pain.

Pharmacology

Buprenorphine is a partial agonist, acting at the mu-receptor. It also has antagonistic activity on the kappa-receptor. *Caution:* The antagonistic activity may precipitate withdrawal in patients on other opioid agonists.

Buprenorphine patches take 3 days to achieve maximal effect. After removal, blood Buprenorphine levels will half every 12 hours.

Buprenorphine has a dose-related-response until a ceiling effect is reached. Over this range it is between 30–100 times more potent than oral morphine.

Tips for Use:

1. *Dose conversions:* Norspan® 5mg a week is roughly equal to 10–15mg sustained release oral morphine a day. For each additional 5mg Norspan patch an additional 10–15mg a day can be added, to a maximum of 40mg weekly. This will replace 80–120mg sustained release oral morphine a day.
2. *Transferring from methadone:* Always allow a minimum 24 hour washout period with methadone tablets (Physeptone®), and if patients are taking more than 30mg of Methadone daily, always seek specialist medical practitioner advice.
3. *Adverse reactions:* Similar to all other opioids, nausea, sedation, constipation etc. 10% of patients can expect to develop a contact allergic reaction, which may require cessation of treatment.
4. *Breakthrough pain management:* Norspan® provides a baseline level of pain relief; breakthrough analgesia can be achieved by adding another short acting opioid up to once daily e.g. breakthrough pain at night may require the addition of a small dose (5mg) oral morphine.

Relevant Resources:

Cobb M et al. (1998). The effect of fluconazole on the clinical pharmacokinetics of methadone, *Clinical Pharmacology & Therapeutics,* (63), 6, 655–662.

Dr R Henning (2006). Consultant in Pain, Dependence, and Medical Hypnosis, Clinical Experience.

Gourlay G K (1998). Sustained relief of chronic pain: pharmacokinetics of sustained release morphine, *Clinical Pharmacokinetics*, 35 (3) Sep.

Gourlay G K et al. (1997). Pharmacokinetics and pharmacodynamics of twenty-four-hourly Kapanol compared to twelve-hourly MS Contin in the treatment of severe cancer pain, *Pain,* 69, 295–302.

Gourlay G K (1999). Different opioids –same actions? *Opioid sensitivity of chronic noncancer pain*, ed. Eija Kalso, Henry J. McQuay and Zsuzsanna Wiesenfeld-Hallin (Progress in Pain Research and Management, Vol. 14). Seattle, 97–115.

Milligan K et al. (2001). Evaluation of long-term efficacy and safety of transdermal fentanyl in the treatment of chronic noncancer pain *The Journal of Pain,* (2), 4, 197–204.

Newshan G and Lefkowitz M (2001). Transdermal Fentanyl for Chronic Pain in AIDS: A Pilot Study, *Journal of Pain and Symptom Management*, (21), 1, 69–77.

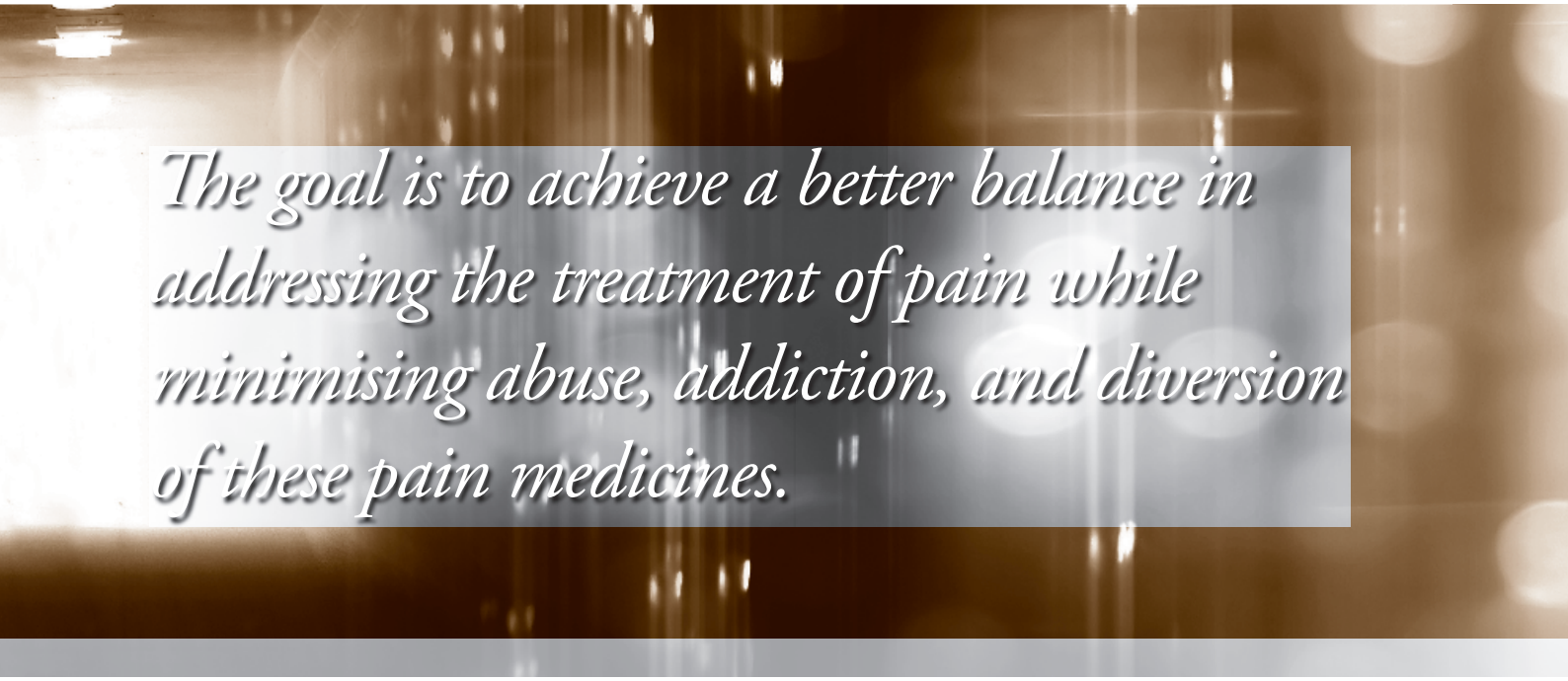
Rainov N et al. (2001). Long-Term Intrathecal Infusion of Drug Combinations for Chronic Back and Leg Pain. *Journal of Pain and Symptom Management,* (22), 4, 862–871.

Product Information, *Norspan® Transdermal Patch,* TGA Approval 4 Apr 2005, Mundipharma Pty. Ltd.

Zeppetella G (2000). An Assessment of the Safety, Efficacy, and Acceptability of Intranasal Fentanyl Citrate in the Management of Cancer-Related Breakthrough Pain: A Pilot Study, *Journal of Pain and Symptom Management,* (20), 4, 253–258.

PUBLIC HEALTH ISSUES IN THE MEDICAL USE OF S8 OPIOID ANALGESICS

SECTION VI



PUBLIC HEALTH ISSUES IN THE MEDICAL USE OF S8 OPIOID ANALGESICS

What is the extent of prescription opioid abuse?

It is difficult to measure with any precision trends in the abuse of prescription drugs, including S8 opioid analgesics. Obviously, however, the quantities of S8 drugs available for abuse and diversion increases with the increased prescription of them. Abuse may occur in the context of the doctor-patient relationship or in the misuse of 'street' or diverted prescription drugs. In terms of the first category, very little is known about the proportion of patients who abuse opioid analgesics that are prescribed for them. However, approximately 7% of patients being treated on the South Australian Opioid Dependence Substitution Program (methadone/buprenorphine) have an iatrogenic source of their dependence. There are many more whose pain and dependence issues are able to be adequately managed within the pain treatment model. With regard to the second category – use of 'street' or diverted prescription drugs – some South Australian data exists from the Illicit Drug Reporting System (IDRS). That data suggests that among injecting drug users, morphine is the most widely abused opioid analgesic (over 40% of the cohort surveyed). Types of morphine particularly injected were Kapanol® and MS Contin®.

The Australian Institute of Health & Welfare has collected and collated national data regarding hospital admissions where opioid poisoning was the principal diagnosis (using ICD-10 AM criteria). Between 1998 and 2004 over 6300 admissions occurred nationally as a result of opioid poisonings (excluding including heroin/opium poisonings).

While information is limited, it is fair to say that few patients treated with opioids in the context of an open, functional, and trusting GP-patient relationship will develop problems with opioid abuse that cannot be addressed by their GP.

Relevant Resources:

Drugs of Dependence Unit (2006). Data on File.

Weekley J, Pointer S and Ali R (2005). SA Drug Trends 2004 – Findings from the Illicit Drug Reporting System (IDRS), NDARC Technical Report No 213, University of New South Wales.

Australian Institute of Health & Welfare, National Hospital Morbidity Database, http://www.aihw.gov.au, accessed June 2006.

What are the street values of prescription opioids?

Prescription opioids have street values which make them attractive for selling on the black-market or trading for other drugs or favours. These activities fit broadly under the banner of diversion. The following approximate values have been obtained from the listed relevant resource and anecdotes from patients and GPs in South Australia.

Opioid	Street Value per Tablet/Capsule
Methadone (Physeptone®) 10mg tablet	AUD $7
Morphine (Kapanol®/MS Contin®) 100mg capsule/tablet	AUD $30–$40
Oxycodone (OxyContin®) 80mg tablet	AUD $30–$40
Buprenorphine (Subutex®) 8mg tablet	AUD $40

While the GP's field of practice is medicine not suppression of crime, it is important to be aware that even a one off prescription of 20 Kapanol®/MS Contin® /OxyContin® could yield up to $800 on the black-market, or that an additional 100mg morphine dose each day could yield up to $800 a month.

Relevant Resources:

Weekley J, Pointer S and Ali R (2005). SA Drug Trends 2004 – Findings from the Illicit Drug Reporting System (IDRS), *NDARC Technical Report No 213*, University of New South Wales.

What are the common ways opioids are diverted to illicit uses?

Diversion refers to the unlawful transfer of prescription opioids from legitimate to illicit channels of distribution, often resulting in abuse, exchange, or sale of those drugs. Opioids are diverted in many ways, all of which are illegal. Some examples include:

- Legally prescribed opioids subsequently given to third parties (friends or family), perhaps to treat their pain conditions.
- Legally prescribed opioids for genuine pain conditions that a patient subsequently sells to third parties, or trades for other drugs.
- Prescribed opioids obtained through unlawful means or false pretences subsequently sold to third parties or traded for other drugs.
- Prescriptions are forged or fraudulently altered, then presented to pharmacies, with resulting opioids sold or traded for other drugs.
- Opioids are stolen from suppliers, pharmacies, or chronic pain patients and sold or traded for other drugs.

To help reduce diversion, GPs should keep prescription pads in a secure location, and contact the South Australian Police and the DDU if there is reason to suspect prescription forms may have been stolen. GPs are under an obligation to write prescriptions in a manner that helps prevent prescriptions from being fraudulently altered, for example:

- write all prescriptions in ink or cause the prescription to be printed in ink
- write the quantity of opioid drugs both in words and numerals on the prescription

GPs are asked to ensure there are no blank areas on prescriptions where additional items could be fraudulently added and that strengths or number of repeats is written clearly to avoid fraudulent changes.

Prescription-shopping or drug-seeking are behaviours that may aid in diversion. Skilled 'professional' patients may seek out GPs and use them as suppliers of opioids that are diverted to the black-market. All GPs who hold suspicions about a specific patient are strongly encouraged to contact the DDU, as further information may be available. GPs are also encouraged to contact the DDU to arrange internet access to the *Online Privileged Circular* (regularly updated with the particulars of the most persistent or egregious drug-seekers).

Relevant Resources:

Gilson A M, Ryan K M, Joranson D E, and Dahl J L (in press). A reassessment of trends in the medical use and abuse of opioid analgesics and implications for diversion control: 1997-2002. *Journal of Pain and Symptom Management vol 28 no. 2 August 2004*.

Drugs of Dependence Unit, *Online Privileged Circular*, *Controlled Substances Act 1984* (SA) s58 (accessed through www.dassa.sa.gov.au).

Australian Prescriber Magazine: Drug-Seeking Behaviour: http://www.australianprescriber.com/magazine/20/3/68/70/

What behaviours are potential indicators of problems for patients on long-term opioid therapy?

Patients who receive opioids for chronic pain conditions may engage in problematic drug-related behaviours. The range of behaviours is broad and their meaning may be difficult to clarify. Some behaviours that are clear-cut indicators of abuse or addiction when they occur in those with no chronic pain condition become more challenging to interpret when they are actually the unrelieved symptoms that are the target of therapy. In all cases, problematic drug-related behaviours must be carefully assessed, even as efforts are undertaken to eliminate or limit them. The differential diagnosis of problematic behaviour includes addiction and diversion, but also pseudo-addiction (see: Appendix B), confusion related to organic brain disease, and numerous psychiatric disorders associated with impulsive or self destructive drug use.

Some of the problematic drug-related behaviours that occur in populations with chronic pain should be noted and managed by GPs. These include:

- complaints about pain not being controlled and the need for more S8 opioids
- drug hoarding
- requesting specific pain medicines or specific routes of administration (claiming others don't work)
- openly acquiring similar medicines from other GPs or patients
- occasional unsanctioned dose escalation
- poor compliance with other recommendations for pain treatment

These behaviours are not acceptable and could lead to any of a number of responses on the part of the GP, including the decision to taper and discontinue treatment. GPs also should be aware that some of these types of behaviours, such as prescription forgery, may constitute criminal offences under State and Commonwealth legislation. However, it is important to recognise that these behaviours cannot be perceived to be an immediate reflection of addiction. Rather, the assessment may reveal other potential explanations, including behaviours relating to pseudo-addiction.

The following behaviours are more egregious, and as such, are more probable indicators of abuse, addiction, or diversion:

- deterioration in personal function at work, in the family, or socially
- illegal activities, such as selling medicine, forging prescriptions, stealing drugs from other patients, buying prescription drugs from non-medical sources
- taking medicine for non-pain related reasons e.g. to 'chill out after a difficult day'
- injection or snorting of medicine
- crushing controlled release preparations
- multiple episodes of lost or stolen prescriptions
- resistance to changes in treatment, regardless of adverse effects
- refusal to comply with random urine drug screens or referral to pain management specialists
- concurrent abuse of alcohol or illicit drugs
- use of multiple GPs and pharmacies

GPs are strongly advised to contact the DDU to discuss patients who exhibit any of the above behaviours. GPs should expect some degree of interaction with the DDU and possibly South Australia Police if their patients are involved in illegal activities. In the case of the latter, examples include selling opioids that have been prescribed for them, or when there is a need to substantiate prescription forgeries.

Relevant Resources:

Compton P, Darakjian J, and Miotto K (1998). Screening for addiction in patients with chronic pain and "problematic" substance use: evaluation of a pilot assessment tool. *Journal of Pain and Symptom Management,* 16 (6): 355–363.

Passik S D, Kirsh K, McDonald M et al. (2000). A pilot survey of aberrant drug-taking attitudes and behaviours in samples of cancer and AIDS patients. *Journal of Pain and Symptom Management* 19 (4): 274–286.

Opioid prescribing in the setting of past misuse/abuse

Past opioid misuse/abuse is not a reason for withholding chronic pain treatment. It is a reason to seek input from sources external to the GP-patient relationship. Past misuse/abuse may comprise opioid addiction (whether to heroin or prescribed pain relief), uncontrolled dose escalation, inappropriate administration of oral opioids (e.g. by injection).

Sources external to the GP-patient relationship include:

- staff specialists at public drug treatment centres (e.g. Warinilla)
- professional staff at the DDU
- staff specialists at pain management units
- the dispensing pharmacist
- private consultants in pain and dependence

GPs must, with the aid of the patient and listed external sources, determine the extent of the patient's past misuse/abuse and identify where they are likely to encounter problems if opioids are prescribed for pain relief. GPs are encouraged to have in place a *Consent to Treatment* agreement between themselves and the patient if they decide to proceed in such a setting. Treatment is to be structured in a manner that maintains the safety of the patient, and increases both the patient's ability to maintain control and the GP's ability to identify opioid misuse/abuse.

Depending on the specifics of the case, the above structure may include:

- frequent collection and/or supervision of medicine from a single nominated pharmacy (ranging between fortnightly to daily collection)
- frequent reviews
- the use of a single drug (a long-acting opioid)
- ensuring no lost, stolen, or damaged opioid prescriptions or drugs are replaced
- pill counts
- random and pre and post supervised blood opioid levels
- regular random urinalysis (to provide evidence of therapeutic adherence and non-use of other drugs)

The structure of the treatment plan should be tailored to reflect the GP's assessment, with aid of external sources, of the severity of drug misuse/abuse risk. Clear and regular communication between the GP and the patient is an extremely valuable part of the treatment plan.

Relevant Resources:

Gourlay D, Heit H and Almahrezi A (2005). Universal Precautions in Pain Medicine: A Rational Approach to the Treatment of Chronic Pain, *Pain Medicine*, Vol 6, 2.

Opioid prescribing in the setting of current opioid misuse/abuse – Role of Opioid Substitution Pharmacotherapy

Depending on the severity of misuse/abuse, the options of counselling the patient and implementing interventions described in the previous section may avail themselves, e.g. if the patient is frequently running short of tablets, the GP ought to increase the frequency with which the patient collects tablets from a single pharmacy and to see them more frequently for prescriptions. GPs must be clear about indicating to the patient that behaviour which is unacceptable. Ideally, these behaviours should have been outlined and discussed prior to a trial of opioids for chronic pain.

Continued drug misuse/abuse, despite repeated interventions may, in some cases, indicate the need to discontinue prescribing of potentially abusable drugs, and in other cases, provide the impetus for termination of the GP-patient relationship. The GP should be prepared to respond in these ways, and should understand both the options for non-drug therapies and the approach to termination without abandonment e.g. appropriate referral to a practitioner with experience in drug treatment.

A useful way of avoiding abandonment may involve transferring the patient to an accredited prescriber under the Opioid Dependence Substitution Program (methadone/buprenorphine). The program has the advantage of providing supervised daily dosing of methadone or buprenorphine in a manner that helps to reduce risks associated with opioid misuse/abuse, while still providing a degree of opioid pain relief.

Relevant Resources:

Dunbar S A, and Katz N P (2001). Chronic opioid therapy for nonmalignant pain in patients with a history of substance abuse: report of 20 cases. *Journal of Pain and Symptom Management,* 11 (3): 163–171.

Heit H A, and Gourlay D (2004). Urine drug testing in pain medicine. *Journal of Pain and Symptom Management,* 27 (3): 260–67.

Graziotti P and Gouke R (1997). The Use of Oral Opioids in Patients with Chronic Nonmalignant Pain: Management Strategies. *Medical Journal of Australia*, 167, 30–34.

Savage S R (2002). Assessment for addiction in pain-treatment settings. *Clinical Journal of Pain,* 18: S28–S38.

Wesson D, Ling W and Smith D E (1993). Prescription of opioids for treatment of pain in patients with addictive disease. *Journal of Pain and Symptom Management,* 8: 289–296.

Role of the Drugs of Dependence Unit

The DDU has the responsibility of administering the State legislation controlling the availability of prescribed drugs. With S8 drugs, this includes granting statutory Authorities. The aim of granting Authorities is to obtain a reasonable balance of permitting S8 opioid use for appropriate medical treatment, while minimizing the potential of these drugs to cause harm in the community through induction of drug-dependence, abuse, or diversion to illicit markets. This is achieved by ensuring treatment is appropriate to the condition, is consistent with accepted pain treatment protocols, and appropriate management limitations are employed.

Authorities may be granted, refused or revoked. When granted, they will be subject to certain conditions. Conditions are determined by the specific patient, pain condition and treatment circumstances, and aim to:

- ensure the pain condition has been fully investigated
- ensure opinions are obtained from appropriate pain management specialists or a pain unit
- ensure other treatment options have been explored and if appropriate, instigated
- ensure appropriate drug, route and dose
- ensure appropriate monitoring and management of the patient
- provide guidance and support to the prescriber
- support the prescriber and the pharmacist who may be placed under pressure to prescribe or dispense inappropriately
- divert patients to a more appropriate treatment provider, such as a pain management specialist, pain unit or drug treatment facility, when required
- ensure treatment is terminated if necessary

GPs are encouraged to discuss with DDU professional staff any treatment concerns they have where management becomes difficult. Management may be assisted if difficult or unpalatable decisions are seen by the patient to be made by the DDU and that the GP is required to comply. This may avoid long and arduous arguments with patients, relieve pressure to prescribe or supply inappropriately, or avoid intimidation or threats. Patient anger can be diverted away from the GP to the DDU staff. Documents generated by the DDU may be shown to the patient to reinforce the above. Such a strategy is thought more likely to preserve the therapeutic relationship.

OTHER LEGAL AND REGULATORY CONSIDERATIONS

SECTION VII

OTHER LEGAL AND REGULATORY CONSIDERATIONS

State Government legislative control over S8 opioids

In South Australia the prescription, supply, administration, possession, storage, and handling of S8 opioids is subject to the provisions of three main legislative instruments:

- *Controlled Substances Act 1984*
- *Controlled Substances (Poisons) Regulations 1996*
- *Code of Practice for the Storage & Transportation of Drugs of Dependence 2000*

Sections, regulations and clauses of the above legislative instruments relating to S8 opioids are administered by the Drugs of Dependence Unit, Drug & Alcohol Services South Australia.

The major obligations placed on South Australian GPs are:

- Prescriptions for S8 may not be provided unless the GP has examined the patient.
- Prescription or supply of an S8 opioid where the treatment of the patient exceeds 2 months must be in accordance with a state Authority (separate from any Medicare Australia authority for increased quantities of drugs). Exemptions apply for:
    - notified palliative care patients (where life expectancy is less than 12 months)*
    - elderly patients (where patients' age is greater than 70 years)*
    - GPs acting as a locum or practice partner of an authorised prescriber
- GPs can't prescribe or supply opioids to persons they have reasonable grounds to suspect are dependent on drugs to treat or maintain that dependence, unless specifically authorised to do so. Such Authorities shall only be granted to GPs who are accredited by the Opioid Dependence Prescriber Review Committee (ODPRC).
- GPs can't prescribe or supply opioids to themselves or nuclear family members (unless in a verifiable emergency or are specifically authorised to do so).

**So long as not prescribing pethidine, hydromorphone, or dextromoramide.*

GPs are asked to, in the first instance, contact professional staff of the DDU for advice regarding legislative controls and the prescription or supply of S8 opioids. Circulars explaining a prescriber's legal obligations are available from the Drug & Alcohol Services South Australia web site (See: http://www.dassa.sa.gov.au/goto/ddu).

Writing prescriptions for S8 opioids

The *Controlled Substances (Poisons) Regulations 1996* (SA) specifies requirements for written prescriptions for S8 opioids. Prescriptions must be written legibly in ink, or printed, with the following information included:

- GP's professional name, address, and telephone number
- patient's full name, street address, and date of birth
- DDU Authority Number if applicable (e.g. "S18A/08/XXXX)
- date of prescription (i.e. the date it was actually written)
- GP's personal signature

- name, dose, strength, route, and frequency for safe administration of drug
- total amount of drug to be supplied each time prescription is to be dispensed must be written in both words and numbers
- total number of times prescription is to be dispensed, if applicable
- if prescribing an above average strength, underline the dose and initial
- if repeat dispensings are required, the interval between dispensings (strongly recommended for S8 opioid prescriptions)
- endorsed "Notified Palliative Care Patient" or "NPCP" if applicable

Additional instructions may include:

- the name of the pharmacy, as nominated by the patient, that the prescription may be dispensed. This will enable the pharmacist to assist to monitor the patient and facilitate communication and feedback to the GP
- collection frequency if frequent collections are required (prior discussion with the pharmacist is desirable to ensure this is practical and if there is an additional cost for the patient)
- supervised dosing requirements if required (prior discussion with the pharmacist is required)
- The number of items on the prescription or ensure there are no blank spaces where additional items could be fraudulently added

Medicare Australia (PBS) requirements for increased quantities of drugs

The Pharmaceutical Benefits Scheme (PBS) is administered by the Commonwealth Government agency, Medicare Australia (formerly the Health Insurance Commission) through the *National Health Act 1953* (Cth). Many S8 opioids are subsidised through the PBS. Increased quantities of these opioids (in most cases, exceeding 20 units) will only be provided upon the issuing of a Medicare Australia Authority, after certain conditions have been met. ***GPs ought to remember this Authority is separate from that which must be obtained as part of State Government legislative control.***

In April 2006, significant changes were implemented by Medicare Australia that affect the way GPs access increased quantities of S8 opioids. GPs should carefully read the requirements for Authority for increased quantities in the publication *Schedule of Pharmaceutical Benefits*, Department of Health & Ageing. Information specified in the restricted benefit must be provided to Medicare Australia when applying for increased quantities and or repeats. Authority applications for quantities sufficient for one month's therapy may be made by calling the Authority Prescription Application Line on 1800 888 333. Authority applications for quantities in excess of one month's therapy must be made in writing. Further information regarding the prescribing of pharmaceutical benefits is available by calling the PBS Information Line on 1800 020 613.

APPENDIX A

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Burness Communications (www.burnesscommunications.com) assisted the Principal Working Group in developing, editing and disseminating the document.

APPENDIX B

Definitions

Abuse: A term used in the psychiatric (Substance Abuse) nomenclature to describe a maladaptive pattern of substance use, not related to a therapeutic purpose, resulting in recurrent and significant adverse consequences. Repeated non-therapeutic use of a substance causes harm that can manifest in physical or social impairment but does not meet the criteria of compulsive use despite harm. In common parlance, abuse may also refer to the use of a substance, including a controlled prescription drug, that is outside of social norms (including the norm of adherence to prescribed drug treatments).

Addiction: A primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterised by behaviours that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Addiction is considered distinct from, though sometimes interrelated with, tolerance and physical dependence. Neither physical dependence nor tolerance to prescribed drugs is sufficient evidence of addiction. Unlike tolerance or physical dependence, addiction is not a predictable effect of drug exposure but represents an idiosyncratic adverse reaction in biologically and psychosocially vulnerable individuals, for which drug exposure is only one of the etiologic factors. Simple exposure to opioids does not produce addiction.*

Opiate: A substance that is produced from the poppy plant, such as codeine and morphine.

Opioid: A scientific term that refers to both natural and synthetic drugs whose effects are mediated by specific receptors in the central and peripheral nervous systems, including codeine, morphine, oxycodone, and fentanyl.

Physical Dependence: A state of neuro-adaptation that is manifested by a specific withdrawal syndrome that can be produced by abrupt cessation of dosing, rapid dose reduction, and/or administration of an antagonist. Most patients on long-term opioid therapy develop physical dependence, which is not predictive of addiction.*

Pseudo-addiction: A term used to describe an iatrogenic phenomenon in which a patient with under treated pain is perceived by health care professionals to exhibit behaviours similar to those seen in addiction but is not true addiction.

Patients may become focused on obtaining medications, may clock watch, and may otherwise seem inappropriately drug seeking. The term has been used to describe even such behaviours as illicit drug use and deception, if they appear to be primarily driven by the patient's efforts to obtain relief. It is believed that pseudoaddiction can be distinguished from true addiction because the behaviours resolve and do not recur when pain is effectively treated. Clinicians should be aware that abuse or addiction, and pseudo-addiction can co-exist, and a pattern of maladaptive drug-related behaviour could signal the presence of addiction, under treated pain, or both.

Tolerance: Tolerance is a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time. Tolerance often occurs in the absence of addiction, as when drugs are used therapeutically over a period of time, and usually requires increased doses of the drug to produce the pharmacologic effects initially resulting from smaller doses.*

*The definitions of addiction, physical dependence, and tolerance are from American Academy of Pain Medicine, American Pain Society, and American Society of Addiction Medicine (2001). Definitions relate to the use of opioids for the treatment of pain.

Relevant Resources:

American Academy of Pain Medicine, American Pain Society.

American Society of Addiction Medicine (2001). *Definitions Related to the Use of Opioids for the Treatment of Pain*. Glenview, IL: AAPM, APS, ASAM. (Available at http://www.ampainsoc.org/advocacy/opioids2.htm)

Savage S R, Joranson D E, Covington E C et al. (2003). Definitions related to the medical use of opioids: Evolution towards universal agreement. *Journal of Pain and Symptom Management,* 26 (1): 655–667. (Available at http://www.medsch.wisc.edu/painpolicy/biblio.htm)

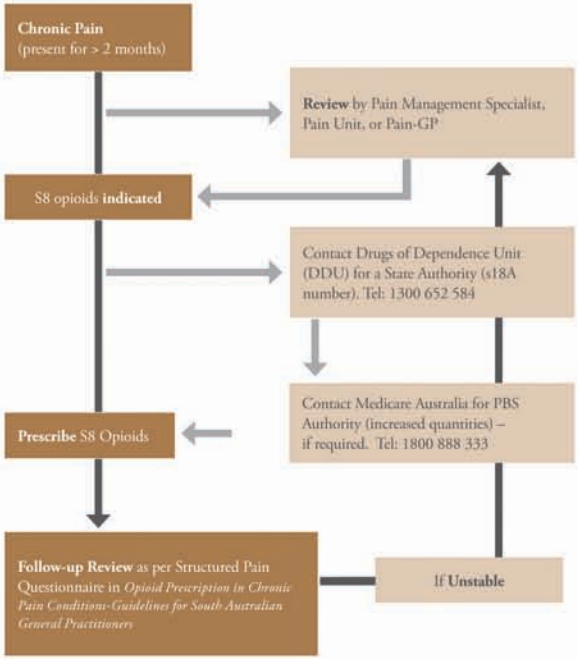
Weissman D E and Haddox J D (1989). Opioid pseudoaddiction – an iatrogenic syndrome. *Pain,* 36: 363–366.

Heit H A (2003). Addiction, Physical Dependence, and Tolerance: Precise Definitions to Help Clinicians Evaluate and Treat the Patient with Chronic Pain. *Journal of Pain and Palliative Care Pharmacotherapy*.

SOUTH AUSTRALIAN PAIN COLLABORATIVE PROJECT

Royal Adelaide Hospital Pain Management Unit, Flinders Medical Centre Pain Management Unit, Drug & Alcohol Services South Australia

Prescribing S8 Opioids – QUICK REFERENCE GUIDE



PAIN SPECIALIST REFERRAL FOR PATIENTS WHO:

- are relatively young (e.g. <35 years old)
- have a comorbid psychiatric or psychological disorder
- have previous or current opioid or other substance use disorders
- are treated with high doses (e.g. >200mg day of morphine or equivalent)
- are treated only with, or mainly with, injectable or short acting opioids
- have indeterminate pathology

RED FLAGS FOR PRESCRIBING S8 OPIOIDS:

- deterioration in functioning at work, in the family, or socially
- illegal activities e.g. selling medicine, forging prescriptions, stealing drugs from other patients, buying prescription drugs from non-medical sources
- injection or snorting of medicine
- crushing controlled release preparations
- multiple episodes of "lost" or "stolen" prescriptions
- resistance to changes in treatment, regardless of adverse effects
- refusal to comply with random urine drug screens or referral to pain management specialists
- concurrent abuse of alcohol or illicit drugs
- use of multiple GPs and pharmacies

CLINICAL FLOWCHART

HISTORY, EXAMINATION, AND INVESTIGATION

- Identify causal pathology where possible.
- Take a full history, including:
  - cause (mechanism of injury, medical findings, patient's beliefs)
  - description (palliative/provocative factors, quality, radiation, severity, timing)
  - impact (biological, psychosocial, spiritual)
  - treatments (past and current – effectiveness)
  - medicines (past and current – effectiveness)
  - context (personal development, education, employment)
- Appropriate examination.
- Corroborate history with other health professionals.

DIAGNOSES

- Assessment of:
  - Persistent pain and causes
  - Loss of function
  - Opioid dependence / addiction risk
- Establish mental health diagnoses.

→ Manage mental health issues

DISCUSS MANAGEMENT OPTIONS

- Multidisciplinary approach involving:
  - Non-Pharmacological Options –
    - Exercise
    - Coping strategies
    - Counselling
    - Psychosocial support
    - Yoga, meditation
  - Pharmacological –
    - Paracetamol
    - NSAIDS
    - Opioids

CONTACTS

FLINDERS MEDICAL CENTRE
PAIN MANAGEMENT UNIT
Tel: (08) 8204 5499
Fax: (08) 8374 1758

ROYAL ADELAIDE HOSPITAL
PAIN MANAGEMENT UNIT
Tel: (08) 8222 5403
Fax: (08) 8222 5904

REPATRIATION GENERAL HOSPITAL
PAIN MANAGEMENT UNIT
Tel: (08) 8275 1658
Fax: (08) 8277 9476

MEDICARE AUSTRALIA (PBS)
Tel: 1800 888 333

DRUGS OF DEPENDENCE UNIT
Tel: 1300 652 584
Fax: 1300 658 447

The following maximum doses are to be used as a guide only and are not intended to override clinical judgment in specific cases. In chronic non-malignant pain, higher opioid doses need to be approached with increasing levels of caution and supervision. Ongoing daily doses above 100mg morphine or equivalent (see table below) are usually only prescribed by GPs after second opinion, specialist support or pain management unit review. Daily doses exceeding morphine 200mg or equivalent are only rarely utilised.

LONG-ACTING PREPARATIONS (preferred agents for chronic pain)		
MORPHINE	STRENGTHS	Suggested Dosing Intervals
Kapanol®	10, 20, 50, 100mg capsules	1 – 2 times a day
MS Mono®	30, 60, 90, 120mg capsules	Once a day
MS Contin®	5, 10, 15, 30, 60, 100, 200mg tablets	2 – 3 times a day
OXYCODONE		
OxyContin®	5, 10, 20, 40, 80mg tablets	2 times a day
METHADONE		
Physeptone®	10mg tablets	2 – 3 times a day
FENTANYL		
Durogesic®	12, 25, 50, 75, 100 mcg/hr patches	Applied every 72 hours
BUPRENORPHINE		
Norspan®	5, 10, 20mg patches	Applied weekly

SUGGESTED MAXIMUM DOSE	
MORPHINE	
Kapanol®	200mg per day
MS Mono®	200mg per day
MS Contin®	200mg per day
OXYCODONE	
Oxycontin®	120mg per day
METHADONE	
Physeptone®	60mg per day
FENTANYL	
Durogesic®	50mcg/hr
BUPRENORPHINE	
Norspan®	40mcg/hr (two 20mg weekly patches)
BREAKTHROUGH DOSES	1/12 or 1/6 of daily dose. If more than 3 breakthrough doses are required per day, the total daily dose of long-acting opioid should be increased by the total of the breakthrough doses being required each day.

EQUIANALGESIC TABLE – Per Oral			
MORPHINE	:	OXYCODONE	1.5 : 1
MORPHINE	:	METHADONE*	3 : 1
OXYCODONE	:	METHADONE*	2 : 1
MORPHINE	:	HYDROMORPHONE	7.5 : 1
MORPHINE	:	FENTANYL	90mg per day : 25mcg/hr patch
MORPHINE	:	BUPRENORPHINE	30-100 : 1

S8 OPIOID PRESCRIPTIONS MUST INCLUDE:

- GP's professional name, address, and telephone number.
- Patient's full name, street address, and date of birth.
- Drugs of Dependence Unit Authority Number if applicable (e.g. s18A/XXXX).
- Date of prescription (i.e. the date it was actually written).
- GP's personal signature.
- Name, dose, strength, route, and frequency for safe administration of drug.
- Total amount of drug to be supplied each time prescription is to be dispensed written in both words and numbers.
- Total number of times prescription is to be dispensed, if applicable.
- Underline the dose and initial if prescribing an above average strength.
- Interval between dispensings if repeat dispensings are required (strongly recommended for S8 opioid prescriptions).
- Endorsed "Notified Palliative Care Patient" or "NPCP" if applicable.
- *Converting patients from a strong mu opioid to methadone is difficult because the half-life of methadone is extremely variable and not predictable. Thus, there is no conversion ratio that holds between methadone and any strong opioid. It is best to assume that the patient has a long half-life and err on the conservative side by slowly increasing the dose of methadone from a small initial dose of, for example, 5 mgs nocte. This can take weeks, but in chronic non-malignant pain this is usually not a concern.

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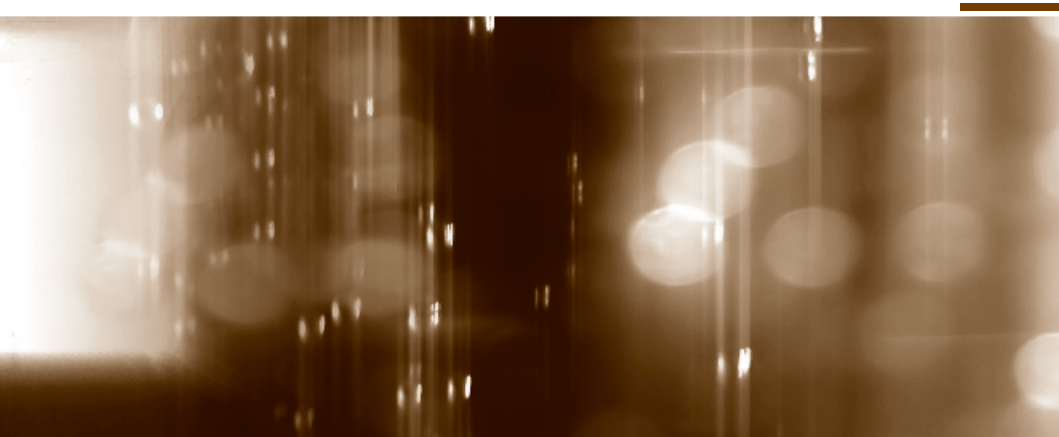
PAIN MANAGEMENT *what* YOU CAN DO



HOW TO DESIGN A PERSONAL PAIN MANAGEMENT PLAN… **Here are some tips on things you and your doctor can discuss:**

1. Find out about your condition.

- Ask your doctor about any questions or concerns that you may have. Remember you have the right to ask questions and expect answers that you can understand. Doctors sometimes don't provide information or address concerns as they may assume you already know the information.
- Check out other reliable forms of information such as pharmacist, nurse or other health professional, support organisations, books or the internet.

2. Keep a pain diary to identify what makes your condition worse or what helps it.

- For example, you can keep a list of when (which day, date and time) the pain begins, how long it lasts, how strong it is, what medicines work, what situations or other triggers (e.g. certain activities) seems to make the pain worse or better.

3. Design a personal management plan with your doctor or other health professional for a realistic way of managing your pain.

- Include activities, exercise, relaxation training, a medication schedule, a plan for flare-ups that may happen after hours. Injections such as pethidine should not be necessary for treating flare-ups of chronic pain.
- This plan should be reviewed at regular intervals.
- Carry this plan with you.
- Don't just put up with pain.

4. Set up a support network for when you need help.

- This can include family, friends or fellow sufferers.
- Find out what community resources are available to you.

5. Learn coping skills that help you manage your pain. For example:

- Pace your activity so you don't get over-tired.
- Set priorities so the more important things get done first.
- Communicate with your family, friends and doctors so you don't isolate yourself.
- Learn techniques of relaxation and distraction to overcome the pain. An occupational therapist could teach you these simple skills.

6. Exercise for fun and fitness.

- Consult your doctor for advice on appropriate exercise.
- Inactivity contributes to weakness, fatigue and sleeplessness. Being overweight puts extra stress on the body. A physiotherapist could help with exercise options.
- Discomfort or pain through exercise may not necessarily be harmful.

7. Ensure regular sleep and rest patterns. If you have problems sleeping:

- Have a regular time for getting up in the morning.
- Avoid tea, coffee and alcohol later in the day.
- Daytime napping can upset your sleep pattern.
- Get some fresh air and sunlight during the day.
- A hot bath before bed is helpful.
- Don't regularly use medications to help you sleep.
- Check with your doctor about timing your pain medication.

8. Benefit form a healthy diet.

- Drink 8 glasses of water a day.
- Eat a balanced diet from the five food groups. (A dietician could advise on this.)

9. Recognise and manage your emotional changes.

- Sometimes pain can leave you feeling tired, frustrated, depressed, worried, angry or just generally in a bad mood. This can make the pain seem worse.
- Think in a positive way so the negative thoughts don't take over.
- Help from a psychologist could be of assistance.

10. Reward yourself!

- Living with pain is difficult. Give yourself credit for each positive step you take.

THE MAIN TYPES OF PAIN

Acute pain lasts for a short time. When the cause is treated the pain goes away. Pain is called **chronic** when it does not go away and you have experienced pain on most days of the week for at least three months. Tests may not find an explanation for the pain. This does not mean that chronic pain is not real. The nervous system, which sends pain signals, may have become disturbed. The pain itself, however it began, has become the problem.

WHAT YOU CAN DO

Medicine can cure many conditions, but it may not be able to completely ease your chronic pain. However, with proper management and your help, most chronic pain can be relieved to a tolerable level. People who take responsibility for the management of their pain can lead a normal life. Chronic pain can cause physical problems and emotional distress such as anger, frustration or a feeling of helplessness. A negative attitude can increase your pain. However, you can learn to focus on your abilities, your positive qualities and ways that allow you to regain control of your life – in spite of the pain. **Managing pain is ongoing; every day and step by step.**

The path back to a satisfying life may not be straight but by learning to ask for and accept help and advice, you can do it. Pain Management Units have specialist doctors, nurses, psychologists, physiotherapists and occupational therapists to help people learn to manage their pain and regain a worthwhile lifestyle. **Discuss with your GP whether a referral to one of these units or to a specialist pain management doctor would be beneficial.**

WHAT YOU NEED TO KNOW ABOUT MEDICATION

Ideally, you will be able to learn coping skills like relaxation and distraction to help with the pain, but people with chronic conditions often need to use some medication.

1. Find out about your medicines.

- Whether there are side effects of medicines, if there are any special requirements (e.g. To be taken with food, how often, etc.), if the medicines can effect driving and whether they can cause dependence if used unwisely. Make sure you know when and how much medication can be used.

2. Keep an updated list of all your medications.

- Keep a copy of this list with you and show it to your doctor/s when your medication changes.
- Include any over-the-counter medicines or natural supplements or remedies. Check with your pharmacist about whether medications interact with other medicines you are taking or with certain foods.
- It is a good idea to go to one pharmacy. Ask the pharmacist to record all your medications on your medication list.
- Ask what any new drug is for and if there are any special requirements in taking it.

3. Work closely with your doctor to tailor a medication program that controls your pain to a tolerable level.

- Report side effects, follow instructions carefully, and be patient until you find the right medication for you.
- Sometimes it is best to take a pain reliever around the clock to take the edge off the pain, rather than waiting until the pain becomes overwhelming.
- Unsupervised increase of medication can lead to greater problems in the long run.
- Unless the medication is helping you to function and get on with your life, you should stop it, slowly, under doctor's instruction.

4. Never try anyone else's medicine or give them yours: it can be dangerous & is illegal.

5. Ask for a Consumer Medicines Information leaflet for each medicine:
These explain the medicine in plain English. Ask your doctor or pharmacist for these leaflets.

6. If you go to hospital: Take your medication list with you.
When you leave, ask for an explanation about any medication that you are given and what you should do when you go home. Doctors sometimes believe that people understand more than they really do about their continuing treatment and follow-up.

REMEMBER: IT'S UP TO YOU

If you are actively involved in your health care you will get better results. So:

- Speak up about your concerns
- Understand your medicines
- Learn to relax and self manage
- Learn about your condition
- Keep active
- Stay positive

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DRUG & ALCOHOL SERVICES SOUTH AUSTRALIA

STRUCTURED PAIN QUESTIONNAIRE

The following structured pain questionnaires may assist GPs to:

- gain the patient's perspective into the pain problem
- provide clues about the type of pain being suffered (e.g. nociceptive/neuropathic)
- identify appropriate modalities for treating the type of pain suffered

CHRONIC PAIN MANAGEMENT SCREENING TOOL

Adapted with the kind permission of the Hunter Integrated Pain Service (NSW)

Date:

A. PERSONAL PARTICULARS *(confirm details)*

Mr/Mrs/Miss/Ms: Surname:

Given Names:

Previous Surnames:

Marital Status:

Address:

Postcode:

Telephone: (H): (W): (Mob):

DOB: Age:

Country of Birth: Language Spoken:

B. CLASSIFICATION

Have you been seen by a pain clinic before *(give details)*:

Are you currently visiting a pain clinic? *(give details)*:

Is there a current compensation case related to your pain problem? *(circle one)* No / Yes

If Yes: *(circle one)* Workers Comp. / Motor Vehicle Accident / Public Liability

Insurer *(name & address):*

Claim Number: **Case Manager:**

Are you on a pension? No / Yes *(circle one).* If Yes, Pension Number:

C. WORK STATUS

1. What is/was your main occupation before your pain/injury?

2. What is your current work status?

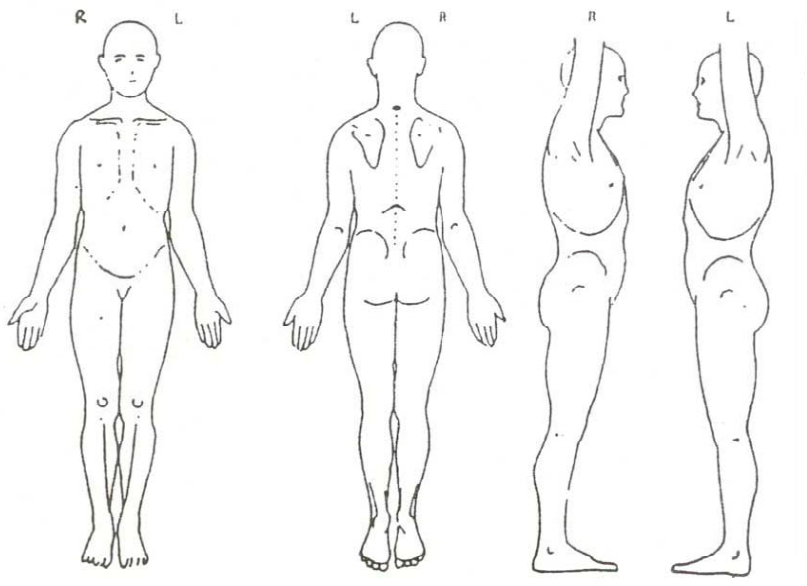
( ) full time work	( ) part time work	( ) unemployed due to other reasons
( ) voluntary work	( ) home duties	( ) unemployed due to pain
( ) retired	( ) student	( ) retraining

D. PAIN ISSUES

1. Please describe the location of your pain *(circle number)*

0 Head, face & mouth
1 Neck region (Cervical)
2 Upper shoulder & upper limbs
3 Upper back region (Thoracic)
4 Abdominal region
5 Lower back, lumbar spine, sacrum & coccyx
6 Lower limbs
7 Pelvic region
8 Anal, perineal & genital region
9 More than three major sites (don't just circle this option – indicate all pain sites)

Please indicate on the diagrams below where you feel pain, tingling or numbness



2. Describe the character of this pain *(e.g. tingling, burning, throbbing, aching, radiating, numbness, stabbing).*

3. Which statement best describes this pain?

0 Single episode
1 Always/often present, always the same intensity
2 Always/often present, intensity varies
3 Recurring irregularly (e.g. like headache)
4 Recurring regularly (e.g. premenstrual pain)

4. How long has this pain been present? *(date if known)*

0 1 month or less
1 1 month to 6 months
2 6 months to 12 months
3 12 months to 3 years
4 3–5 years
5 5–10 years
6 >10 years

5. How did this pain begin?

1 Accident at work
2 At work but not involving an accident
3 Accident at home
4 Car accident
5 After Surgery
6 After an illness: _____
7 Pain just began, no clear reason
8 Genetic
9 Other: _____

For questions 6, 7 & 8: *0* means "no pain at all" and *10* means "worst pain imaginable"

6. How intense is your pain at the present time?

0	1	2	3	4	5	6	7	8	9	10
(no pain)									(worst pain)	

7. In the last 3–6 months, what were the highest and lowest levels of your pain *(make 2 circles)*

0	1	2	3	4	5	6	7	8	9	10
(no pain)									(worst pain)	

8. In the last 3–6 months, what was the usual level of pain *(that is, at times you were experiencing pain)*

0	1	2	3	4	5	6	7	8	9	10
(no pain)									(worst pain)	

E. INTERFERENCE FROM PAIN

Please rate how much the following aspects of your life have been disrupted by pain
0 means "not disrupted at all" 10 means "totally prevented or disrupted by pain"

1. Family/home responsibilities

(This includes chores or duties performed around the house, yard and things done for other family members)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

2. Recreation

(This includes hobbies, sports and other leisure time activities)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

3. Social activity

(This refers to activities, which involve participation with friends and acquaintances. It includes going out, movies, parties, eating out, BBQs and any other social functions)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

4. Occupation

(This refers to activities that are part of or directly related to one's job. It includes non-paying jobs such as home duties or volunteer)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

5. Sexual behaviour

(This refers to the frequency and quality of one's sex life)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

6. Self-care

(This includes activities which involve personal care and independent daily living e.g. showering, getting dressed)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

7. Life-supporting activity

(This refers to basic everyday behaviours like eating, sleeping)

0 1 2 3 4 5 6 7 8 9 10
(no disability) (total disability)

8. How often during the day do you have to stop all activity because of the pain?

1	2	3	4	5
(Not at all)	(1-5 times)	(6-10 times)	(11-15 times)	(more than 16 times)

9. How many times do you need to lie down during the day because of pain?

1	2	3	4	5
(Not at all)	(1-5 times)	(6-10 times)	(11-15 times)	(more than 16 times)

10. How many days do you stay in bed longer than usual because of pain?

1	2	3	4	5
(Not at all)	(1-2 days/week)	(3-4 days/week)	(5-6 days/week)	(7days/week)

F. PSYCHOLOGICAL DISTRESS

Please circle the number that best describes how you felt	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. In the last 4 weeks, how often did you feel tired for no good reason?	1	2	3	4	5
2. In the last 4 weeks, how often did you feel nervous?	1	2	3	4	5
3. In the last 4 weeks, how often did you feel so nervous that nothing could calm you down?	1	2	3	4	5
4. In the last 4 weeks, how often did you feel hopeless?	1	2	3	4	5
5. In the last 4 weeks, how often did you feel restless or fidgety?	1	2	3	4	5
6. In the last 4 weeks, how often did you feel so restless that you could not sit still?	1	2	3	4	5
7. In the last 4 weeks, how often did you feel depressed?	1	2	3	4	5
8. In the last 4 weeks, how often did you feel that everything was an effort?	1	2	3	4	5
9. In the last 4 weeks, how often did you feel so sad that nothing could cheer you up?	1	2	3	4	5
10. In the last 4 weeks, how often did you feel worthless?	1	2	3	4	5

G. MANAGEMENT

1. How many times per month do you consult a GP in regard to your pain?

times per month

2. How many visits to Emergency Depts. have you had in the last 12 months, specifically related to your pain?

times per year

3. How many admissions to hospital have you had in the last 12 months, specifically related to your pain?

times per year

4. Since this pain began, which of the following people have you seen about it?

( ) acupuncturist
( ) anaesthetist
( ) chiropractor
( ) occupational therapist
( ) orthopaedic surgeon
( ) other (please specify) _____
( ) neurosurgeon
( ) osteopath
( ) hypnotherapist
( ) neurologist
( ) physiotherapist
( ) psychologist
( ) psychiatrist
( ) rheumatologist
( ) homeopath

5. Please indicate the outcomes for any of the following treatments you have tried, that is, rate whether they were helpful, no help, or made the pain worse:

Treatment	Never Tried	Helpful	No Help	Pain Worse	Ongoing
Surgery					
Nerve blocks					
TENS					
Bed rest in hospital					
Bed rest with traction					
Psychology					
Hypnosis					
Relaxation					
Acupuncture					
Chiropractic					
Osteopathic					
Physiotherapy					
Hydrotherapy					

6. Please list any operations you have had relating to your pain problem:

Type of Operation	Date	Surgeon

7. Please list all the medicines you are taking at present

Medication Name	Dose	Benefits *(tick)*				Side-effects
		Marked	Moderate	Slight	None	

8. Please list the medicines you have taken in the past for your pain

Medication Name	Dose	Benefits *(tick)*				Side-effects
		Marked	Moderate	Slight	None	

9. Do you think you need more medicine, or stronger medicine, than you are currently taking?

1	2	3	4	5
(agree strongly)	(agree)	(unsure)	(disagree)	(disagree strongly)

10. Have you ever smoked regularly? NO / YES

If you currently smoke, how many cigarettes do you smoke in a normal day? _____

11. Do you drink alcohol regularly? NO / YES

If YES, on how many days a week would you drink? _____

How many drinks do you usually have on these days? _____

Do you ever drink alcohol to relieve your pain? NO / YES

12. Are there any specific questions you would like answered by your GP?

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CONSENT TO OPIOID THERAPY

OPIOID THERAPY CONTRACT *(example)*

I, _____ , agree to the following rules and conditions regarding my prescription of S8 opioid medicine.

The medicine(s) covered by this agreement include:

Medicine	Dose	Directions	Quantity Per Month

1. I will limit my dose of opioids to the dose prescribed. I will discuss any future changes in my dose with my GP.
2. I am responsible for my opioid medicine. Lost, misplaced or stolen prescriptions or medicine will not be replaced.
3. No early prescriptions will be authorised.
4. I will obtain all supplies of these medicines only at _____ pharmacy (phone number: _____).
5. I will request all prescriptions through my GP's practice during these hours: _____.
6. I understand that my GP may stop prescribing opioids or change the treatment plan if I do not show any improvement in pain from opioids or my level of activity has not improved.
7. Other: _____.
8. I understand that failure to comply with any of these conditions or failure to make regular follow-up appointments with my GP may result in termination of prescriptions for the medicine listed above. It may also result in being ***prevented from receiving any further care.***

Signed:_____ Date: _____

GP: _____ Date: _____

GETTING THE BEST RESULT FROM OPIOID MEDICINE

A PARTNERSHIP AGREEMENT *(example)*

The greatest success in chronic pain management comes when there is a partnership based on mutual respect between patient and GP.

As patient and GP, we respect each other's rights and accept our individual responsibilities.

The GP understands that it is important for patients with pain to know that the GP will:

- Listen and try to understand the patient's experience living with pain.
- Accept the patient's reports of pain and response to treatment.
- Thoroughly assess the patient's pain and explore all appropriate treatment options, including those suggested by the patient.
- Explain what is known and unknown about the causes of the patient's pain.
- Explain the meaning of test results or specialist visits/consultations, and what can be expected in the future.
- Explain the risks, benefits, side-effects, and limits of any proposed treatment.
- Respect the patient's right to participate in making pain management decisions, including the right to refuse some types of treatment.
- Make sure that the patient has access to acute care, even when the GP is not personally available.
- Not allow the patient to be treated disrespectfully by other providers or staff because of the patient's use of opioids for pain.

The patient understands that it is equally important for GPs that their patients on opioid medicines:

- Take medicine only at the dose and time/frequency prescribed.
- Make no changes to the dose or how the medicine is taken without first talking to the GP.
- Do not ask for opioid medicines from other doctors.
- Arrange for prescriptions only through the GP's clinic during regular office hours.
- Do not ask for prescriptions earlier than agreed upon.
- Protect their prescriptions and medicines, keeping all medicines away from children.
- Do not share their medicines with others.
- Be willing to be involved in programs that can help improve social, physical, or psychological functioning as well as daily or work activities.
- Be willing to learn new ways to manage their pain by attempting step-by-step behaviour and lifestyle changes in their daily life.

We agree that the GP may stop prescribing the medicine or the patient may decide to stop taking the medicine if there is no improvement in pain or activity, there is loss of improvement from the medicine, or there are significant side-effects from the medicine.

We both realise and have discussed that there can be limitations to opioid therapy. It may not be helpful or only partially helpful and that it is only one part of the treatment of chronic pain.

We agree to work together in an active partnership, learning from both successes and failures, to find the most effective ways to control pain and improve functioning.

Patient:_____Date:_____

Provider:_____ Date:_____