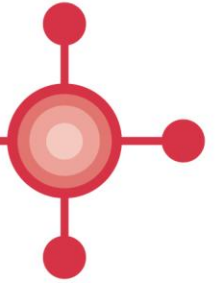


All Wales Medicines Strategy Group

Grŵp Strategaeth Meddyginiaethau Cymru Gyfan



Persistent Pain Resources

Medicines Used in Persistent Pain

October 2016

This document has been prepared by a multiprofessional collaborative group, with support from the All Wales Prescribing Advisory Group (AWPAG) and the All Wales Therapeutics and Toxicology Centre (AWTTC), and has subsequently been endorsed by the All Wales Medicines Strategy Group (AWMSG).

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This document should be cited as:

All Wales Medicines Strategy Group. Persistent Pain Resources. October 2016.



EXECUTIVE SUMMARY

- Persistent, also known as chronic, pain is usually defined as occurring when pain has been present for three months or more¹.
- Prevalence of persistent pain varies widely depending on the definition used and how it is measured. An estimated 14 million people in the UK live with persistent pain²; this equates to over 600,000 people in Wales.
- Persistent pain can have a significant impact on quality of life and the ability of patients to undertake everyday activities³.
- Opioid analgesics are increasingly being used to treat persistent pain; however, their safety and efficacy in the long-term management of pain is uncertain, as is the propensity for these medicines to cause problems of tolerance, dependence and addiction⁴.
- Strong opioid use as a whole is increasing within NHS Wales, and accounted for 716,756 items in the year to March 2016, an increase of 11% from the previous year.
- Medicines commonly used in the treatment of persistent pain, such as tramadol, gabapentin, pregabalin, and fentanyl and buprenorphine patches, have prompted recent reviews following concerns regarding safety and risk of misuse and diversion⁵⁻⁸.
- Medicines used in persistent non-malignant pain conditions have featured in the [National Prescribing Indicators \(NPIs\)](#)⁹⁻¹¹. During the development of the NPIs for 2016–2017, it was identified that signposting resources to support non-specialist prescribers in this complex therapeutic area would help to promote appropriate prescribing in line with the prudent prescribing initiatives¹².
- The resources are aimed at non-specialist prescribers and those involved in medicines review in primary care. The resources signpost to appropriate, relevant and up-to-date information on the prescribing of medicines in persistent pain and include key messages pulled from national and local guidance. They also aim to address the inappropriate prescribing of medicines in pain management and reduce the risks associated with misuse and diversion.
- The signposted resources include information on the non-pharmacological management of persistent pain, and issues surrounding opioid/strong opioid prescribing and prescribing for neuropathic pain.

¹ See [National Prescribing Indicators 2015–2016](#) for details of CASPA drug baskets.

PERSISTENT PAIN RESOURCES OVERVIEW

The resources signpost to and pull together key messages from appropriate, relevant and up-to-date information, focussing on the care of patients with persistent (also known as chronic) pain conditions in non-specialist settings. They provide information on the non-pharmacological and pharmacological management of persistent pain, including issues surrounding opioid/strong opioid prescribing and prescribing for neuropathic pain.

These resources do not aim to produce prescriptive guidance or formularies. Rather, they aim to direct non-specialist prescribers involved in the care and medication reviews of patients with persistent pain to the most up-to-date and useful evidence-based resources and highlight the main messages from national and local guidance.

Areas of focus

The resources will focus on four main areas:

1. Persistent pain – understanding the condition;
2. Non-pharmacological management of persistent pain conditions;
3. Opioid/strong opioid prescribing in persistent pain conditions;
4. Neuropathic pain.

Aim

The aim of these resources is to:

- Raise awareness of the issues surrounding the management of persistent pain conditions and support patients, carers and healthcare teams in understanding the potential benefits and harms of medicines used in pain management.
- Provide prescribers with the information needed to support the appropriate management of persistent pain conditions.
- Address inappropriate prescribing of medicines in pain management and reduce the risks associated with misuse and diversion.

Contents

The resources include:

- Executive Summary and Introduction
- Medicines Used in Persistent Pain – prescribing data and safety information
- Signposting to Persistent Pain Resources – summary, resources for healthcare professionals, including guidance and audits, resources for patients, including patient information leaflets and videos
- Ten Key Messages:
 - Managing persistent pain
 - Non-pharmacological management
 - Neuropathic pain
 - Strong opioids
- Management of Persistent Pain – Shared Decision-Making Toolkit
- Management of Persistent Pain – Educational Slide Set

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1.0 INTRODUCTION

Pain is a common and distressing condition, which is often categorised as either acute or persistent (also known as chronic). Acute pain can occur as a result of trauma, surgery or an acute illness. Persistent, or chronic, pain has historically been defined as occurring when pain has been present for three months or more. However, it is now recognised that persistent pain can present as a complex problem before this time¹³.

1.1 Persistent pain

Prevalence of persistent pain varies widely depending on the definition used and how it is measured. An estimated 14 million people in the UK live with persistent pain²; this equates to over 600,000 people in Wales.

Persistent non-malignant pain covers a wide range of painful conditions affecting patients physically, psychologically and socially. These conditions can have a significant impact on quality of life and the ability of patients to undertake everyday activities³. People with persistent pain need a multi-disciplinary approach to help them manage and cope with the effects of their pain so that they can maintain the highest possible quality of life and are able to function day-to-day.

Persistent pain can range from mild to severe and is not necessarily a sign of existing tissue damage. Rather, it may relate to changes in the peripheral and central nervous system that occur over time, so that the pain signalling becomes self-sustaining over a prolonged period¹. Unrelieved persistent pain has become a more significant problem as pain prevalence has increased: for example, with an ageing population and with more cancer and trauma survivors¹³. Persistent pain can be difficult to treat and unrelieved persistent pain is a major socio-economic burden for the health service and the community¹³.

These Persistent Pain Resources are intended to provide non-specialist prescribers and other healthcare professionals involved in the care and medication reviews of patients with access and signposting to relevant, evidence-based and up-to-date resources brought together from a variety of local and national sources.

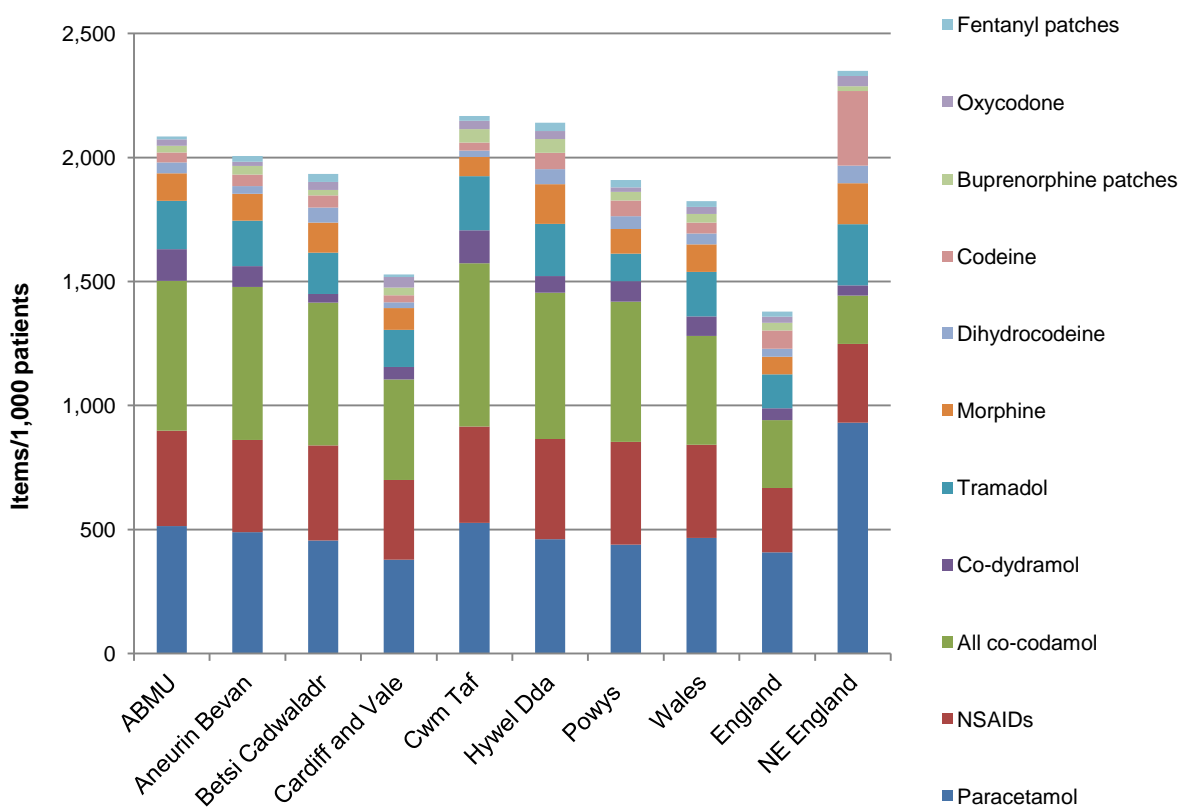
2.0 MEDICINES USED IN PERSISTENT PAIN

Medicines commonly used in the treatment of persistent pain, such as tramadol, gabapentin, pregabalin, and fentanyl and buprenorphine patches, have prompted recent reviews following concerns regarding safety and risk of misuse and diversion⁵⁻⁸.

2.1 All analgesics

Figure 1 gives a breakdown of analgesic prescribing for the health boards in Wales, and shows that tramadol and morphine account for the largest proportion of opioid prescribing (excluding combination products such as co-codamol) in all of the health boards. Figure 1 indicates that there is considerable variation between the health boards in the amount of opioid items prescribed. Wales appears to have higher prescribing of co-codamol products than England and NE England. However, NE England has considerably higher prescribing of codeine and paracetamol separately.

Figure 1. Analgesic prescribing breakdown for health boards in Wales, England and NE England – April 2015–March 2016

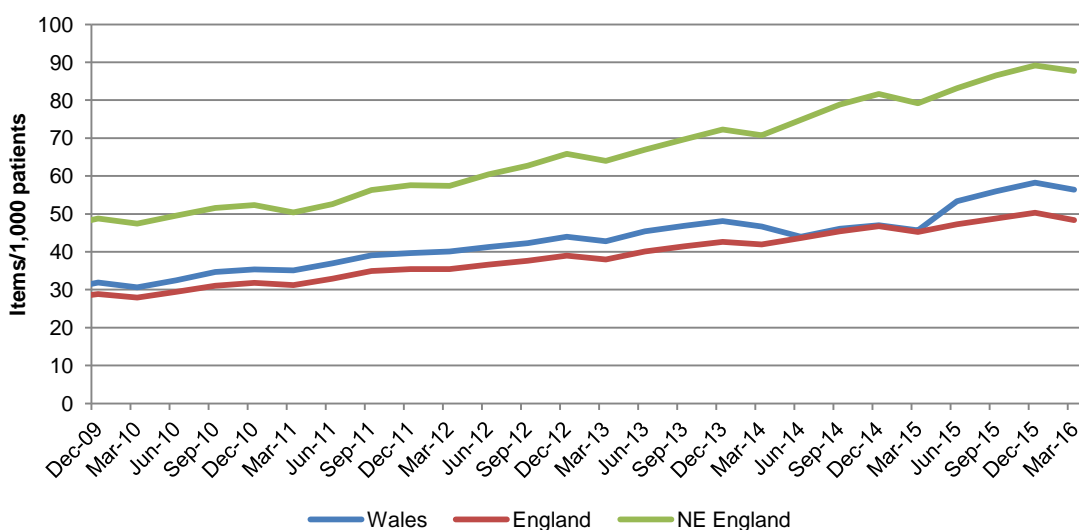


2.2 Opioids

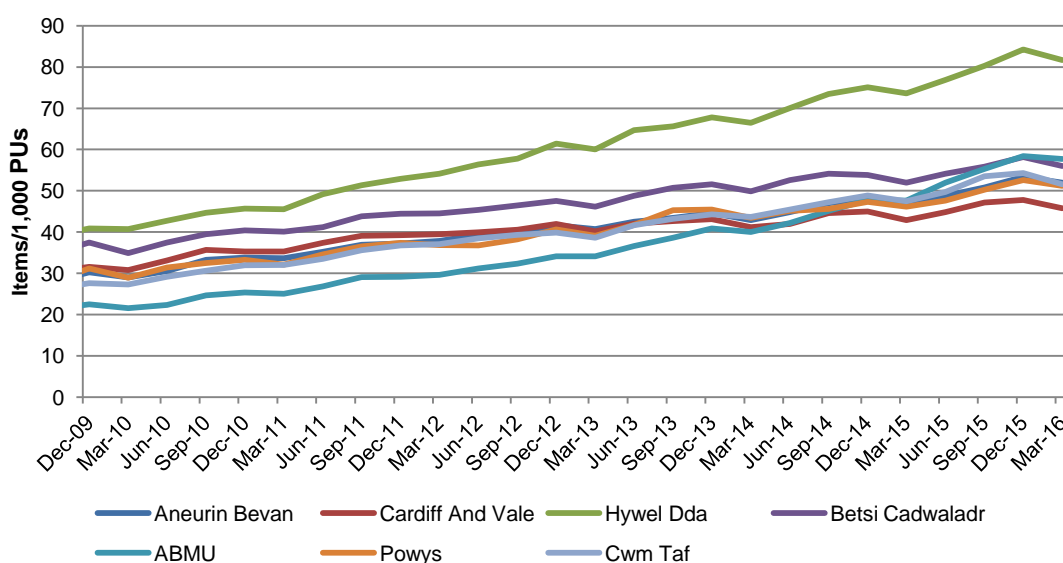
Opioid analgesics are increasingly being used to treat persistent pain; however, their safety and efficacy in the long-term management of pain is uncertain, as is the propensity for these medicines to cause problems of tolerance, dependence and addiction⁴. Strong opioid use as a whole is increasing within NHS Wales, and accounted for 716,756 items in the year to March 2016, an increase of 11% from the previous year.

Figure 2 shows the increasing prescribing trend for strong opioids[†] in Wales, England and the North East (NE) of England, and Figure 3 shows the trends for the Welsh health boards. Since the quarter ending September 2011, the number of items prescribed in Wales has increased by 46%. Prescribing has increased by 46% in England and by 52% in NE England.

**Figure 2. Strong opioid prescribing trends for Wales, England and NE England
Quarter ending December 2009 to quarter ending March 2016**



**Figure 3. Strong opioid prescribing trends of the Welsh health boards
Quarter ending December 2009 to quarter ending March 2016**



[†] Strong opioids are defined as per the 2015–2016 NPIs and include buprenorphine, dipipanone, fentanyl, hydromorphone, morphine, oxycodone, pentazocine, pethidine, tapentadol (excluding injection formulations and buprenorphine preparations prescribed for the management of opioid dependence).

2.3 Tramadol

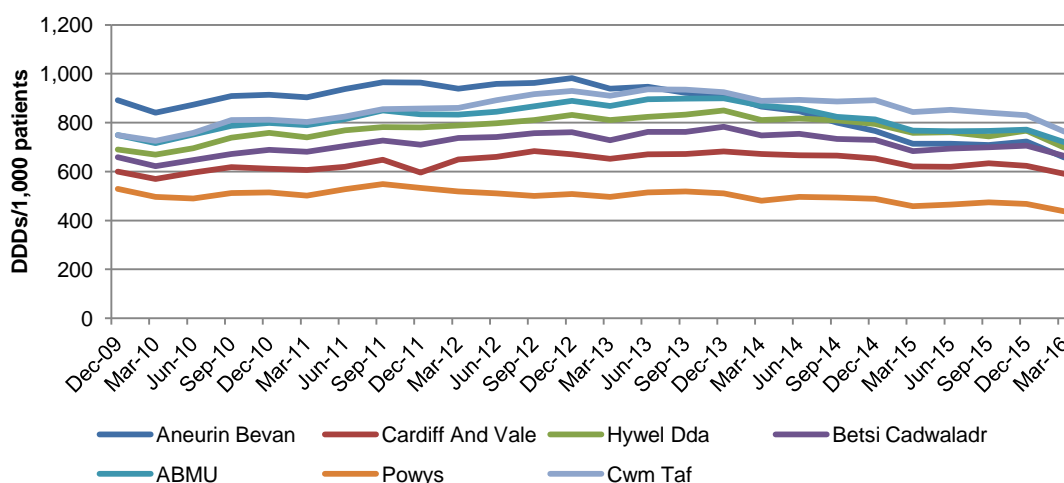
Deaths related to tramadol in England and Wales increased from 83 in 2008¹⁴ to 240 in 2014¹⁵. Advice published by the Advisory Council on the Misuse of Drugs (ACMD) in February 2013 highlighted the risks associated with misuse and diversion⁵. In October 2013, the All Wales Medicines Strategy Group (AWMSG) published the [Tramadol Educational Resource Materials](#), providing healthcare professionals with resources to review the prescribing of tramadol in NHS Wales¹⁶. In June 2014, tramadol was controlled as a Class C drug under the Misuse of Drugs Act 1971¹⁷ and placed within Schedule III to the Misuse of Drugs Regulations 2001, but with exemption from the safe custody requirements¹⁸.

The Advisory Panel on Substance Misuse (APoSM) published a report on [tramadol](#) in September 2015 and a report considering other prescription-only analgesics (including opioids) is scheduled to be published in 2016. The APoSM report *Reducing the harms associated with prescription-only analgesics: Tramadol* made several recommendations to address the issue of deaths associated with tramadol and other prescription-only medicines¹⁹:

- AWMSG should consider retaining the tramadol NPI as one of the NPIs in Wales for at least a further two years, to highlight the importance of safe and appropriate prescribing of this medicine in primary care in NHS Wales.
- The All Wales Therapeutics and Toxicology Centre (AWTTC) and the Wales Centre for Professional Pharmacy Education (WCPPE) should consider updating and re-issuing the educational and audit resources concerning tramadol prescribing in light of the experience gained since its publication, including the information contained in the APoSM Review.
- AWTTC should ensure that a case study involving tramadol and opioid prescribing is incorporated into the case-based Prudent Prescribing workshops being delivered to all health boards in Wales in 2015–2016.
- A further audit of deaths associated with tramadol in Wales should be conducted in 2015–2016 to examine the impact of the interventions that have been, and will be implemented.
- APoSM should further examine the issues associated with analgesics (including opioid analgesics) other than tramadol in order to make recommendations in the future to improve safe, effective and appropriate use of these enormously important and clinically valuable medicines.

Figure 4 shows the prescribing trend for tramadol in Wales. Tramadol prescribing in NHS Wales started to plateau towards the end of 2013, having risen year-on-year for several years previously, and started to decrease from 2014. Tramadol prescribing decreased significantly (7%, $p < 0.005$) between 2013–2014 and 2014–2015.

**Figure 4. Tramadol prescribing trend of the Welsh health boards
Quarter ending December 2009 to quarter ending March 2016**

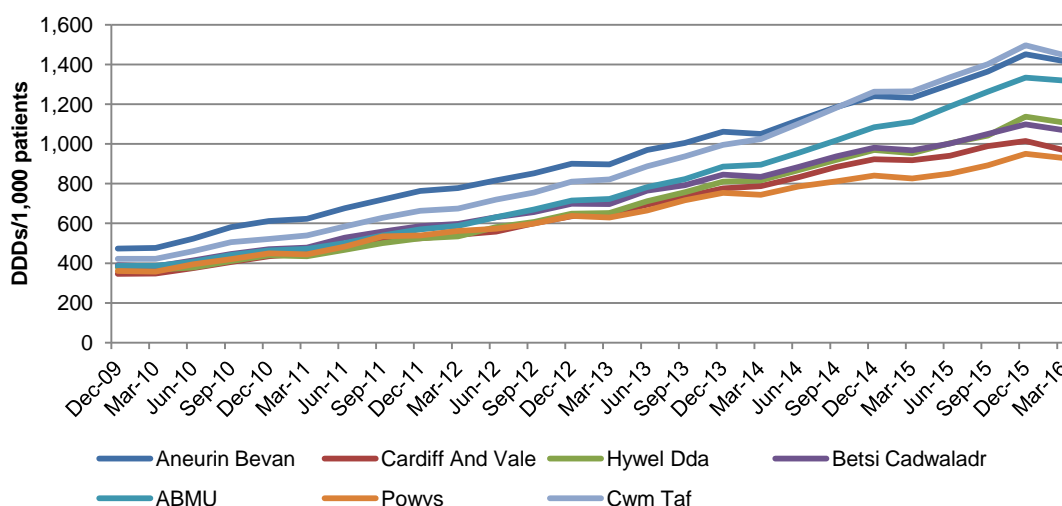


2.4 Gabapentin and pregabalin

ACMD published advice in January 2016 concerning gabapentin and pregabalin, highlighting the potential risk of dependence, misuse and diversion of these medicines and the importance of appropriate prescribing to minimise these risks⁶. The number of drug-related deaths where gabapentin and pregabalin were mentioned on the death certificate have increased from 1 and 4 deaths in 2009, to 26 and 38 deaths in 2014 for both gabapentin and pregabalin respectively⁶.

Figure 5 shows the prescribing trend for gabapentin and pregabalin in Wales. Gabapentin and pregabalin prescribing has increased in NHS Wales by 16% from 2014–2015 to 2015–2016.

Figure 5. Gabapentin and pregabalin prescribing trend of the Welsh health boards Quarter ending December 2009 to quarter ending March 2016



Prescribing data

The prescribing data presented below provide some context and an overview of the recent prescribing trends in medicines used for the treatment of persistent, also known as chronic, non-malignant pain conditions. The data are compiled from the Comparative Analysis System for Prescribing Audit (CASPA) database[‡], which captures prescribing information from WP10 and WP10HP prescriptions. The data are not linked to specific patient details or indications; caution should therefore be applied when interpreting the data. However, prescribing data can provide useful insight into prescribing behaviours, and emerging trends and comparisons can highlight areas for potential review.

SPIRA

In July 2016, the [Server for Prescribing Information Reporting and Analysis \(SPIRA\)](#) was made available. SPIRA provides an online interactive programme for comparative analysis of NPI information. As medicines used in persistent non-malignant pain conditions have featured in the NPIs for a number of years⁹⁻¹¹, SPIRA will be useful for future analysis of prescribing data for these medicines.

It is essential that medicines used in the treatment of persistent pain are monitored within the wider context of pain management. Monitoring trends for all analgesic medicines will ensure that variations or changes in prescribing in NHS Wales can be addressed. Tramadol, gabapentin and pregabalin prescribing will be monitored as part of the NPIs for 2016–2017¹¹, and morphine prescribing as a percentage of strong opioid prescribing will continue to be monitored as a Local Comparator.

[‡] CASPA provides a record of all WP10 prescriptions (issued by GPs in Wales for patients receiving NHS treatment) and WP10HP prescriptions (issued by hospitals in NHS Wales) forwarded to Prescribing Services, NWSSP, for processing and payment following dispensing.

3.0 CURRENT GUIDANCE

A full list of useful resources and guidance is available in the Signposting to Persistent Pain Resources document.

The Persistent Pain Resources aim to bring together key prescribing messages from local and national resources, and facilitate the sharing of good practice in NHS Wales.

Whilst there has been a lot of work done recently in health boards in Wales on guidelines focusing on a variety of specific areas of pain prescribing, there is currently no comprehensive central point of reference for non-specialist prescribers to access the available resources for the management of persistent pain. Although some patients will require access to specialist secondary and tertiary care pain services, the majority of persistent pain patients will be managed in the community or primary care²⁰. See local advice for referral criteria to specialist services.

As of January 2016, the Faculty of Pain Medicine of the Royal College of Anaesthetists (RCoA) hosted the [Opioids Aware](#) online resource (funded by Public Health England). This resource was developed by UK healthcare professionals and policymakers, and provides information to support safe and effective decisions in the prescribing of opioid medicines for pain¹.

The National Institute for Health and Care Excellence (NICE) has published guidance in a number of areas known to be associated with persistent pain, such as osteoarthritis²¹, low back pain and sciatica²², and neuropathic pain²³. Welsh Government published its '*Service Development and Commissioning Directive for Chronic Non-malignant Pain*' in 2008, which sets out to improve the service provision and care for people living with persistent pain³.

When prescribing analgesics, it is important that prescribers consider the dose equivalence of the different medicines. Additionally, there may be some variation in the effectiveness of an analgesic between patients, and so it is suggested that prescribers start lower than the equivalent dose, monitoring and titrating slowly, tailoring the treatment to the individual. Equivalence tables are available from a number of sources and may differ locally; it is therefore important to refer to local guidelines when appropriate. Equivalence tables from the British National Formulary (BNF) are included in Appendix 1.

4.0 EXAMPLES OF GOOD PRACTICE

Aneurin Bevan University Health Board has published a persistent pain strategy outlining issues around the community management of people with persistent pain, with particular focus on safe and effective prescribing. The strategy outlines the implementation of a package of measures to improve quality and patient safety in the management of persistent pain. Aneurin Bevan University Health Board has also shown the greatest reduction in tramadol prescribing following audit and review, with an 11% decrease from September 2014 to September 2015.

Betsi Cadwaladr University Health Board promotes the use of a written, structured agreement in complex patients, in conjunction with its local guidelines (see Appendix 2A&B), and in line with advice published by the Faculty of Pain Medicine of the RCoA. The written, structured agreement and accompanying documents aim to promote communication about the care of patients receiving opioid treatment for persistent non-malignant pain. The resources were developed in consultation with the local Pain Management Service and GPs to support the safe prescribing of strong opioids for persistent non-malignant pain and to help reduce the risk of problem drug use.

5.0 ACKNOWLEDGEMENTS

We would like to acknowledge the work of health boards and local specialist teams in Wales involved in producing various guidance and resources, the Welsh Pain Society and the RCoA Faculty of Pain Medicine, as well as other national organisations. Guidelines, patient information and policy documents have been reviewed and the key messages have been included in these resources, alongside signposting to the full guidance or most relevant resource.

We are always interested to hear about initiatives that have led to good outcomes in health boards in NHS Wales. Please send good news stories from your health board to awttc@wales.nhs.uk.

REFERENCES

1. Faculty of Pain Royal College of Anaesthetists. Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain. Available at: <http://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware>. Accessed June 2016.
2. Faculty of Pain Medicine Royal College of Anaesthetists. Core Standards for Pain Management Services in the UK. Available at: <http://www.rcoa.ac.uk/document-store/core-standards-pain-management-services-the-uk>. Accessed March 2016.
3. Welsh Assembly Government. Service development and commissioning directives: Chronic non-malignant pain. Available at: <http://gov.wales/topics/health/publications/health/strategies/pain/?lang=en>. Accessed June 2016.
4. Pain Community Centre. Substance Misuse: Hospital Management. 2016. Available at: <http://www.paincommunitycentre.org/article/substance-misuse-hospital-management>. Accessed March 2016.
5. Advisory Council on the Misuse of Drugs. ACMD consideration of tramadol. 2013. Available at: <https://www.gov.uk/government/publications/acmd-advice-on-tramadol>.
6. Advisory Council on the Misuse of Drugs. Pregabalin and Gabapentin advice. 2016. Available at: <https://www.gov.uk/government/publications/advice-on-the-anticonvulsant-drugs-pregabalin-and-gabapentin>. Accessed June 2016.
7. Medicines Healthcare Products Regulatory Agency. Drug Safety Update: Transdermal fentanyl "patches": reminder of potential for life-threatening harm from accidental exposure, particularly in children. 2014. Available at: <https://www.gov.uk/drug-safety-update/transdermal-fentanyl-patches-reminder-of-potential-for-life-threatening-harm-from-accidental-exposure-particularly-in-children>.
8. Welsh Assembly Government. Patient Safety Notice: Risk of harm from the inappropriate use and disposal of fentanyl patches. 2015. Available at: <http://www.patientsafety.wales.nhs.uk/news/39820>. Accessed June 2016.
9. All Wales Medicines Strategy Group. National Prescribing Indicators 2014–2015. Available at: http://www.awmsg.org/docs/awmsg/medman/National_Prescribing_Indicators_2014-2015.pdf. Accessed June 2016.
10. All Wales Medicines Strategy Group. National Prescribing Indicators 2015–2016. February 2015. Available at: <http://www.awmsg.org/docs/awmsg/medman/National%20Prescribing%20Indicators%202015-2016.pdf>. Accessed June 2016.
11. All Wales Medicines Strategy Group. National Prescribing Indicators 2016–2017. February 2016. Available at: <http://www.awmsg.org/docs/awmsg/medman/National%20Prescribing%20Indicators%202016-2017.pdf>. Accessed June 2016.
12. Routledge P, Welsh Assembly Government, Public Health Wales et al. Making prudent healthcare happen. 2014. Available at: <http://www.prudenthealthcare.org.uk/prescribing/>. Accessed June 2016.
13. Rowbotham D. J, and Collett B. J. Chapter 12: Guidelines for the provision of anaesthetic services. Anaesthetic services for chronic pain management. 2014. Available at: <http://www.rcoa.ac.uk/gpas2014>.
14. Office For National Statistics. Deaths Related to Drug Poisoning in England and Wales: 2012. Available at: <http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginenglandandwales/2013-08-28>. Accessed June 2016.
15. Office For National Statistics. Release: Deaths Related to Drug Poisoning, England and Wales - 2014. 2015. Available at: <http://www.ons.gov.uk/ons/rel/subnational-health3/deaths-related-to-drug-poisoning/england-and-wales---2014/deaths-related-to-drug-poisoning-in-england-and-wales--2014-registrations.html>.

All Wales Medicines Strategy Group

16. All Wales Medicines Strategy Group. Tramadol Educational Resource Materials. Available at: http://www.awmsg.org/awmsgonline/medman_library.html?jqprselect=button1. Accessed June 2016.
17. Advisory Council on the Misuse of Drugs. The Misuse of Drugs Act 1971 (Ketamine etc.) (Amendment) Order 2014. Available at: <http://www.legislation.gov.uk/ukdsi/2014/9780111110904>. Accessed June 2016.
18. Home Office. Summary of responses to the consultation of proposals to schedule tramadol, and remove the prescription writing exemption for temazepam, under the Misuse of Drugs Regulations 2001. 2013. Available at: <https://www.gov.uk/government/consultations/scheduling-of-tramadol-and-exemptions-for-temazepam-prescriptions>.
19. Advisory Panel on Substance Misuse. Reducing the harms associated with prescription-only analgesics: Tramadol. 2015. Available at: <http://gov.wales/docs/dhss/publications/151110tramadolreporten.pdf>. Accessed June 2016.
20. Scottish Intercollegiate Guidelines Network. SIGN 136. Management of chronic pain. A national clinical guideline. Available at: <http://sign.ac.uk/guidelines/fulltext/136/index.html>. Accessed March 2016.
21. National Institute for Health and Care Excellence. Clinical Guideline 177. Osteoarthritis: care and management. Available at: <http://www.nice.org.uk/guidance/CG177>. Accessed March 2016.
22. National Institute for Health Care Excellence. NICE guideline [NG59]. Low back pain and sciatica in over 16s: assessment and management. November 2016. Available at: <https://www.nice.org.uk/guidance/ng59>. Accessed December 2016.
23. National Institute for Health Care Excellence. Clinical Guideline 173. Neuropathic pain in adults: pharmacological management in non-specialist settings. Available at: <http://www.nice.org.uk/Guidance/CG173>. Accessed March 2016.
24. British Medical Association, and Royal Pharmaceutical Society of Great Britain. British National Formulary May 2016. Available at: <https://www.medicinescomplete.com/mc/bnf/current/>. Accessed June 2016.

APPENDIX 1: DOSE EQUIVALENCES

It is important to consider dose equivalence when comparing the prescribing of different analgesics. Additionally, there is some variation in the effectiveness of an analgesic between patients, and so it is suggested that prescribers start lower than the equivalent dose, monitoring and titrating slowly, tailoring the treatment to the individual. Equivalence tables are available from a number of sources and may differ locally; it is therefore important to refer to local guidelines when appropriate.

Table 1 below gives an example of a clinical practice guide from the BNF for the dose equivalence of some commonly prescribed opioids. Tables 2 and 3 give **approximately** equivalent 24-hour doses of oral morphine for buprenorphine and fentanyl patches.

Table 1. Equivalent doses of opioid analgesics²⁴

Analgesic	Route	Dose
Codeine	PO	100 mg
Diamorphine	IM, IV, SC	3 mg
Dihydrocodeine	PO	100 mg
Hydromorphone	PO	2 mg
Morphine	PO	10 mg
Morphine	IM, IV, SC	5 mg
Oxycodone	PO	6.6 mg
Tramadol	PO	100 mg

PO=by mouth; IM=intramuscular; IV=intravenous; SC=subcutaneous

Table 2. Buprenorphine patch equivalences²⁴

Buprenorphine patches are <i>approximately</i> equivalent to the following 24-hour dose of oral morphine [§] .			
morphine salt 12 mg daily	≡	BuTrans [®] '5' patch	7-day patches
morphine salt 24 mg daily	≡	BuTrans [®] '10' patch	7-day patches
morphine salt 48 mg daily	≡	BuTrans [®] '20' patch	7-day patches
morphine salt 84 mg daily	≡	Transtec [®] '35' patch	4-day patches
morphine salt 126 mg daily	≡	Transtec [®] '52.5' patch	4-day patches
morphine salt 168 mg daily	≡	Transtec [®] '70' patch	4-day patches

Table 3. Fentanyl patch equivalences²⁴

72-hour fentanyl patches are <i>approximately</i> equivalent to the following 24-hour dose of oral morphine [§] .			
morphine salt 30 mg daily	≡	fentanyl '12' patch	3-day patches
morphine salt 60 mg daily	≡	fentanyl '25' patch	3-day patches
morphine salt 120 mg daily	≡	fentanyl '50' patch	3-day patches
morphine salt 180 mg daily	≡	fentanyl '75' patch	3-day patches
morphine salt 240 mg daily	≡	fentanyl '100' patch	3-day patches

[§] Conversion ratios vary and these figures are a guide only. Morphine equivalences for transdermal opioid preparations have been approximated to allow comparison with available preparations of oral morphine.

An illustrative example

Below is a case example of a pain medication history seen in a secondary care pain clinic referred from primary care:

- two co-codamol 30/500 tablets taken four times a day;
- two tramadol 50 mg capsules taken four times a day;
- one fentanyl 75 micrograms/hour transdermal patch applied every three days;
- morphine sulfate 10 mg/5 ml oral solution when required.

The morphine equivalence of this is:

- codeine 240 mg in 24 hours, which is equivalent to 24 mg morphine;
- tramadol 400 mg in 24 hours, which is equivalent to 40 mg morphine;
- fentanyl 75 micrograms/hour, which is equivalent to 180 mg morphine in 24 hours.

Total 244 mg morphine equivalence in 24 hours, plus however much morphine oral solution is being taken.

APPENDIX 2A: BETSI CADWALADR OPIOID REVIEW PRO-FORMA EXAMPLE 2010

OPIOID MEDICATION REVIEW

To be completed in conjunction with the patient assessment tool at each review (monthly during the initial drug titration) for patients receiving strong opioid therapy for the management of chronic non-malignant pain

PATIENT SPECIFIC DETAILS / Addressograph	
G. No:	Consultant:
Name:	Address:
DoB:	
Checklist (tick as appropriate)	
Assessment:	Compliance
<input type="checkbox"/> Adequate analgesia <input type="checkbox"/> Improvement vs. treatment goals If no improvement, review activity and treatment goals and consider whether appropriate to continue opioid	<input type="checkbox"/> Taking medication as recommended <input type="checkbox"/> Difficulty with tablets <input type="checkbox"/> Referral to pharmacist
Side effects:	Outcome:
<input type="checkbox"/> Nausea <input type="checkbox"/> Itching <input type="checkbox"/> Sedation <input type="checkbox"/> Dizziness These side effects may reduce with time - reduce dose or consider alternative opioid if symptoms persist <input type="checkbox"/> Constipation Manage actively with dietary advice & stimulant laxative therapy <input type="checkbox"/> Confusion <input type="checkbox"/> Memory loss <input type="checkbox"/> Weight gain <input type="checkbox"/> Weight loss <input type="checkbox"/> Sweating <input type="checkbox"/> Urine retention <input type="checkbox"/> Hallucinations <input type="checkbox"/> Respiratory depression <input type="checkbox"/> Hormonal effects Consider stopping or reducing the dose if side effects occur	<input type="checkbox"/> Continue <input type="checkbox"/> Increase dose as per protocol <input type="checkbox"/> Reduce dose as per protocol
Comments	
Date of next review:..... or Discharge from pain service.....	
Completed by:	
Signed (healthcare professional):	
Print Name:	
Designation:	
Date:	
Contact Number:	

APPENDIX 2B: BETSI CADWALADR OPIOID TREATMENT PLAN EXAMPLE 2010

OPIOID TREATMENT PLAN

Pain Management Service: To be completed at time of discharge or outpatient review and a copy sent to the GP.

GP initiating treatment: Complete treatment plan and file in patient's notes

Date of review:

PATIENT SPECIFIC DETAILS / Addressograph	
Patient Hospital No:	Consultant:
Name:	Address:
DoB:	
Treatment Plan	
Opioid recommended: (Drug name: give BRAND name where applicable):	
Initial dose and frequency:	
Indication/reason for opioid therapy:	
Treatment goals:	
Maximum dose limit: (Consider specialist referral for patients who fail to derive benefit from large doses of opioids) ¹	
Recommended treatment for flare up/breakthrough pain: (include both drug and non drug management)	
Date of next review:	
Completed by:	
Signed (healthcare professional):	
Print Name:	
Designation:	
Date:	
Contact Number:	