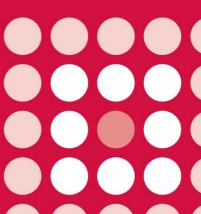


**March 2015** 



This report has been prepared by the Welsh Analytical Prescribing Support Unit (WAPSU), part of the All Wales Therapeutics and Toxicology Centre (AWTTC).

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#### 1.0 INTRODUCTION

The purpose of this prescribing update is to keep health boards in Wales informed on any changes in prescribing since the Tramadol Educational Resource Materials were made available for use in NHS Wales in November 2013, and to benchmark current prescribing data with that of other health boards, England and NE England.

### 1.1 Background

At its November 2013 meeting, the All Wales Medicines Strategy Group (AWMSG) endorsed the Tramadol Educational Resource Materials produced by the All Wales Therapeutic and Toxicology Centre (AWTTC) and the All Wales Prescribing Advisory Group (AWPAG). The purpose of these materials is to promote the appropriate prescribing of tramadol in NHS Wales. These resources are intended to raise awareness amongst healthcare professionals and patients of the potential harms associated with the misuse and diversion of tramadol, and to provide prescribers with information and training to aid in the appropriate prescribing of tramadol as part of an overall pain management strategy. The materials include primary care, secondary care and emergency department audits, an educational slide set, Welsh Medicines Resource Centre (WeMeReC) bulletins, a patient information leaflet and a shared decision-making toolkit. These are available at <a href="https://www.awmsg.com">www.awmsg.com</a>.

This document provides an analysis of tramadol prescribing data to September 2014, highlighting any changes in tramadol prescribing since the Tramadol Educational Resource Materials were available for use in NHS Wales<sup>1</sup>.

Table 1 details the sequence of events up to and following the development of the Tramadol Educational Resource Materials.

Table 1. Timeline of Tramadol Education Resource Materials development

Timeline				
Feb 2013	The Advisory Council for the Misuse of Drugs (ACMD) recommended that the UK Government should reclassify tramadol as a controlled class C substance, and place it within Schedule III to the Misuse of Drugs Regulations.			
Apr 2013	Initial prescribing analysis was undertaken by the Welsh Analytical Prescribing Support Unit (WAPSU) at the request of Welsh Government.			
May 2013	Tramadol featured in WeMeReC's pharmacovigilance module.			
Jun 2013	AWPAG tramadol subgroup meets to discuss NHS Wales tramadol prescribing review.			
Jul 2013	Consultation on the scheduling of tramadol launched by Crime Prevention Minister, Jeremy Browne.			
Aug 2013	Office for National Statistics (ONS) statistical bulletin highlights the increase in tramadol deaths in England and Wales and related coverage in national press.			
Nov 2013	Tramadol Educational Resource Materials endorsed for use in NHS Wales by AWMSG.			
Dec 2013	CMO update includes the link to Tramadol Educational Resource Materials.			
Feb 2014	WeMeReC module on non-malignant chronic pain published.			
Apr 2014	Tramadol becomes a National Prescribing Indicator in Wales.			
Apr 2014	A&E audit on tramadol overdose admissions completed by 14 A&E departments in Wales.			
Jun 2014	Tramadol becomes a Controlled Class C substance and placed in Schedule III to the Misuse of Drugs Regulations.			
Jun 2014	Wales Centre for Pharmacy Professional Education (WCPPE) Misuse of medicines training package on tramadol published.			
Aug 2014	AWMSG materials updated.			
Aug 2014	Prescribing decision support review.			
Sep 2014	ONS statistical bulletin shows that tramadol-related deaths continue to rise in England and Wales.			
Oct 2014	Advisory Panel on Substance Misuse (APoSM) evidence gathering session on tramadol and other opioids.			
Nov 2014	Substance misuse annual report 2013–2014 on tramadol in development.			
Jan 2015	Tramadol prescribing NHS Wales update analysis. Data to September 2014.			

#### 2.0 DATA RELATING TO HARM

Deaths involving tramadol more than doubled in the UK between 2008 and 2013, from 83 to 220. Mortality rates from drug misuse in general remained significantly higher in Wales than in England for 2013; however, whilst the number of drug misuse deaths in England rose by 21% between 2012 and 2013, there was no rise in the number of drug misuse deaths in Wales, which remained at 135 deaths each year<sup>2</sup>.

Tramadol has accounted for approximately 1.3% of all the UK National Poisons Information Service telephone pharmaceutical enquiries since 2009–2010<sup>3</sup>. Tramadol appeared seventh on the list of the top ten telephone enquiries for pharmaceutical agents in 2012–2013 with 691 enquiries. Fifty-one of these enquiries originated in Wales.

Yellow Card Centre (YCC) Wales received six yellow card reports relating to tramadol in 2013–2014, of which five were considered to be serious. In 2012–2013 there was only one yellow card report relating to tramadol, which was not considered to be serious by the reporter, showing a modest increase in tramadol yellow card reporting in NHS Wales. The 2013–2014 increased reporting rates may be linked to the yellow card information within the Tramadol Educational Resource Materials.

An audit of tramadol overdose admissions to emergency departments in Wales was conducted over a two-month period between April and June 2014. Of 14 emergency departments that undertook the audit, 12 sets of data have been received so far. The results are summarised below.

Over the two-month audit period a total of 20 people were admitted to emergency departments in Wales for an overdose that involved tramadol.

- The average age of the patients admitted to the emergency department for an overdose involving tramadol was 34.4 years.
- 85% of individuals identified were female.
- 70% of individuals identified had tramadol prescribed as part of their medication history and 30% were taking potentially interacting medication, such as selective serotonin reuptake inhibitors and warfarin.
- 25% of individuals identified had a history of alcohol or drug-related problems.
- 80% of individuals identified had a history of depression.

#### 3.0 PRIMARY CARE PRESCRIBING ANALYSIS

The figure below shows the tramadol prescribing trends for Wales, England and NE England as defined daily doses (DDDs) per 1,000 patients. Usage in Wales remains higher than in England but lower than in NE England.

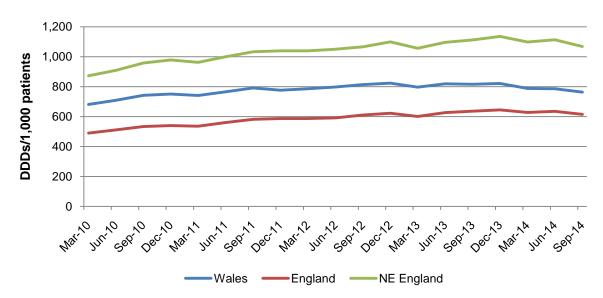


Figure 1. Tramadol prescribing trend for Wales, England and NE England (March 2010– September 2014)

Figure 2 shows the breakdown of opioids prescribed in Wales and its health boards as items per 1,000 patients. Tramadol prescribing accounted for 39.7% of all opioids prescribed from October 2013 to September 2014, a decrease from 42.4% of all opioids from October 2012 to September 2013.

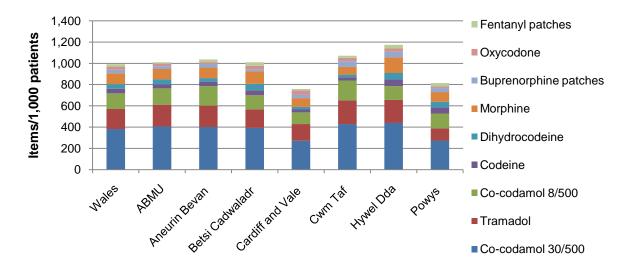


Figure 2. Breakdown of opioid prescribing (October 2013–September 2014)

Figure 3 shows the tramadol prescribing trend for the health boards in Wales. Every health board is starting to show a decrease in prescribing. In particular, Aneurin Bevan Health Board has reduced its tramadol prescribing by over 13% in the last year.

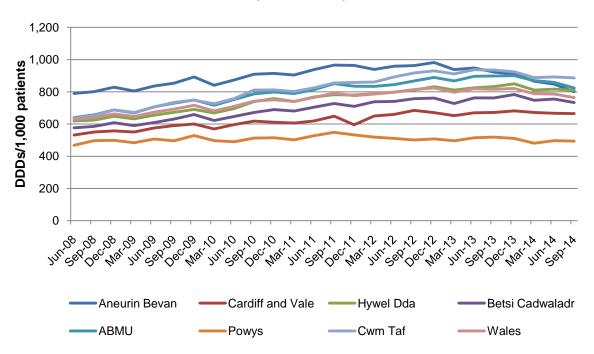


Figure 3. Tramadol prescribing trend for the health boards in Wales (June 2008– September 2014)

Figure 4 shows tramadol prescribing in health boards in Wales compared to Clinical Commissioning Groups (CCGs) in England. This currently shows Wales to have a higher average prescribing rate than England.

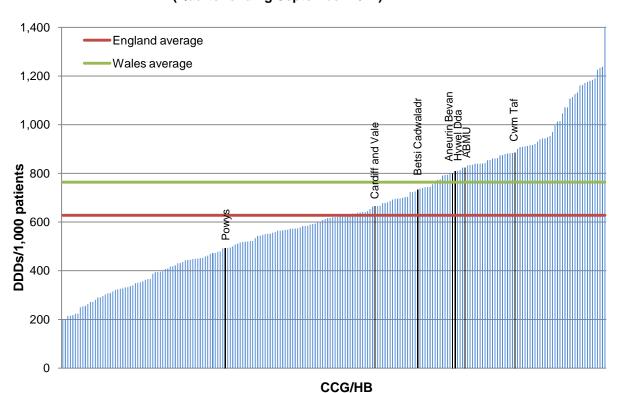


Figure 4. Tramadol prescribing of health boards in Wales compared to CCGs in England (Quarter ending September 2014)

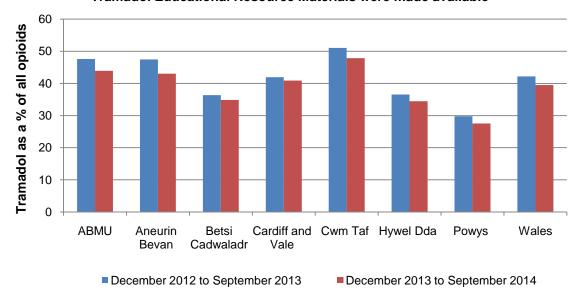
Table 2 compares prescribing for the second quarter 2013–2014 with that of the second quarter 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue. The national prescribing average has promisingly decreased by over 6%.

Table 2. Tramadol prescribing – Quarter 2 2013–2014 compared with Quarter 2 2014–2015

	Qtr 2 2013–2014 (DDDs per 1,000 patients)	Qtr 2 2014–2015 (DDDs per 1,000 patients)	Change	% Change
ABMU	898	824	-74	-8.27%
Aneurin Bevan	922	800	-121	-13.17%
BCU	762	733	-29	-3.81%
Cardiff and Vale	672	665	-7	-0.98%
Cwm Taf	935	886	-49	-5.19%
Hywel Dda	833	809	-24	-2.87%
Powys	518	494	-25	-4.80%
National average	816	764	-52	-6.34%

Figure 5 shows the prescribing of tramadol as a percentage of all opioids for a 10-month period before the Tramadol Educational Resource Materials were made available for use in NHS Wales, compared to the same 10-month period a year later, and this shows a significant decrease in prescribing in Wales. The decrease for tramadol prescribing as DDDs per 1,000 patients however has not yet reached statistical significance.

Figure 5. Tramadol prescribing 10 months before compared with 10 months after the Tramadol Educational Resource Materials were made available



Appendix 1 shows a pictorial timeline of tramadol prescribing alongside tramadol implementation activities.

#### 4.0 DISCUSSION

The purpose of the Tramadol Educational Resource Materials was to promote the appropriate prescribing of tramadol in NHS Wales. These resources were intended to raise awareness amongst healthcare professionals and patients of the potential harms associated with the misuse and diversion of tramadol, and to provide prescribers with information and training to aid in the appropriate prescribing of tramadol as part of an overall pain management strategy. The increasing trend of tramadol prescribing (as DDDs per 1,000 patients) has been reversed and a decrease in prescribing in all health boards has now been seen.

There is also a downward trend in the prescribing of tramadol as a percentage of all opioids, which has reached significance for Wales and shows that the increasing trend in prescribing has started to reverse.

Tramadol also became a National Prescribing Indicator for 2014–2015 and prescribing will continue to be monitored and reported on a quarterly basis.

Although prescribing was used as a measure here to assess the impact of the Tramadol Educational Resource Materials, there are many factors which affect the potential of a drug to be misused or cause harm, which are not related to the rate of prescribing, and this was an important message contained within the educational resource materials. There should be a focus on prudent prescribing, to improve the appropriateness of tramadol prescribing and to reduce the risk of diversion of supplies and harm.

It is also important to note that a rapid reduction in prescribing may not be appropriate and could cause substitution to a less appropriate medication. Tramadol does have a place in therapy for those who do not respond to other first-line analgesia.

Assessment of audit feedback will be essential for review of the impact of the Tramadol Educational Resource Materials and will provide more detailed and local knowledge of the work being undertaken to review tramadol prescribing.

Updated fatal toxicity indices will also help to illustrate the relationship between tramadol prescribing and harm in relation to deaths involving tramadol.

It is essential that there is a holistic approach to the review of tramadol prescribing in Wales. Education and awareness is also key for healthcare professionals and patients to reduce the risks associated with the diversion and misuse of tramadol.

### **REFERENCES**

- 1 All Wales Medicines Strategy Group. Tramadol Educational Resource Materials. 2014. Available at: <a href="http://www.awmsg.org/medman library.html?jqprselect=button1">http://www.awmsg.org/medman library.html?jqprselect=button1</a>. Accessed Jan 2015.
- 2 Office for National Statistics. Release: Deaths Related to Drug Poisoning, England and Wales 2013. 2014. Available at: <a href="http://www.ons.gov.uk/ons/rel/subnational-health3/deaths-related-to-drug-poisoning/england-and-wales---2013/index.html">http://www.ons.gov.uk/ons/rel/subnational-health3/deaths-related-to-drug-poisoning/england-and-wales---2013/index.html</a>. Accessed Jan 2015.
- 3 National Poisons Information Service. Report 2012/13. 2013. Available at: http://www.npis.org/annualreports.html. Accessed Mar 2015.

# APPENDIX 1. PICTORIAL ILLUSTRATION OF TRAMADOL PRESCRIBING AND IMPLEMENTATION OF TRAMADOL PRESCRIBING REVIEW IN NHS WALES

## Tramadol implementation activities



