

<p><b>Lower your risk of stroke.</b></p> <p><b>Community pharmacy public health campaign report</b></p>		
<p><b>Author:</b> Andrew Evans, Principal Pharmacist in Pharmaceutical Public Health</p>		
<p><b>Date:</b> 16 August 2013</p>		<p><b>Version:</b> 1</p>
<p><b>Publication/ Distribution:</b></p> <ul style="list-style-type: none"> <li>• Chief Pharmaceutical Officer, Welsh Government</li> <li>• Health Board Chief Pharmacists</li> <li>• Stroke Association Wales</li> <li>• Community Pharmacy Wales</li> <li>• Royal Pharmaceutical Society, Wales</li> <li>• Public Health Wales intra and internet web pages</li> </ul>		
<p><b>Review Date:</b> N/A</p>		
<p><b>Purpose and Summary of Document:</b></p> <p>To report on the Lower your risk of stroke. Community pharmacy public health campaign delivered through community pharmacies in Wales during May 2013.</p>		
<p><b>Work Plan reference:</b> PLA</p>		

© 2013 Public Health Wales NHS Trust

Material contained in this document may be reproduced without prior permission provided it is done so accurately and is not used in a misleading context.

Acknowledgement to the Public Health Wales NHS Trust to be stated.

## Contents

Executive summary .....	5
1 Background .....	7
2 Introduction .....	8
3 Key Messages .....	9
4 Method .....	10
5 Results .....	13
6 Discussion .....	19
7 Conclusions .....	23
8 Recommendations .....	24

<b>Appendices</b>	
<b>Appendix 1</b>	Lower your risk of stroke campaign poster.
<b>Appendix 2</b>	Lower your risk of stroke campaign media coverage list.
<b>Appendix 3</b>	Uptake of relevant Welsh Centre for Pharmacy Professional Education (WCPPE) provided support.

<b>Index of figures</b>		<b>Page</b>
<b>Figure 1</b>	Error bar chart of proportion of MUR consultations for target groups May 2012 and 2013 (Wales).	<b>13</b>
<b>Figure 2</b>	Error bar chart of proportion of MUR consultations for target groups May 2012 and 2013 mean (Wales).	<b>14</b>
<b>Figure 3</b>	Proportion of pharmacies undertaking at least one MUR consultation for target groups April 2012 to May 2013 (Wales).	<b>16</b>

<b>Index of tables</b>		<b>Page</b>
<b>Table 1</b>	Total medicines use reviews reported to NHS Wales Shared Services Partnership (all claims to 6 <sup>th</sup> July 2013).	<b>12</b>
<b>Table 2</b>	Number (%) of MUR consultations for target groups by Local Health Board.	<b>15</b>
<b>Table 3</b>	Number (%) of pharmacies completing at least one MUR consultation for during the campaign period by Local Health Board.	<b>17</b>

## Glossary

AF	Atrial fibrillation
CPW	Community Pharmacy Wales
LHB	Local Health Board
MUR	Medicines use review
NHSSSP	NHS Wales Shared Services Partnership
WCPPE	Welsh Centre for Pharmacy Professional Education

## Executive summary

Under the community pharmacy contractual framework community pharmacies are required to participate in up to six health promotion campaigns per annum, either local or national (, in the manner reasonably requested by Local Health Boards). In 2011, Health Board Chief Pharmacists agreed that Public Health Wales would facilitate and evaluate up to three national campaigns per annum. This paper reports on the first national community pharmacy public health campaign of 2013/14, the main purpose of which was to raise public awareness of the increased stroke risk amongst people diagnosed with hypertension and atrial fibrillation (AF). In addition the campaign is designed to provide these people with advice on how they can reduce their stroke risk and recognise the signs of a stroke.

The campaign also offered an opportunity to:

- Provide advice on lifestyle changes which reduce stroke risk;
- For people taking antihypertensive medicines or oral anticoagulants to decrease their stroke risk to have a medicines use review (MUR); and
- Remind people of the most common signs of a stroke and the importance of seeking emergency medical attention.

The campaign was supported by all 7 Health Board Chief Pharmacists and delivered in partnership with Public Health Wales, Community Pharmacy Wales and supported by the Stroke Association.

During the month long campaign pharmacies across Wales supported individuals with hypertension or atrial fibrillation (AF) by prioritising them for an MUR. During each MUR the pharmacist checked understanding and use of medicines and reinforced the importance of medicines adherence as a way in which the risk of the individual having a stroke could be reduced.

Pharmacists and staff reminded people of the signs of a stroke and the importance of seeking emergency medical attention. Pharmacy staff also distributed campaign materials which included information on how making healthy lifestyle choices can reduce the risk of having a stroke.

Approximately 36,000 leaflets were distributed to pharmacies across Wales. Pharmacists completed 10,059 MURs with people taking specified medication which indicated that the individual was at increased risk of stroke during the campaign representing just under 47% of all MURs in that period. Analysis of MUR claim data indicated that there was a statistically significant increase in the proportion of MURs for the target group when compared with the four months immediately preceding the campaign and with the equivalent month in the previous year. Whilst the increase in the proportion of MURs in the target group was statistically significant the increase was small.

# 1 Background

Each year across Wales, approximately 11,000 people will have a stroke, of those around a third may die. In addition over 65,000 people are living with the effects of stroke<sup>1</sup>.

High blood pressure is the most important risk factor for stroke, contributing to about 50% of all strokes<sup>2</sup> and it has been estimated that 53% of men and 41% of women with high blood pressure are not receiving treatment. Of those who are being treated, around half still have high blood pressure<sup>3</sup>.

In Wales atrial fibrillation (AF) affects over 50,000 people<sup>4</sup>. AF is an irregular heart rhythm which causes the heart to pump blood inefficiently. This means that blood clots are more likely to form in the heart which can then travel through the blood stream to the brain causing a stroke. People who have AF are five times more likely to have a stroke than those who do not and those strokes are more likely to lead to death or to leave the sufferer with high levels of disability<sup>5</sup>.

Smoking, being overweight or obese, having a diet high in salt and being physically inactive are all factors which increase the risk of having a stroke. Whereas eating high amounts of fresh fruit and vegetables and taking moderate exercise can substantially reduce the risk.

<sup>1</sup> Stroke Association Available at <http://www.stroke.org.uk/news/stroke-facts-and-statistics-your-area> [Accessed 28 June 2013].

<sup>2</sup> Lawes CM, Vander Hoorn S, Rodgers A. International Society of Hypertension. Global burden of blood pressure related disease, 2001. Lancet 2008; 371: 1513-8.

<sup>3</sup> Scarborough P, Bhatnagar P, Wickramasinghe K, Smolina K, Mitchell C, Rayner M (2010). Coronary heart disease statistics 2010 edition. British Heart Foundation: London.

<sup>4</sup> The Office of Health Economics. *Estimating the direct costs of atrial fibrillation to the NHS in the constituent countries of the UK and at SHA level in England 2008* November 2009. London.

<sup>5</sup> Wolf, P.A., Abbott R.A. and Kannel.W.B. (1991) Atrial fibrillation as an independent risk factor for stroke: The Framingham study. Stroke 22 (8) P983-88.

## 2 Introduction

The Community Pharmacy Contractual Framework places an obligation on community pharmacy contractors to signpost people to relevant health and social care providers and patient groups and to participate in up to six local or national public health campaigns each year. Health Board Chief Pharmacists in Wales agreed to support this national public health campaign, the main purpose being to raise public awareness of the increased stroke risk amongst people diagnosed with hypertension and AF.

Through the campaign pharmacies were able to provide advice on lifestyle measures that could reduce the risk of having a stroke and offer a medicines use review (MUR) consultation for people who were taking antihypertensive or oral anticoagulant medication to reduce their stroke risk. The MUR consultation provided an opportunity to improve individuals' understanding and use of medicines and reinforce the importance of medicines adherence as a way in which their risk of having a stroke could be reduced. Pharmacists were encouraged to prioritise patients taking antihypertensive or oral anticoagulant medication for MUR consultations during the campaign period. In addition to MUR consultations, pharmacies were able to promote other relevant services such as NHS smoking cessation services and discharge medicines reviews. The support and expertise of the Stroke Association enabled this national campaign to be carried out.



### 3 Key Messages

The key messages which the Lower your risk of stroke campaign was seeking to deliver were:

- Having high blood pressure or an irregular heart rhythm (atrial fibrillation) increases risk of having a stroke.
- It is important to take prescribed medicines correctly as this will lower risk of stroke.
- A medicines use review can help people to use medicines more effectively.
- Unhealthy lifestyle choices, like smoking, being overweight and eating unhealthily, all increase risk of stroke.
- Giving up smoking, losing weight and eating healthily will lower stroke risk.
- Be aware of the most common signs of a stroke which are facial weakness, arm weakness and speech problems.
- A stroke is a medical emergency, call 999 immediately. Taking action swiftly can limit damage in the brain and dramatically increase chances of survival.

## 4 Method

- 4.1 Unlike previous campaigns, which ran for a two week period, Lower your risk of stroke was a month long campaign. During May people were encouraged to visit their community pharmacy to discuss how they could lower their risk of having a stroke and be provided with information about stroke risk factors.
- 4.2 A letter was sent to all pharmacies by Health Board Chief Pharmacists a few weeks ahead of the campaign advising them of the campaign and reminding them of their contractual terms.
- 4.3 Campaign materials (Appendix 1) were designed by the Stroke Association with advice from Community Pharmacy Wales (CPW) and Public Health Wales to ensure its appropriateness for use in pharmacies. Materials were delivered to the Public Health Champion in all pharmacies by the NHS Wales Shared Services Partnership (NHSSSP).
- 4.4 Financial support was provided by the Stroke Association to meet the printing costs of the public facing materials. The Stroke Association, CPW and Public Health Wales provided considerable resource to the media efforts (Appendix 2). CPW was also a key partner in developing the communication material for pharmacies and acting as a point of contact for community pharmacy contractors.).
- 4.5 The Welsh Centre for Pharmacy Professional Education (WCPPE) provided support to pharmacists and pharmacy technicians to undertake continuing professional development in preparation for the campaign (Appendix 3) which included e-learning materials covering both stroke and hypertension MURs and quick reference

guides for MURs for people taking antihypertensive medicines and warfarin.

- 4.6 CPW contacted community pharmacies by email before the campaign reminding them to participate and of the request to prioritise target groups for MUR consultations.
- 4.7 Case studies were developed which described people who had had a stroke who might have benefitted from specific community pharmacy services and called for others to visit a pharmacy during the campaign for support and advice from their pharmacist.
- 4.8 The campaign was launched on Thursday 2<sup>nd</sup> May by the Minister for Health and Social Services at a community pharmacy in Carmarthen. The launch was attended by partners and supported by the local Stroke Information and Support Group.
- 4.9 The key campaign intervention involved pharmacists focussing MUR activity on people taking medication to control their blood pressure and those with atrial fibrillation who were taking warfarin to reduce their stroke risk. Other interventions included pharmacists and appropriately trained pharmacy staff:
- Distributing campaign materials and providing advice on lifestyle changes, such as stopping smoking, eating healthily and losing weight, all of which can reduce the risk of stroke; and
  - Reminding people of the most common signs of a stroke and, because a stroke is a medical emergency, that they should call

999 immediately if they suspect that they or someone else is having a stroke.

4.10 For the first time in a national community pharmacy public health campaign pharmacy contractors were not asked to record or return specific information regarding the number of contacts they made during the campaign. Instead it was agreed that the change in the number and proportion of MUR consultations for the target group would be measured from MUR claim data submitted to the NHSSSP. The decision not to require pharmacies to return individual evaluation forms was taken in order to:

- Evaluate the feasibility of using routine data to measure campaign impact;
- Reduce the administrative burden on pharmacy contractors; and
- Reduce administrative costs (e.g. printing and postage costs)

4.11 The proportion of MUR consultations for the target groups was obtained from claims data submitted to NHSSSP. Data were analysed using Microsoft Excel and Stata version 12.

## 5 Results

### 5.1 Target group medicines use reviews

During the campaign period (May 2013) 21,532 MUR consultations were undertaken, of these 10,059 (46.72%) were with people taking either antihypertensive (9,312) or oral anticoagulant medication (747) who were the people whom pharmacists had been asked to prioritise for MUR consultations during the campaign period. The number and proportion of target group MUR consultations in the campaign period was compared to same month in 2012 and to the mean proportion in the previous months in 2013 in order to determine whether the campaign was associated with an increase which might indicate that stroke patients were more likely to have an MUR consultation as a result of the campaign. The number and proportion of MUR consultations for the target group for the campaign and comparator periods are shown in Table one.

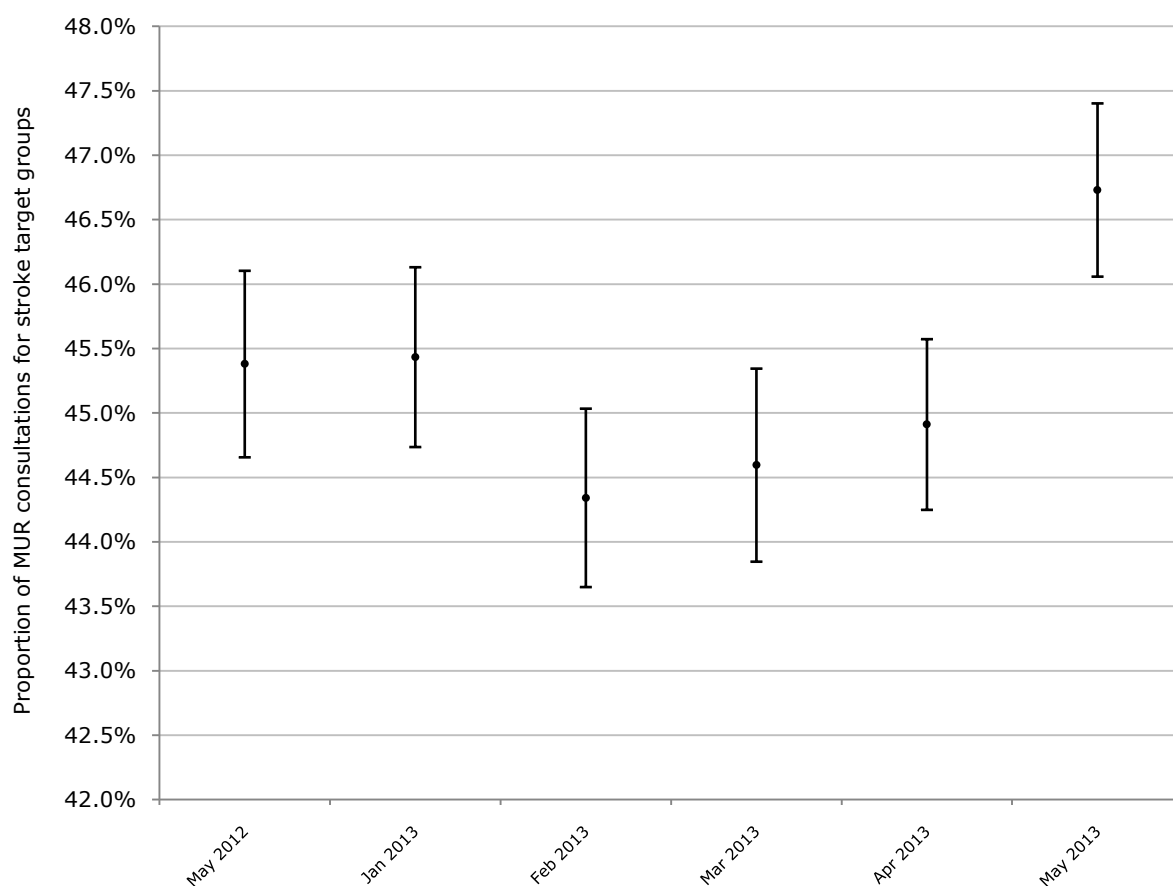
**Table one:** Total medicines use reviews reported to NHS Wales Shared Services Partnership (all claims to 6<sup>th</sup> July 2013)

	Total MUR consultations	Total MUR consultations for target group	Percentage of total MUR consultations for target group	95% Confidence Interval
May 2012	18,184	8,252	45.38	44.46 – 46.10
January 2013	19,580	8,896	45.43	44.74 – 46.13
February 2013	19,787	8,774	44.34	43.65 – 45.03
March 2013	16,923	7,547	44.60	43.85 – 45.35
April 2013	21,720	9,755	44.91	44.25 – 45.57
May 2013	21,532	10,059	46.72	46.05 – 47.38

Source: NHS Wales Shared Services Partnership

Both the number and proportion of MUR consultations for the target group were higher than in any of the previous months preceding the campaign in 2013 or the same month in 2012 (Figure one).

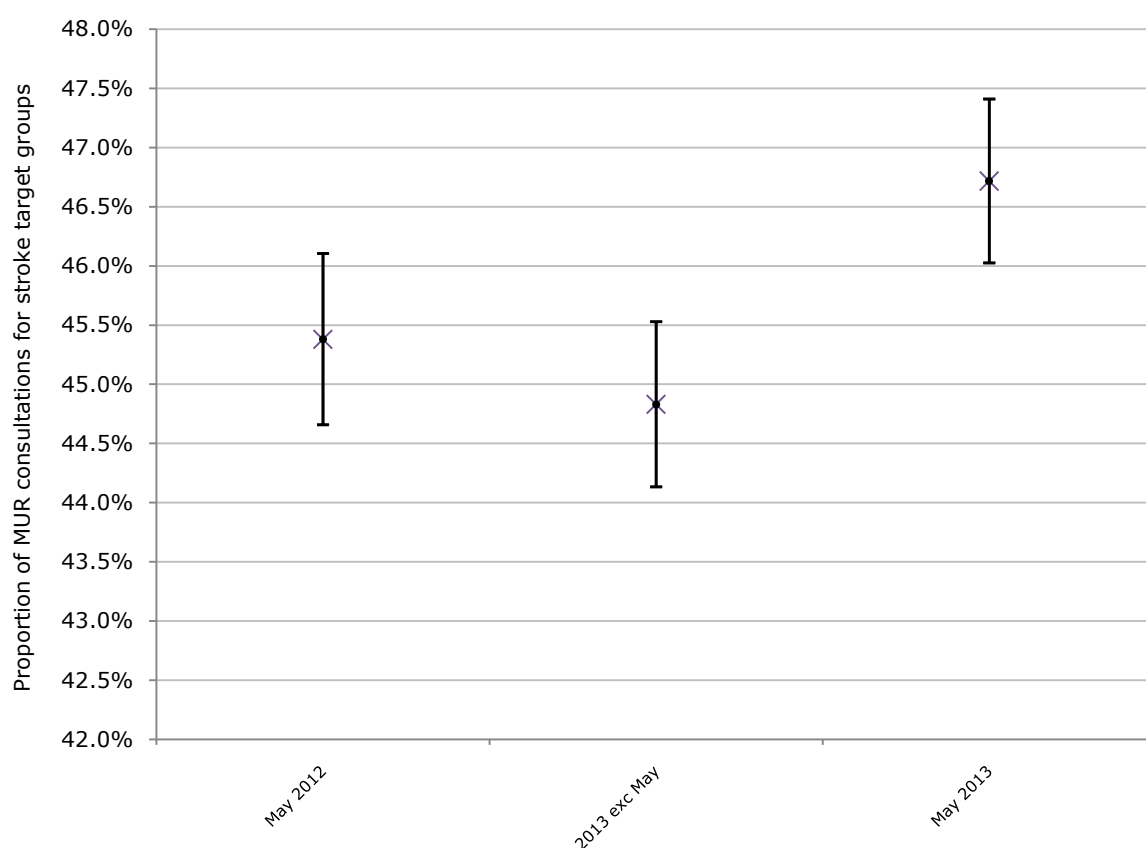
**Figure one:** Error bar chart of proportion of MUR consultations for target groups May 2012 and 2013 (Wales)



Source: NHS Wales Shared Services Partnership

There was some evidence that the proportion of MUR consultations for the target group during the campaign period increased when compared with both the mean proportion in the previous months in 2013 (46.7% vs 44.8%, difference = 1.88%, 95% CI 1.13% to 2.64%,  $p < 0.001$ ), and the proportion in May 2012 (46.7% vs 45.4%, difference = 1.34%, 95% CI 0.35% to 2.32%,  $p = 0.0078$ ) (Figure two).

**Figure two:** Error bar chart of proportion of MUR consultations for target groups May 2012 and 2013 mean (Wales).



Source: NHS Wales Shared Services Partnership

Whilst a statistically significant difference was observed between the proportion of MURs, for the target group in the campaign period and the comparator months, it is worth noting that the size of the increase was modest at 1.88% versus 2013 and 1.34% versus May 2012. This represented an additional 406 MUR consultations for the target group during the campaign month when compared to the mean proportion in the previous months in 2013 or an additional 288 when compared to May 2012.

The number and proportion of MUR consultations for the target group for the campaign and comparator periods by LHB are shown in table two.

**Table two:** Number (%) of MUR consultations for target groups by Local Health Board

	Abertawe Bro Morgannwg	Aneurin Bevan	Betsi Cadwaladr	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys
May 2012	1,752 (44.31)	1,358 (46.71)	1,742 (43.30)	1,165 (47.52)	928 (48.74)	1,119 (45.71)	188 (47.00)
January 2013	1,525 (44.71)	1,553 (47.62)	2,109 (45.13)	1,177 (44.12)	1,045 (45.28)	1,149 (46.31)	338 (43.44)
February 2013	1,369 (42.34)	1,792 (47.84)	1,833 (42.61)	1,062 (41.88)	1,088 (45.01)	1,322 (46.60)	308 (43.02)
March 2013	1,170 (43.21)	1,815 (48.26)	1,485 (45.08)	807 (40.84)	956 (45.05)	1,055 (43.87)	259 (39.42)
April 2013	2,013 (45.39)	1,593 (47.02)	1,916 (44.67)	1,246 (44.58)	1,582 (43.80)	1,228 (44.13)	177 (42.34)
May 2013	1,870 (45.37)	1,682 (49.94)	2,075 (45.98)	1,403 (48.23)	1,585 (46.51)	1,205 (45.28)	239 (43.30)

Source: NHS Wales Shared Services Partnership

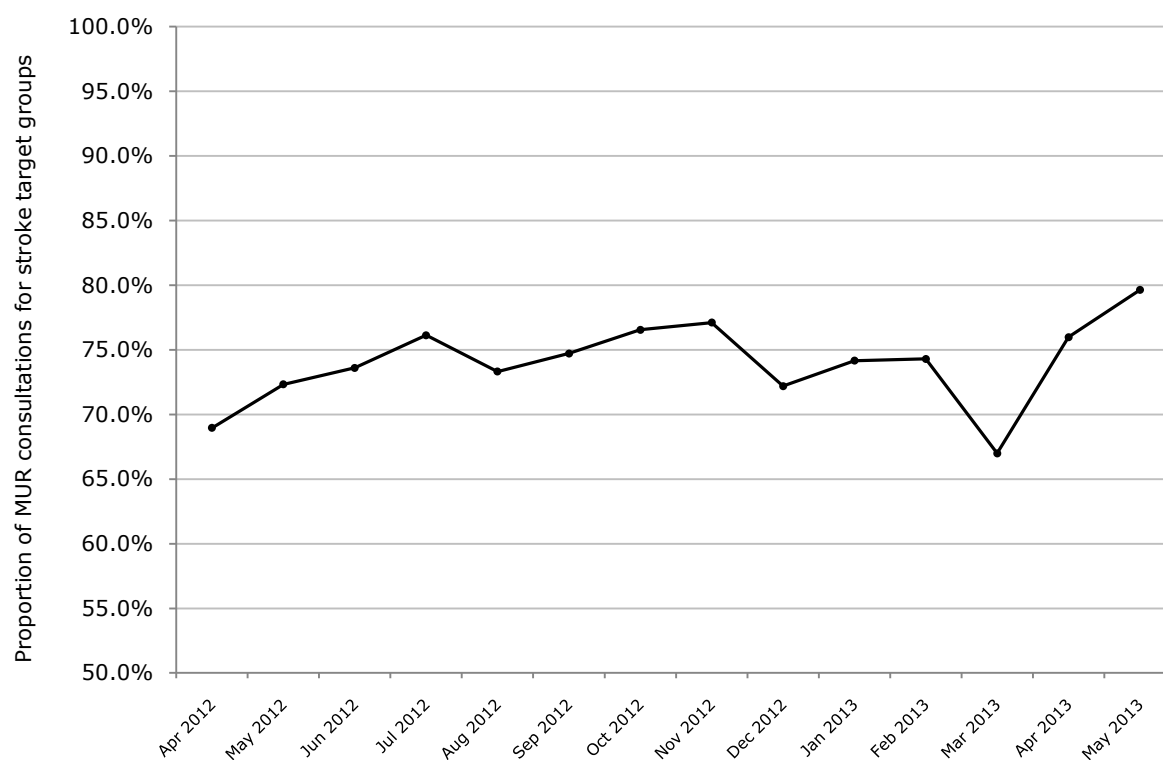
## 5.2 Participation by pharmacies

The number of pharmacies that provided at least one MUR consultation with a patient in the target group during the campaign was 567, representing 79.6% of all pharmacies in Wales. The proportion of pharmacies providing MUR consultations for the target group in the period April 2012 to May 2013 was reviewed in order to determine whether there was any indication that pharmacies were targeting MUR consultations as had been requested. There was a small increase in the proportion of pharmacies providing at least one MUR consultation with a patient in the target group when compared to previous months. This may suggest that the campaign encouraged some pharmacies who would otherwise not have done so to provide target MUR consultations.

The proportion of pharmacies providing MUR consultations for the target group are shown in Figure three.



**Figure three:** Proportion of pharmacies undertaking at least one MUR consultation for target groups April 2012 to May 2013 (Wales).



Source: NHS Wales Shared Services Partnership

The number and proportion of pharmacies providing MUR consultations for the target group during the campaign by LHB are shown in Table three.

**Table three:** Number (%) of pharmacies completing at least one MUR with target group during the campaign period by Local Health Board

Local Health Board	Pharmacies	Pharmacies providing at least one MUR with target group during campaign (%)
Abertawe Bro Morgannwg	125	105 (84.00)
Aneurin Bevan	128	103 (80.47)
Betsi Cadwaladr	154	125 (81.17)
Cardiff and Vale	106	81 (76.42)
Cwm Taf	77	71 (92.21)
Hywel Dda	99	67 (67.68)
Powys	23	15 (65.22)
Wales Total	712	567 (79.63)

## **6 Discussion**

### **6.1 Participation by community pharmacy**

Unlike previous campaigns the participation of individual community pharmacies was not monitored. From the routine data used to measure the impact of the campaign it was not possible to determine the number of pharmacies that actively participated. It was possible to identify that 567 pharmacies provided MUR consultations with the target group during the campaign. This represented a high proportion (79.6%) of pharmacies. Both the Stroke Association and Public Health Wales received requests, from pharmacies, for additional materials. This with the apparent increase in number and proportion of MUR consultations for the target group provide a reasonable degree of assurance in regard of participation by pharmacies.

Media coverage and the involvement of the Minister for Health and Social Services are likely to have raised public awareness of the campaign and promoted pharmacy participation.

### **6.2 Medicine use reviews**

Over 21,000 MUR consultations took place during the campaign period. Of these over 10,000 people, whose medication indicated that they might be at increased risk of stroke, had an MUR consultation. There was evidence that the proportion of MUR consultations with people in the target group increased during the campaign period, representing between 288 and 406 additional MUR consultations in the target group. There is however considerable variation in the number of MUR consultations undertaken each month. Confounding factors include:

- The underlying trend for a year on year increase in the number of MUR consultations;
- Seasonal variation. For instance the number of MUR consultations decreases considerably during December;
- The cap of 400 MUR consultations per pharmacy. There is the potential that, towards the end of the financial year, there is a reduction in capacity because some pharmacies have completed the maximum prescribed number for that year. The effect of this is disproportionate since the pharmacies that are unable to provide MUR consultations are those that have been most active during the year.

Whilst it cannot be measured, it is possible that as a result of the campaign, the quality of MUR consultations for stroke patients may have been improved; for example by using the patient facing materials or as a result of continuing professional development activity undertaken by pharmacists.

### 6.3 Patient literature

The Stroke Association provided each pharmacy with 50 *How to prevent a stroke* and 50 *F.A.S.T.* leaflets for disseminating to people at risk of stroke. The actual number of leaflets disseminated by pharmacies was not recorded. It is assumed that these were distributed during or after the campaign as part of the ongoing health promotion activities in pharmacies.

Bilingual posters were designed by Stroke Association and distributed to and displayed by pharmacies to promote the campaign.

## 6.4 Promotional activity

A wide range of promotional activities took place across Wales during the campaign. These were linked to both Lower your risk of stroke and Stroke action month which coincided with the pharmacy campaign. Pharmacist attended several events across Wales to promote the campaign messages. These included:

- A pop up shop in the St David's Shopping Centre, Cardiff
- Community Fairs, organised by Stroke Association in Bridgend and Pontypool; and
- A photocall organised by a local pharmacy in Gwent attended by representatives of the Newport Gwent Dragons rugby team and the Stroke Association.

Social media was extensively used to promote the campaign. In particular Twitter was used by the Stroke Association, CPW, Public Health Wales, Local Health Boards and the Minister for Health and Social Services to raise awareness of the campaign. Twitter messages ("tweets") were disseminated ("retweeted") by variety of followers using the hashtag #LOWERSTROKERISK.

## 6.5 Logistics and organisation

Campaign packs were delivered to the three regional depots of NHSSSP at least four weeks prior to the campaign start date. All pharmacies received the packs at least one week prior to the start of the campaign. All Pharmacies signed to acknowledge the receipt of campaign packs. No pharmacies contacted Public Health Wales due to non-receipt of materials.

## 6.6 Media coverage

See Appendix 2.

## 6.7 Use of routine data

The results of this campaign suggest that use of routine data, such as that collected for the MUR service to measure the impact of health promotion activity by pharmacies is feasible. Benefits of this approach included:

- Reduced administration for pharmacies. They were not required to retain additional campaign specific records.
- Reduced administration for Public Health Wales. It was not necessary for any pharmacy information to be processed in order to evaluate campaign activity.
- Potential for more rapid assessment of campaigns. The link between the submission of data and making claims for payment acts as an incentive for pharmacies to submit data timeously. It was not necessary for analysis to be delayed whilst chasing any outstanding returns.
- Ability to make comparisons of service activity between the campaign and comparator periods in order to identify changes associated with campaigns.
- Potential for pharmacies to measure the impact of the campaign on their service provision, demonstrating that participation in campaigns might lead to direct business benefits which may in turn improve engagement with campaigns (virtuous circle)

There are however limitations to the use of routine data. These include:

- Routine data could only be used to provide information in relation to specific campaign objectives. In this case it was possible to identify the number of MURs for target groups but not the number of interventions taking place which were outside the MUR service.
- Although the majority of pharmacies in Wales provide the MUR service, some do not. The direct contribution of these pharmacies is then outside the scope of this report.
- Any change in practice could only be measured using aggregated data. Individual pharmacy participation cannot be truly ascertained given the small number of interventions at the pharmacy level.
- There is limited routine data available. From the data available there appears to be significant variation in the extent to which pharmacies provide services in any given month. There are many confounders and it is not easy to detect a campaign effect.
- It was not possible to directly assess whether the MUR consultations conducted during May resulted from the focus on stroke during the campaign; in future this may be better understood by the use of an agreed additional question on the MUR claim form.

## 7 Conclusions

Lower your risk of stroke built on the experience of previous national public health campaigns and benefited from improvements in logistics and organisation and from the involvement of a partner (Stroke Association) which had participated in a previous campaign.

As with previous campaigns there was considerable media coverage both in professional and general press.

Whilst it is not possible to determine the actual level of participation there are indications that pharmacies were engaged and that this led to a small but significant increase in MUR consultations for the target group and to an increase in the number of pharmacies providing MUR consultations for the target group. The use of routine data to measure participation reduced administrative workload but this had implications for the measurement of the campaign's impact.

## 8 Recommendations

- Future national community pharmacy campaigns should continue to be planned so as to fully utilise the potential for pharmacies to deliver campaigns which can be supported by the MUR or other NHS pharmacy services.
- Where possible routine data should continue to be used as one means of measuring campaign impact but this may need to be combined with data collected specifically in relation to each campaign.
- Welsh Government, Local Health Boards, Public Health Wales and CPW should consider whether sources of existing routine data can be improved to collect data which would support measuring the impact of future campaigns.
- Public Health Wales should explore the feasibility of collating campaign specific data through other means e.g. online surveys or random sampling of pharmacies.

All partners should consider how less formal partnership arrangements might continue outside the national public health campaigns, in order to promote patient access to resources and services to the benefit of public health.



## Appendix 1.



# Lower your risk of stroke

# Gostwng eich risg o strôc

**11,000 people in Wales will have a stroke each year.**  
**Bydd 11,000 o bobl yng Nghymru yn cael strôc bob blwyddyn.**

Many strokes caused by conditions such as high blood pressure are preventable. If you take medicines to lower your blood pressure this can lower your risk of stroke.

Make sure you are getting the most from your medicines today by asking your pharmacist to carry out a **Medicines Use Review**.

By taking 20 minutes for a review you can ensure that your medicines are working for you.

Available only from your local pharmacy.

Medrid atal llawer o strocioau a achosir gan gyflyrau megis pwysedd gwaed uchel. Os ydych yn cymryd meddyginiaeth i ostwng eich pwysedd gwaed gall hyn ostwng eich risg o strôc.

Gwnewch yn siŵr eich bod yn cael y budd mwyaf o'ch meddyginiaeth heddiw drwy ofyn i'ch fferylllydd gynnal **Adolygiad Defnydd Meddyginiaethau**.

Drwy gymryd 20 munud ar gyfer adolygiad gallwch sicrhau fod eich meddyginiaeth yn gweithio i chi.

Ar gael o'ch fferyllfa leol yn unig.

This Community Pharmacy Service is provided by NHS Wales, part of the Community Pharmacy Wales Local Health Partnership Initiative. Cefn y Gwasanaeth Fferyllfaeth gynhysgu'r holl bobl yng Nghymru. Rhannu'r gwasanaeth gyda Fferyllfaeth Gymunedol Cymru.

**GIG CYMRU**  
**NHS WALES**  
 Iechyd Cyhoeddus Cymru  
 Public Health Wales

**Community Pharmacy Wales**  
 Fferyllfaeth Gymunedol Cymru

Stroke Association is registered as a charity in England and Wales (no. 234441). Ffôn Cymdeithas Strôc ydych chi'n drafod i'ch fferylllydd yn unig.

**For more information contact**

**Stroke Association**  
**Telephone:** 0303 3033 100  
**Website:** [stroke.org.uk](http://stroke.org.uk)  
**Email:** [info.cymru@stroke.org.uk](mailto:info.cymru@stroke.org.uk)

**Community Pharmacy Wales**  
**Telephone:** 029 20 442070  
**Website:** [cpwales.org.uk](http://cpwales.org.uk)  
**Email:** [info@cpwales.org.uk](mailto:info@cpwales.org.uk)

**I gael mwy o wybodaeth cysylltwch â:**

**Cymdeithas Strôc**  
**Ffôn:** 0303 3033 100  
**Gwefan:** [stroke.org.uk](http://stroke.org.uk)  
**E-bost:** [info.cymru@stroke.org.uk](mailto:info.cymru@stroke.org.uk)

**Fferylliaeth Gymunedol Cymru**  
**Ffôn:** 029 20 442070  
**Gwefan:** [cpwales.org.uk](http://cpwales.org.uk)  
**E-bost:** [info@cpwales.org.uk](mailto:info@cpwales.org.uk)

cymdeithas  
**Strôc | Stroke**  
 association

Reproduced with the permission of the Stroke Association

## **Appendix 2. Lower your risk of stroke campaign media coverage list (supplied by partners).**

### **National Radio:**

BBC Radio Wales - interview with Matthew Jones, pharmacist

### **National/Regional Press:**

Western Mail May 22, 2013

Ask the Experts: Strokes we could prevent up to 40% of strokes why don't we do it? (opinion piece)

<http://www.walesonline.co.uk/news/health/40-strokes-could-prevented-relatively-4002216>

Western Mail May 13, 2013

Dragons star rolls up his sleeve to raise awareness of strokes

<http://www.thefreelibrary.com/Dragons+star+rolls+up+his+sleeve+to+raise+awareness+of+strokes%3b...-a0329557327>

Chemist and Druggist May 3, 2013

Welsh MUR campaign targets patients at risk of stroke

[http://www.chemistanddruggist.co.uk/news-content/-/article\\_display\\_list/15632702/welsh-mur-campaign-targets-patients-at-risk-of-stroke](http://www.chemistanddruggist.co.uk/news-content/-/article_display_list/15632702/welsh-mur-campaign-targets-patients-at-risk-of-stroke)

Pharmaceutical Journal May 2, 2013

Stroke risk campaign launched in pharmacies across Wales

[http://www.pjonline.com/news/stroke\\_risk\\_campaign\\_launched\\_in\\_pharmacies\\_across\\_wales](http://www.pjonline.com/news/stroke_risk_campaign_launched_in_pharmacies_across_wales)

### **Local Radio:**

Radio Carmarthenshire - interview with Chris James, pharmacist and Chair, CPW

Calon FM, Wrexham - interview with Jo Kember, pharmacist

## Local Newspapers:

Carmarthen Journal May 8, 2013

New health campaign to lower risk of stroke

<http://www.thisissouthwales.co.uk/New-health-campaign-lower-risk-stroke/story-18921846-detail/story.html#axzz2a8tTnsm9>

## Online:

BBC online May 1, 2013

Stroke campaign by pharmacists to cut number of victims

<http://www.bbc.co.uk/news/uk-wales-22357372>

World News May 14, 2013

New health minister says visit your pharmacy in may to lower your risk of stroke

[http://article.wn.com/view/2013/05/14/New\\_Health\\_Minister\\_says\\_Visit\\_your\\_pharmacy\\_in\\_May\\_to\\_lower/](http://article.wn.com/view/2013/05/14/New_Health_Minister_says_Visit_your_pharmacy_in_May_to_lower/)

Aberdare online April 30, 2013

Lower your risk of stroke national community pharmacy public health campaign throughout May 2013

<http://www.aberdareonline.co.uk/content/lower-your-risk-stroke%E2%80%99-national-community-pharmacy-public-health-campaign-throughout-may-20>

Newport Gwent Dragons website May 10, 2013

Coundley visits Mayberry pharmacy, Blackwood

<http://www.newportgwentdragons.com/News/Article/24979>

ITV online May 2, 2013

Stroke campaign launches

<http://www.itv.com/news/wales/story/2013-05-02/community-pharmacy-stroke-campaign-launched/>

**Appendix 3. Uptake of relevant Welsh Centre for Pharmacy Professional Education (WCPPE) provided support**

<b>WCPPE event/materials</b>	<b>Number attended/requested</b>
Stroke e-learning package	45
Distance learning pack: Anticoagulation	31
Live event: Supporting patients in the management of stroke	165
Learning@lunch live event: Stroke	134