Welsh Pharmacy Review

ISSUE 56 - 2023

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COELIAC DISEASE
Unacceptable diagnosis delays

WELSH PHARMACY AWARDS
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SUICIDE PREVENTION
The role of research in Wales

EPISTATUS®
Oromucosal Midazolam Solution (as maleate)

Advertisement | Intended for UK Healthcare Professionals Only.

HELP IS BY THEIR SIDE

Epistatus® (midazolam maleate) is indicated for the treatment of prolonged, acute, convulsive seizures (PACS) in infants, toddlers, children and adolescents aged 3 months to less than 18 years.*

*For infants between 3-6 months of age, treatment with the standard dose of 2.5 mg (0.25 mL) should be in a hospital setting, where monitoring is possible and resuscitation equipment is available.

Epistatus® is now licensed in 4-age specific doses[1-4]:

Designed for Oromucosal Administration[1-4]

- Epistatus® is a **sweetened, sugar-free, slightly viscous** midazolam formulation[1-4]
- Epistatus® **2.5 mg** dose is contained in a volume of **0.25 mL, 5 mg** in **0.5 mL, 7.5 mg** in **0.75 mL**, and **10 mg** in **1 mL**[1-4]

Portable Design[1-4]

- The device is housed within a **tough** yet **lightweight** outer casing that is both **protective** and **tamper-evident**[1-4]

Prescribing Flexibility[5]

- **Single-unit pack** can be **tailored** to **PACS frequency** for individualised patient treatment[5]

Scan the QR code to visit **www.epistatus.co.uk** for further information about Epistatus®, including resources for clinicians and patients.

Prescribing Information

EPISTATUS® 2.5mg, 5.0mg, 7.5mg, 10mg oromucosal midazolam maleate solution. Please consult Summary of Product Characteristics (SmPC) before prescribing.

Presentation & composition: Oromucosal solution. Each pre-filled, oral syringe (1ml) contains midazolam maleate corresponding to 2.5/ 5.0/ 7.5/ 10mg midazolam. Excipients with a known effect: ethanol 49/ 99/ 148/ 197mg/ml per dose, liquid maltitol 169/ 338/ 506/ 675mg per dose.

Indication: 2.5mg, 5mg, 7.5mg, 10mg: Treatment of prolonged, acute, convulsive seizures in infants, toddlers, children, and adolescents aged from 3 months to less than 18 years. Epistatus must only be used by parents/caregivers where the patient has been diagnosed to have epilepsy.

Dosage:

Age range	Dose	Labelled packaging colour
3 to 6 months, hospital	2.5mg (0.25ml)	Yellow
> 6 months to < 1 year	2.5mg (0.25ml)	Yellow
1 year to < 5 years	5mg (0.5ml)	Blue
5 years to < 10 years	7.5mg (0.75ml)	Purple
10 years to < 18 years	10mg (1ml)	Orange

Carers should only administer a single dose. If the seizure does not stop shortly after administration, emergency medical assistance must be sought, considering prior instructions from the prescribing physician, or local guidelines. The empty syringe must be given to the healthcare professional. Patients should be kept under supervision by a carer who remains with the patient. A second or repeat dose when seizures re-occur after an initial response should not be given without prior medical advice. Please see SmPC for full information on special populations.

Administration: For oromucosal use only. Using the prefilled oral syringe provided, administer, over a period of 2-3 seconds, approximately half of the prescribed dose to each buccal cavity. If difficult to get the syringe into the buccal cavity, administer the whole dose, over a period of 4-5 seconds, to one buccal cavity.For detailed instructions please refer to the SmPC.

Contraindications: Hypersensitivity to midazolam, benzodiazepines or to any of the excipients; myasthenia gravis; severe respiratory insufficiency; sleep apnoea syndrome; severe hepatic impairment.

Warnings & Precautions: For oromucosal use only. Take care to avoid the risk of choking. Use in paediatric patients aged 3 to 6 months should be limited to use only under supervision of health care professions where resuscitation equipment is available and where respiratory function can be monitored and equipment for respiratory assistance, if needed, is available. Caution in patients with chronic respiratory insufficiency (may further depress respiration). Midazolam should be used with caution in patients with chronic renal failure or impaired hepatic function (may accumulate); or cardiac function (may decrease clearance). Debilitated patients are more prone to the central nervous system (CNS) effects of benzodiazepines. The concomitant use of Epistatus and opioids increases the risk of sedation, respiratory depression, coma, and death. Epistatus with opioids should be reserved for patients for whom alternative treatment options are not possible. The lowest dosage and shortest duration of concomitant use should be used. Inform patients and caregivers of the need to monitor closely for respiratory depression and sedation. Midazolam should be avoided in patients with a medical history of alcohol or drug abuse. May cause anterograde amnesia. Contains maltitol and ethanol.

Interactions: Please consult the SmPC for full details. Midazolam is metabolized by cytochrome P450 3A4 isozyme (CYP3A4). Inhibitors and inducers of CYP3A4 may increase and decrease the plasma concentration respectively. In the presence of CYP3A4 inhibition the duration of effect of a single dose of oromucosal midazolam may be prolonged; careful clinical monitoring is recommended. Midazolam may interact with other hepatically metabolized medicinal products. Co-administration with other sedative/hypnotic agents and CNS depressants, including alcohol, is likely to result in enhanced sedation and respiratory depression. Alcohol intake should be strongly avoided. The dosage and duration of concomitant opioid use should be limited.

Fertility, Pregnancy, and lactation: Midazolam may be used during pregnancy if clearly necessary. The risk for new-born infants should be considered in the event of administration in the third trimester. Midazolam passes in low quantities into breast milk (0.6%); it may not be necessary to stop breast-feeding following a single dose. Animal studies did not show an impairment of fertility.

Driving and machines: Midazolam has a major influence on the ability to drive or use machines. The patient should be warned not to drive or use machines until fully recovered.

Side effects: Respiratory depression occurs at a rate of up to 5%, although this is a known complication of convulsive seizures as well as being related to benzodiazepine use. Common: sedation, somnolence, depressed level of consciousness, respiratory depression, ataxia*, dizziness*, headache*, nausea, vomiting & fatigue*. Uncommon: hallucination*, agitation*, anterograde amnesia*, pruritus, rash, urticaria. Very rare: aggression*, movement disorders*, physical assault*, seizure, paradoxical reactions*, bradycardia*, cardiac arrest*, hypotension*, apnoea*, dyspnoea*. Increased risk of falls and fractures in the elderly and in those taking concomitant sedatives (e.g., alcohol). Angioedema may occur (frequency unknown). Consult the Summary of Product Characteristics for the full list of adverse drug reactions and before prescribing.

* These adverse reactions have been reported to occur when midazolam is injected in children and/or adults, which may be of relevance to oromucosal administration.

Legal classification: POM

NHS Price: 2.5mg in 0.25 mL, 5mg in 0.5 mL and 7.5mg in 0.75 mL - £43.75, 10mg in 1mL prefilled syringe - £45.76

UK Marketing Authorisation numbers: 2.5mg PL 16786/0015, 5mg PL 16786/0016, 7.5mg PL 16786/0017, 10mg PL 16786/0014.

Northern Ireland Marketing authorisation numbers: 2.5mg PL16786/0019, 5mg PL 16786/0020, 7.5mg PL 16786/0021, 10mg 16786/0018

Marketing Authorisation holder: Veriton Pharma Limited, Unit 16, Trade City, Avro Way, Brooklands Business Park, Weybridge, Surrey, KT13 0YF, United Kingdom.

Date of prep: September 2022 **Job Code: EDM-1010-2022**

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Veriton Pharma Limited. Tel +44 (0) 1932 690325

Job code: EDM-1002-2023
Date of preparation: March 2023

Veriton Pharma is now a part of SERB Pharmaceuticals

WPR

KYRON MEDIA

www.waleshealthcare.com

EDITOR

SARAH NELSON

sarah.nelson@kyronmedia.co.uk

MANAGING DIRECTOR

CHRIS FLANNAGAN

chris.flannagan@kyronmedia.co.uk

BUSINESS DEVELOPMENT MANAGER

TOM DORAN

tom.doran@kyronmedia.co.uk

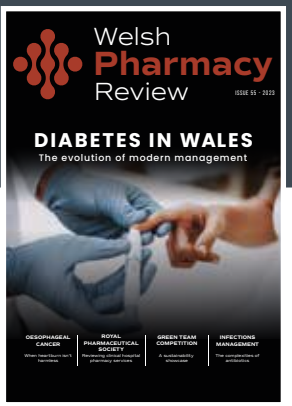
HEAD OF DESIGN

MEGAN BUCKLEY

design@nimedical.info

ACCOUNTS

accounts@nimedical.info



To access the previous editions of WPR online, visit www.waleshealthcare.com/magazine

WELCOME

EDITOR'S LETTER

Welcome to the latest edition of Welsh Pharmacy Review!

On more than one occasion I have jokingly referred to myself as 'an old walking talking memory box' – in allusion to my penchant for sentimentality and impressive ability to recall places and events from 25 years prior. So, it was only fitting that when clearing out my house recently, I stumbled upon my very own wooden memory box that I had assembled when I was 12. Hidden among the faded photographs and school reports I found a myriad of letters addressed to my future self (this was a pre-social media era, if you hadn't already guessed!).

The gel pen-etched instructions on the front of the envelopes made it very clear that they weren't to be opened until I was at least 25 years of age – in full transparency, I think I barely waited 25 days to tear the seals open.

As I re-read my ramblings last week, I discovered that these pages of ambitions painted a 'full' future for me in every sense of the word. A full-time job; a fulfilling social life; a fully-packed house of a family of five, and much, much more. Needless to say, the materialisation of these dreams took on a vastly different shape in reality. But rather than being disheartened, I still do appreciate the goal-driven version of myself who was incentivised to put her dreams down in writing all those years ago.

There is power and strength in putting aspirations to paper – and you will see that threaded throughout the articles in this edition of WPR, as well as how these objectives can be achieved (the important substance that my letters lacked!). For example, the Pharmacists' Defence Association has outlined the Safer Pharmacies Charter to protect the working conditions of its members – check out the findings from the Safer Pharmacies Survey 2022 (page 32). Barod's Rob Barker also pens the lessons which can be taken on-board from the recent Harm Reduction International Conference in Melbourne (page nine). Health and Care Research Wales share the expertise helping to inform evidence-based suicide prevention guidance for schools, social care and health services too (page eight).

Elsewhere, the Royal Pharmaceutical Society for Wales detail the plan towards securing the future vision, Pharmacy: Delivering a Healthier Wales (page seven), and a path to help those in Wales at risk from undiagnosed coeliac disease is carved out by Coeliac UK (page five).

Also in this issue, find out about the supportive measures required for dysphagia (page 40); the causes and management of thyroid conditions (page 12); and what healthcare professionals can do to mitigate the effects of sleep deprivation (page 46).

Happy reading!

Sarah Nelson

@kyronmedia

Kyron Media

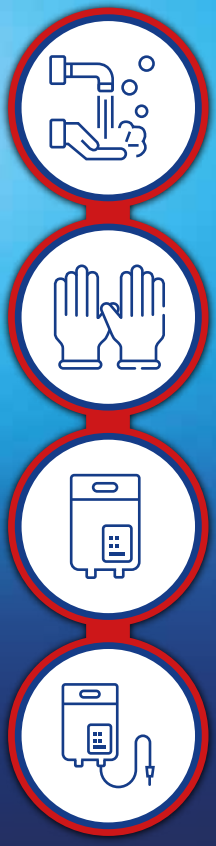
Phenylephrine

0.08mg/ml solution for injection/infusion

READY TO USE 100ML INFUSION BAG

CONTAINING 10MG OF PHENYLEPHRINE HYDROCHLORIDE

Just 4 steps to prepare



Wash hands

Put on gloves

Open the infusion bag

Connect to infusion device

Prescribing information

Refer to the full Summary of Product Characteristics (SmPC) before prescribing. **Name and active ingredient:** Phenylephrine 0.08mg/ml, solution for injection/infusion. **Pharmaceutical form:** Solution for injection/infusion. Clear colourless solution, pH 4.5 – 5.5, osmolality 270 – 330 mOsm/Kg. Each ml of solution for injection/infusion contains 0.1mg phenylephrine hydrochloride equivalent to 0.08mg of phenylephrine base. **Indications:** Hypotension during spinal, epidural and general anaesthesia. **Posology and method of administration: 1. Intravenous bolus injection:** Normal dose 50 – 100mcg. Can be repeated until desired effect is attained. One bolus dose should not exceed 100mcg. **2. Continuous infusion:** Initial dose is 25 – 50mcg/min. Dose may be increased or decreased to maintain systolic blood pressure close to normal value. Doses between 25 – 100mcg/min have been assessed to be effective. **Renal impairment:** Lower doses of phenylephrine may be needed in patients with impaired renal function. **Hepatic impairment:** Higher doses of phenylephrine may be needed in patients with cirrhosis of the liver. **Older people:** Treatment should be carried out with care. **Paediatric population:** Safety and efficacy not known, no available data. **Method of administration:** Parenteral administration by intravenous infusion. Phenylephrine should only be administered by healthcare professionals with appropriate training and relevant experience. **Contraindications:** Hypersensitivity to phenylephrine or to any of the excipients listed in section 6.1 of the SmPC; in patients with severe hypertension or peripheral vascular disease; in combination with non-selective monoamine oxidase inhibitors or within two weeks of their withdrawal; hyperthyroidism. **Special warnings and precautions for use:** Caution is required when administering phenylephrine in patients with: pre-existing cardiovascular disease, diabetes mellitus, arterial hypertension, ischaemic heart disease, arrhythmia, bradycardia, incomplete heart block, tachycardia, occlusive peripheral vascular disease including arteriosclerosis, aneurysm, angina pectoris, angle closure glaucoma, atherosclerosis, the elderly, compromised cerebral or coronary circulation, severe heart failure, cardiogenic shock. Special attention should be given to the injection of phenylephrine to prevent extravasation, as this may cause tissue necrosis (see section 4.8 of the SmPC). This medicinal product contains 366.2mg sodium per 100ml, equivalent to 18.3% of the WHO recommended maximum daily intake of 2g sodium for an adult. **Contraindicated combinations:** non-selective monoamine oxidase inhibitors. Paroxysmal hypertension, possibly fatal hyperthermia. Due to the long duration of MAO inhibitory action, this interaction is still possible 15 days after the MAO inhibitor is discontinued. **Combinations not advisable:** Dopaminergic ergot alkaloids; vasoconstrictor ergot alkaloids; tricyclic antidepressants; noradrenergic-serotonergic antidepressants; selective monoamine oxidase inhibitors type A; linezolid; guanethidine and related products; cardiac glycosides, quinidine; sibutramine; halogenated volatile anaesthetics. **Combinations requiring precautions for use:** Antihypertensives including α and β receptor blockers; oxytocic agents. **Pregnancy and breastfeeding:** See SmPC section 4.6 for full details. **Adverse reactions:** The most common adverse events of phenylephrine are bradycardia, hypertensive episodes, nausea and vomiting. Hypertension is more frequent with high doses. See SmPC section 4.8 for full details. **Legal classification:** POM. **Presentations:** 100ml solution in 100ml flexible polypropylene bag with aluminium overpouch or 100ml solution in a 100ml PVC-free polyolefin bag with an aluminium overpouch. Each bag contains one non-PVC point for filling and closure and one non-PVC administration port. **NHS Cost:** £250.00. **Marketing Authorisation Number:** PL 46788/0024. Distributed by Kent Pharma UK Ltd. **Date of preparation:** December 2022 UK21/011/02 - SmPC Feb 2020.

Adverse events should be reported. Reporting forms and information can be found at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Kent Pharma UK Ltd on 01233 506574 or medical@kent-athlone.com. For a copy of the SmPC or further medical information, please contact medical@kent-athlone.com. Additional information available on request.

Date of preparation: December 2022 Ref: UK22/46/00

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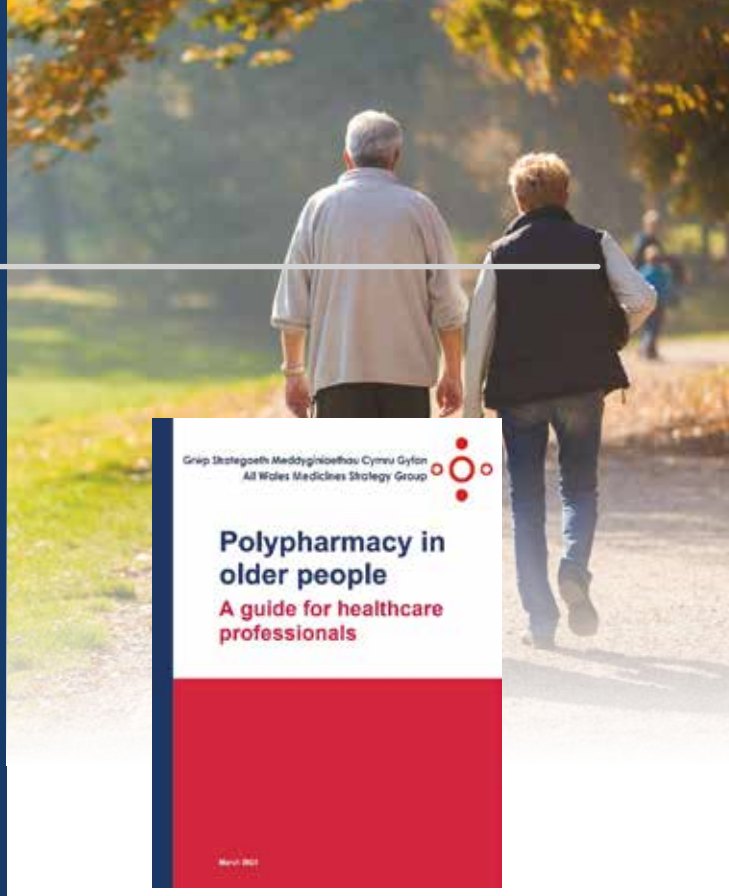
AWTTC

OUT OF HARM'S WAY

In their latest contribution, the All Wales Therapeutics and Toxicology Centre outline the work that they have been doing on supporting polypharmacy in older people which has been shared around the world.



It is known that patients who are prescribed a higher number of medications are also at an increased risk of harm.

This is something that has been identified by the World Health Organisation who highlighted polypharmacy as a major global problem and set a world-wide safety challenge to avoid medicine-related harm.

Patients who are prescribed a high number of medications are not only associated with an increased risk of harm, but also have a higher risk of hospitalisation due to adverse drug events.

Emyr Jones, All Wales Consultant Pharmacist, Community Healthcare, Harriet Price, Clinical Lead Pharmacist Older People Services, and Sheridan Court, Pharmacist, both from Swansea Bay University Health Board, carried out a review of the 2014 document, 'Polypharmacy: Guidance for Prescribing'.

'Polypharmacy in Older People: A Guide for Healthcare Professionals' is a resource which has been created to help support medicines optimisation in older patients who may be subject to medicine-related harm.

Endorsed by the All Wales Medicines Strategy Group as best practice for Wales, it includes practical guides for stopping the following groups of medications:

- Antihypertensives
- Benzodiazepines and Z-drugs
- Oral corticosteroids
- Antidepressants
- Bisphosphonates
- Acid suppressants
- Opioids in non-cancer pain
- Gabapentinoids in neuropathic pain
- Antipsychotics to treat non-cognitive symptoms of dementia
- Acetylcholine esterase inhibitors and memantine in dementia

The purpose of the review was to update sections to support healthcare professionals to optimise patient medication with the aim to minimise risk of harm.

The World Health Organisation released a global patient safety challenge on medication safety to reduce severe, avoidable medication-related harm by 50 per cent in five years. The guidance can be used as tool to help support healthcare professionals meet this challenge.

It can also be used to help educate prescribers on safer prescribing practice, monitoring and deprescribing.

The 44-page document has been published on the All Wales Therapeutics and Toxicology Centre website and has been shared widely via social media.

After its publication the paper was picked up by a Spanish pharmacy and hospital, both in Madrid, who tweeted the document. It has been viewed almost 10,000 times, retweeted 72 times, has 125 likes, and has been bookmarked 25 times.

Emyr Jones, All Wales Consultant Pharmacist, Community Healthcare, said, 'Working with the All Wales Medicines Strategy Group is hugely beneficial in getting work endorsed and recognised as a national All Wales document.

'The All Wales Medicines Strategy Group and its committees provide multidisciplinary input and the All Wales Therapeutics and Toxicology Centre supported us throughout the process and co-ordinated the consultation.

'It's great that this guidance has been through a robust development process and, since publication, has attracted significant international interest.'

To read the document 'Polypharmacy in Older People: A Guide for Healthcare Professionals', visit www.awttc.nhs.wales/medicines-optimisation-and-safety/medicines-optimisation-guidance-resources-and-data/prescribing-guidance/polypharmacy-in-older-people-a-guide-for-healthcare-professionals.

If you have completed a piece of work that you would like to be endorsed and highlighted as good practice, get in touch with us at AWTTC@wales.nhs.uk or follow us on Twitter @AWTTCcomms.

AWTTC
All Wales Therapeutics & Toxicology Centre
Canolfan Therapiwteg a Thocsicoleg Cymru Gyfan

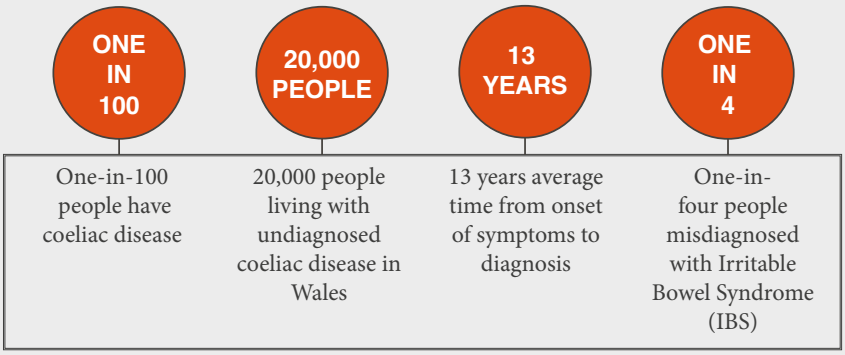
STEPPING UP TO THE PLATE

More than 20,000 people in Wales are at risk from undiagnosed coeliac disease, a serious autoimmune condition. How can we rise to the challenge and alleviate the wait for those in need of answers?

Coeliac UK, the national charity for people with coeliac disease, is raising awareness of the issue of underdiagnosis of the condition. It affects one-in-100 people, and there are more than 20,000 people across Wales estimated to be living with undiagnosed coeliac disease. (1) They are not only likely suffering from unexplained symptoms, but are also at risk of serious long-term health problems, like osteoporosis, neuropathy, infertility, and, in rare cases, small bowel cancer. (2)

Coeliac disease is a serious autoimmune condition that can be diagnosed at any age. Symptoms and their severity are wide-ranging but can include bloating, stomach cramps, diarrhoea, constipation, extreme tiredness, recurrent mouth ulcers, anaemia and neurological symptoms, such as loss of balance and co-ordination. (2)

Around 40 per cent of the population are born with the genes that predispose them to developing coeliac disease. We don't yet know why some people with the genes go on to develop the condition and others don't but once triggered, their body's immune system attacks its own healthy tissues in response to eating gluten, a protein found in wheat, barley and rye. Some people may also be sensitive to avenin in oats. Once diagnosed the only current treatment is a lifelong, strict gluten-free diet. In most cases, this will allow the gut to heal, but damage sustained to the neurological system may only be halted and the residual damage may cause ongoing issues.



It's a common autoimmune condition but only an estimated 36 per cent have a medical diagnosis, meaning that more than 20,000 people in Wales are living with undiagnosed coeliac disease. These individuals are living with and suffering avoidable harm as a result. (1) Unfortunately, delays in diagnosis are common and considered a significant barrier to improving patient outcomes. This can result in the development of significant neurological damage: on average, patients with coeliac disease who have neurological symptoms are diagnosed 10 years later than patients with gut symptoms. (3)

DELAYS AND MISDIAGNOSIS

It takes an average 13 years from onset of symptoms for an adult with the condition to be diagnosed. (4) That's more than a decade of potentially feeling ill, not knowing why, missing work, missing moments with family and friends, trips back and forth to the doctors, or worse.

Not only are people waiting an unacceptable amount of time for a diagnosis, they're also being misdiagnosed. Roughly one-in-four people with coeliac disease have previously been misdiagnosed with or treated for IBS even though NICE guidance recommends a test for coeliac disease before any diagnosis of IBS is offered. (5)

Failure to diagnose coeliac disease promptly and accurately doesn't just affect those with the condition. The impact of ill health is felt in workplaces, communities, and especially with friends and family. And it hurts the health service too. By failing to target interventions appropriately, the health service faces costs associated with treating avoidable complications. Recurring GP appointments, management of osteoporosis and bone fractures, unexplained infertility, and in rare cases, even treatment for small bowel lymphoma are all much costlier than diagnosing coeliac disease.

The good news is that the first step toward diagnosis is a relatively simple and cost-effective one, a blood test which can be accessed via a local

GP. With better recognition of the symptoms from healthcare professionals and the public, we can secure faster access to a blood test for those at risk. For the majority of patients with a positive blood test, the diagnosis will need to be confirmed by a gut biopsy so we also need to tackle the challenge of endoscopy waiting times. For people with suspected coeliac disease any delay is particularly challenging as this means keeping gluten, the very thing making them ill, in their diet throughout the wait time in order for the tests to be accurate.

IS IT COELIAC DISEASE?

Coeliac UK has developed an online assessment tool to help people understand if they might have the condition. Launched as part of the charity's 'Is it Coeliac Disease?' campaign, the symptom-checker is based on NICE guidance with those that are flagged recommended to visit a healthcare professional for testing.

To take a look at the tool and to find out more, visit www.isitcoeliacdisease.org.uk.

JOIN COELIAC UK'S HCP MEMBERSHIP

Join Coeliac UK's HCP membership for FREE and get access to comprehensive patient resources, CPD, the latest research updates, and more.

Whether you're a dietitian, gastroenterologist, GP or pharmacist, Coeliac UK is here for you.

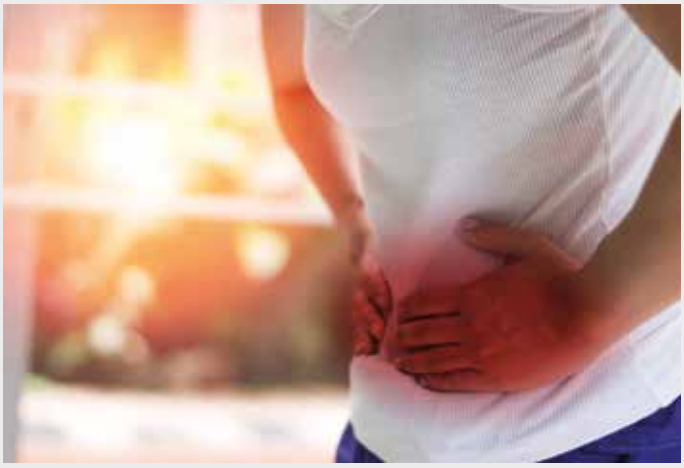
We have over 50 years of expertise in coeliac disease and the gluten-free diet, so by joining as an healthcare professionals member you'll get access to all that knowledge and connect with our amazing gluten-free community.

For more information, visit www.coeliac.org.uk

FINDING AN ANSWER

Despite improvements in Wales, these have been hampered by COVID-19 with the proportion of people waiting more than the minimum eight-week target increasing by almost half (48 per cent) since the same period in 2019. (6) We suspect from our own research that that figure is even worse among people with coeliac disease.

Under-diagnosis of coeliac disease is a challenge that needs addressing now. 13 years is too long. Such is the experience of those seeking diagnosis of coeliac disease that many talk, not of the disappointment of a diagnosis but, the relief of finally having an answer. Today, over 20,000 people across Wales deserve that answer.



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ROYAL PHARMACEUTICAL SOCIETY

LOOKING TO THE FUTURE

As Pharmacy: Delivering a Healthier Wales continues to carve out an ambitious future for the profession, the Royal Pharmaceutical Society for Wales takes WPR behind-the-scenes of the stepping stones and expertise instrumental to the vision's success.

It's been a busy few months for us at the Royal Pharmaceutical Society (RPS) Wales since the turn of the year.

You may remember that in the last edition of WPR, we told you about our work commissioned by the Welsh government to undertake an independent review of clinical pharmacy services within hospitals in Wales. This has been a project that's taken us to all corners of Wales and it's been great meeting and receiving input from so many of you across the country. This input from pharmacy teams has been hugely beneficial and will help inform the final report that will shortly be submitted to the Welsh government.

Another new initiative for us at the RPS Wales this year is to take forward the administration of the delivery board for Pharmacy: Delivering a Healthier Wales (PDHW).

If you're not familiar with PDHW, it's the 2030 vision for pharmacy in Wales. Launched in 2019, the vision sets long-term ambitions for how patients will benefit from the expertise of pharmacy teams by 2030. Back in 2019, it also included initial three-year goals up to the end of 2022 that acted as stepping stones. These have now been supplemented by new 2025 goals that were published last year to keep the profession on-track for 2030.

In all, over 600 members of the pharmacy team in Wales contributed to the creation of the vision and goals. Both plans were developed on behalf of the profession through the Welsh Pharmaceutical Committee, with project management leadership provided by us at the RPS Wales.

Since its publication, PDHW has really acted as a catalyst for the positive changes – big and small – that we've seen in pharmacy in Wales. This has included increasing the clinical role of community pharmacists, increasing opportunity for independent prescribing training, and growing the role of pharmacy technicians and support staff. It's also been a foundation for other various strategic documents and plans, such as the new community pharmacy contractual framework, HEIW's pharmacy workforce plans, and the Welsh government's electronic prescribing implementation programme.

The role of the delivery board for PDHW, that we are now supporting, is to co-ordinate activity that contributes to implementing all the short and long-term goals. We meet on a quarterly basis and are made up of pharmacy professionals (pharmacists and pharmacy technicians) from all sectors and health board areas. Through a carefully-designed mix of career stages, experiences and expertise, the delivery board is able to come together to take a broad overview of pharmacy and progress towards 2030. This ensures that opportunities and barriers identified by those at an operational level are reflected and fed back to those with more strategic and planning roles and vice versa.

We're also delighted to welcome a new chair for the delivery board, Chris Martin. Many of you will know Chris, but for those who don't, he is a community pharmacist by background and has a number of strategic roles across healthcare in Wales. They include Chair of the Life Sciences Hub Wales, Co-Vice Chairman of the Bevan Commission, and member of the main Welsh Government Audit and Risk Committee. As you can imagine, it's so valuable to have someone with Chris' experience and knowledge of healthcare in Wales as part of this work.

To support the delivery board, we also have four sub-groups that align to the four themes of PDHW:

- Enhancing patient experience
- Developing the pharmacy workforce
- Seamless pharmaceutical care
- Harnessing innovation and technology

Again, these groups are made up of a broad range of pharmacy professionals with expertise and insights for each theme. Meeting between delivery board meetings, these groups go into real detail on progress being made on the relevant goals and the barriers that need to be overcome.

While the delivery board has worked effectively for its first few years, it has collectively recognised that fresh perspectives will be needed in order for it to work as effectively as possible. That's why after the final meeting this year, half of the board will be looking to step-down, to enable new members to join and ensure we have the right balance of continuity and new membership. So do look out for these opportunities towards the end of 2023. Joining the board will not only give you a role in driving forward pharmacy towards its 2030 vision, but it's also a great personal and professional development opportunity.

Finally, to close on an exciting note, we're pleased to announce that the first PDHW annual conference will take place at the Parkgate Hotel in Cardiff on 21st September. This will be an opportunity to bring the profession together, along with healthcare colleagues and patients to reflect on progress to date and to consider what more needs to be done on the road to 2030.

Speakers, workshops and registration details will be announced in the coming weeks. It will be great to have as many as possible of you joining us to celebrate pharmacy in Wales and look forward to the future. See you there!

A NEW DAWN

Research has the power to transform care, to change lives – and even to save them. Nowhere is this more evident than in research funded by Health and Care Research Wales at Swansea University, which has led to wide-ranging reforms to prevent self-harm and reduce the number of lives lost to suicide in Wales.

Professor Ann John

Studies funded by Health and Care Research Wales are happening every day, often unseen by the general population, but their impact on the health of individuals and communities in Wales shouldn't be underestimated.

Around 350 people in Wales die by suicide each year. It is the biggest killer of people under the age of 50 and is three times more likely in men than in women.

Suicide is a tragedy for all concerned, and the community at large, but such a multifaceted and complex problem requires a wide range of approaches and solutions in order to begin to tackle it effectively.

The research group, led by Professor Ann John, developed and established a new database, Suicide Information Database-Wales (SID-Cymru), in 2014. This database, the largest of its kind, has become a pivotal resource in facilitating research on suicide: it accesses and links information on prior health, the nature of previous contacts with services and wider social circumstances for all those who die by suicide within Wales, whether known or unknown to mental health services.

The resulting body of work has gone on to be instrumental in the development of Wales' multi-stranded approach to prevent suicide and self-harm. It forms a key part of the Welsh government's strategy around suicide and self-harm prevention (2015-to-2022), Talk to Me 2, but has also influenced such diverse areas as prescription guidance, policy change, reporting advice to media and storylines featuring suicide in TV dramas.

Analysis of the SID-Cymru database has helped reduce access to the means of suicide in numerous ways, from guidance on the prescription of antidepressants to consultation on bridge design.

Following analysis of the SID-Cymru database as part of a review by Public Health Wales into deaths of children and young people through probable suicide, the research informed changes in antidepressant prescribing guidance, circulated to all GP practices in Wales. This highlighted that, 'when prescribing for depressive illness in children and adolescents, only fluoxetine has been shown to be effective and when initiated should be carefully monitored in line with current guidance… Use of other medication to treat depressive illness should be initiated by a specialist and only when ongoing monitoring has been put in place.'

SID-Cymru also informed new, evidence-based suicide prevention guidance for schools, social care and health services. A research engagement seminar attended by stakeholders, including government, education and health professionals, identified a gap in available support around suicide and self-harm for young people, with teachers in particular asking for practical advice. This guidance was issued to every school in Wales in 2019 and is today used by youth service workers, health professionals, social workers and voluntary organisations working with children.

Professor John has also become an influential consultant on suicide prevention in a range of contexts. Bridge architects discussed suicide prevention aspects with Professor John, incorporating considerations into the final design which will have long-term impact and potentially save lives.

Professor John has also discussed responsible reporting of self-harm and suicide with journalists from across Wales, as well as being asked to help embed Samaritans' existing media guidance within Wales. The success of this collaboration led to her being asked to consult on depictions of suicide in Coronation Street, Casualty and Hollyoaks, with several key changes to the storylines thanks to her input.

As well as its impact within Wales, the success of SID-Cymru has led to international recognition, with the Swansea team collaborating with the Public Health Agency in Canada to develop a similar system.

Looking to the future, the team expect to once again be closely involved as the Welsh government drafts its new self-harm and suicide prevention strategy, due to be published later this year. New issues and themes have been observed since the previous strategy was drafted in 2015, particularly the impact of gambling and cyberbullying, demonstrating how vital it is that research in this area continues to develop.

ABOUT HEALTH AND CARE RESEARCH WALES

Health and Care Research Wales is the delivery arm and external brand of the Welsh government's Health and Social Services Research & Development Division. Health and Care Research Wales works in partnership with the NHS, universities, local government, other research-funders, patients and the public to fund, support and increase research that can transform lives, promote economic growth and advance science.

For more information, visit www.healthandcareresearchwales.org.

HISTORY IN THE MAKING

Change through history has come from the people, not by the politicians, pens Rob Barker, Campaigns and Communications Lead for Barod, as he reflects on his recent attendance at the Harm Reduction International Conference in Melbourne.

It's not often I come away from a work event feeling a mix of emotions, while continuing to ask why? Upon the conclusion of Harm Reduction International's conference in Melbourne, I felt exhausted, overwhelmed, angered and sad. But more so, I was inspired by the passion, empathy, hope, and belief that was evident over the four days.

This conference brought over 1,000 delegates from all corners of the world, all harm reductionists, all wanting to fight for the right for health and uphold the rights of every human being. Those were just some of the remarks made by Helen Clark, former Prime Minister of New Zealand, and Chair of the Global Commission on Drug Policy. Ms Clark added that we are still confronted by an international war on people who use drugs by current drugs laws and policies.

Ms Clark went on to say that six decades of this approach has shown its utter failure, none more so than the fact 35 countries across the world still apply the death penalty for drug offences. The most recent case of Tangaraju Suppiah, convicted of co-ordinating the trafficking of one kilogram of cannabis, was hanged on 26th April, showing the disproportion and brutality of such laws. This has been the twelfth killing via the death penalty, for drug offences, in Singapore, in the last 13 months. The reality of such punishments was brought home by Ajeng Larasati from Harm Reduction International, who read the letter from Jeff, a victim of the war on drugs, written shortly before they were executed for a drug offence. We must stop criminalising people who make choices for themselves. Every country, including Wales, must not stay silent when the rights and dignity of others are affected and abused. Silence is violence. Silence is complicity.

Helen Clark, former Prime Minister of New Zealand and Chair of the Global Commission on Drug Policy. Image source: Harm Reduction International (www.hr23.hri.global)

We must stop criminalising people who make choices for themselves. Every country, including Wales, must not stay silent when the rights and dignity of others are affected and abused. Silence is violence. Silence is complicity.

What was evident throughout the four days of the conference was the continuing impact of the barbaric acts of colonialisation, just a few hundred years ago, upon society and drug policy. This was primarily made evident by the acknowledgement made by every speaker at the start of their presentation, 'I acknowledge that where we meet today is on the lands of the five tribes of the Kulin Nation and I wish to acknowledge them as Traditional Owners. I would also like to pay my respects to their Elders, past and present, and Aboriginal Elders of other communities who may be here today.'

James Ward, Director of the Poche Centre for Indigenous Health at the University of Queensland, stated, 'The Western society approach to harm reduction has failed to alleviate effectively enough, nor quickly enough, the disease and effect on my people, and many other Indigenous peoples around the globe… Decolonise, decolonise, decolonise harm reduction.' It can be strongly argued that colonialism and racism provided the footing for current drug laws and policies and plays a significant part in the disproportionate and discriminatory implementation of such. Whether it be Indigenous communities in Australia, the Māori population in New Zealand, First Nation people in Canada or Black and Minority Ethnic communities in the UK, they all make up the minority of their respective countries' populations, but account for most drug offences.

Here in the UK, black people are stopped and searched for drugs at nine times the rate of white people, and as highlighted by Andre Gomes from Release, black children are six times more likely to be searched in schools for drugs. Yet white people report using drugs at twice the rate of that of black people.

SUBSTANCE DEPENDENCY

So, what next? How do we halt and eradicate the role of colonialism within drug policy? Paul Hunt, New Zealand's Chief Human Rights Commissioner, remarked during the closing ceremony, 'The most effective form of indigenous harm reduction is decolonisation' and that systems and cultures of oppression, from racism, stigma, capitalism, and the patriarchy, need to be dismantled and abolished. If we don't, these social injustices will forever rear their heads and continue the harm and damage that we see across the world today. Therefore, more effective policies, such as decriminalisation or legalisation of drugs, to name just a few, need to be implemented, while ensuring those who are most affected and discriminated against by the war on drugs, are the ones that benefit the most from reform. Unfortunately, this has not been the case in Canada upon the implementation of their regulated cannabis market, as white males continue to be the beneficiaries, while black and indigenous communities continue to be left behind.

There is still much to be done within national and global drug policy, most notably highlighted by Ann Fordham from the International Drug Policy Consortium (IDPC). Ann shared the findings from IDPC's unique Global Drug Policy Index, which documents, measures and compares national-level drug policies. The UK sits fourth on that list, surprisingly, above countries that have implemented policies from regulated drug markets and facilities, such as drug consumption rooms – yet this is not necessarily something to be proud of, from a UK perspective, as there is significant room for improvement.

Rob Barker (far right) sharing Barod's findings regarding the implementation of digital interventions in Wales. Image source: Harm Reduction International (www.hr23.hri.global)

However, the work of people within harm reduction really stood out and stole the show over the four days. During the opening ceremony, various awards were presented, most notably to organisations that continued to deliver pivotal services in Ukraine, since the invasion of Russia. What is worth noting too, is since this awful act, needle and syringe programmes have been implemented within prison settings, in Ukraine. Even this is not something in operation in the UK. To say such harm reductionists have shone through in the face of adversity is an understatement. On the note of prisons, it was also highlighted by Peter Davidson, that the implementation of naloxone vending machines has proved a significant success in prisons in Los Angeles. Over 30,000 kits every year have been dispensed to those being released from jail, via this low threshold mechanism. And done so in a confidential and sensitive manner. Yet many are still reluctant to take a kit upon release, as, if they are to use it and save someone's life, the police may act discriminately towards them following such incidents, by investigating them for potential drug offences. A prime example of stigma playing a significant role in the operation of drug policy.

While I could continue for another page or two, outlining the incredible work that was shared and displayed during the conference, there was simply too much on show for me to relay here. However, Barod received a fantastic response to our own poster that was displayed on the final day, highlighting the implementation of some of our regional and national digital interventions, including the Live Webchat Service, Naloxone Click and Deliver Service, and Dyfed Drug and Alcohol Services' Spike on a Bike initiative. It is fair to say that Wales is not far behind, if not on par with, many of our counterparts on the world stage.

During the opening ceremony, Helen Clark set the tone for the conference, saying that 'better access to harm reduction services could, and would, have saved countless lives' and that 'inclusion, equity, and non-discrimination are fundamental to drug-related policies.' Such statements were reiterated at the close of the conference. Firstly, the former President of South Africa, Kgalema Motlanthe, stated that, 'the future is not a place we are going to, but a place we create' and that 'harm reduction is a model for humanity.' Yet it was only right for the conference to be closed upon the words of Judy Chang, the Executive Director of the International Network of People who Use Drugs, who noted that, 'the role as a drug user advocate should not only be limited to telling personal stories. There's undeniable power in sharing our lived experiences and lessons learned. But we are also analytical and tactical, we are strategic advocates and brilliant service providers. People who use drugs are some of the best people I know.'

While thankfully some policies, such as the death penalty for drug offences, are not implemented in Wales, it is safe to say that more can be done to fight exclusion and oppression, both within UK drug law and policy, and its subsequent operation. We can all play a part in the social justice movement around substance use, human rights and the end to stigma and oppression.

We can campaign. We can educate. We can fight. We can demand. As history has dictated, change often come from the people and not by politicians.

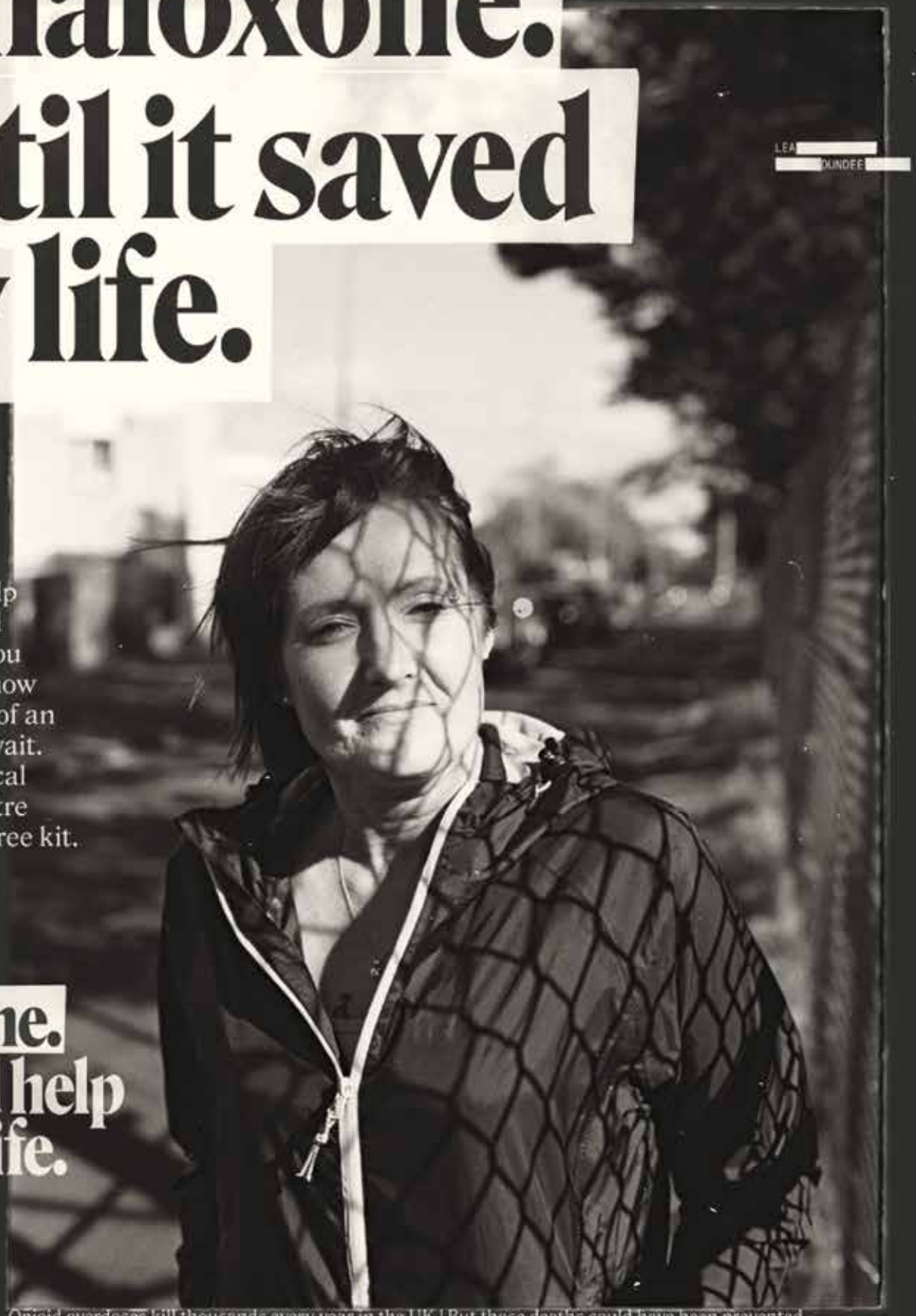
Former President of South Africa, Kgalema Motlanthe. Image source: Harm Reduction International (www.hr23.hri.global)

ABOUT THE AUTHOR

Rob Barker is the Campaigns and Communications Lead for Barod. Rob holds an MSc degree in Addictive Behaviours from the University of Liverpool and has worked in the substance use field, in Wales, for over 12 years. Rob has previously undertaken a Churchill Fellowship, researching the policies and processes of setting up a drug consumption room in Wales.

For more information, visit www.barod.cymru.

I'd never heard of naloxone. Until it saved my life.



Naloxone can help reverse an opioid overdose. So if you use opioids or know someone at risk of an overdose, don't wait. Speak to your local drug service centre about getting a free kit.

Carry naloxone. It could help save a life.

Opioid overdoses kill thousands every year in the UK.[1] But those deaths could have been prevented with naloxone. It's a drug that can help reverse an opioid overdose and help save lives. Signs of an opioid overdose include pinpoint pupils, unconsciousness, or breathing problems. Always call an ambulance first if you think someone is having an opioid overdose. For more information, go to naloxone.org.uk.

This campaign is sponsored by Ethypharm and made in conjunction with real naloxone carriers.

1. Parsons G. Prescriber 2019; 30(12):19-23. Date of preparation: February 2021 | Job number: UK-PREN-17e

UP TO THEIR NECK

Although thyroid disease is common – affecting around two per cent of women and 0.2 per cent of men – most people have never heard of it until they or someone they know is diagnosed with the condition. Lyn Mynott, Chief Executive Officer, Thyroid UK, helps unmask the mystery for your patients – from driving the intensity of thyroid issues forward, to addressing how healthcare professionals can meet the need for action.

Lyn Mynott

Thyroid disease can run in families which is why an individual often finds a relative has a thyroid condition (and never discussed it). There are many types of conditions related to the thyroid but I will focus on just two of them here.

Both of these conditions are diagnosed by blood tests, the main one being the thyroid-stimulating hormone. There are other tests that can be conducted but the NHS may not do these.

First of all, you need to know that the thyroid gland, which is situated in the front of the neck, is a very important organ in the body. It is butterfly-shaped with two lobes and weighs only 2oz but its main function is to control an individual's metabolism (the process by which the body changes food and drink into energy). It also controls growth in children.

The two main types of thyroid conditions are hypothyroidism (underactive thyroid) and hyperthyroidism (overactive thyroid).

WHAT IS AN UNDERACTIVE THYROID?

An underactive thyroid produces less thyroid hormone than it should and causes many symptoms if it's not treated, including fatigue, weight gain, cold intolerance, muscle weakness, constipation, menstrual problems, depression, goitre with difficulty swallowing, loss of libido, fertility problems, hair loss on head and body, dry skin, muscle and joint pain, loss of appetite, and constipation.

WHAT CAUSES AN UNDERACTIVE THYROID?

A baby can be born with hypothyroidism due to having a malfunctioning thyroid, or it can be caused by having treatment for an overactive thyroid or surgery to remove the thyroid (more on this later). It can also be caused by certain medications.

However, the most common cause is the autoimmune form, called Hashimoto's disease (90 per cent), where antibodies destroy the thyroid-producing cells.

An individual may find that they have symptoms of hypothyroidism but, on testing, they are told that they have subclinical hypothyroidism. This affects around six-to-eight per cent of women and three per cent of men, and means that the level of thyroid hormones in the blood has not yet reached the stage where treatment is seen to be needed.

WHAT TREATMENT IS AVAILABLE?

The most common thyroid hormone treatment for hypothyroidism is levothyroxine, which replaces the hormone that the thyroid gland is not producing. This is usually a life-long treatment which is why prescriptions of levothyroxine are free.

The patient's GP will test them regularly in the beginning and increase their dosage until they get to a level where their symptoms are relieved.

Most people feel better on this medication. However, unfortunately, around 12 per cent of patients continue to have symptoms on this treatment.

There are two other thyroid hormone treatments that often help these patients, called liothyronine (difficult to get prescribed on the NHS) and natural desiccated thyroid (not available on the NHS).

The patient should really be kept on the same brand of levothyroxine, although this doesn't happen. If the individual finds that they suddenly start to suffer symptoms again, they should ask their GP to do thyroid blood tests to check that their levels haven't changed significantly. They should have blood tests annually to check that their levels haven't changed.

WHAT IS AN OVERACTIVE THYROID?

An overactive thyroid produces more thyroid hormone than it should and causes symptoms, including heat intolerance, increased sweating, palpitations, increased appetite, diarrhoea, weight loss, shakiness / trembling, tiredness, anxiety, mood swings, menstrual problems, weak muscles and insomnia.

Similar to subclinical hypothyroidism, an individual may find that they have symptoms but, on testing, they are told that they have subclinical hyperthyroidism.

WHAT CAUSES AN OVERACTIVE THYROID?

Nodules (lumps) within the gland can cause an overactive thyroid, as well as an infection of the gland (thyroiditis). It can also be caused by taking too much levothyroxine, causing the thyroid hormone levels to go too high.

However, the most common cause (80 per cent) is the autoimmune form of an overactive thyroid, called Graves' disease. This is where antibodies stimulate the thyroid cells to produce too much thyroid hormone.

WHAT TREATMENT IS AVAILABLE?

Because an overactive thyroid often causes heart palpitations, beta blockers are usually immediately given to control this. Antithyroid medication – carbimazole – is also given to quickly bring levels down to stop any risk of heart issues.

The individual's GP will test them regularly in the beginning and review their dosage until they get to a level where their symptoms are relieved. The individual will probably be on this medication for 18-to-24 months, when the antithyroid drugs are slowly stopped and they are monitored to see if the problem recurs.

If the patient's levels increase again then they can continue to stay on carbimazole (although there are some risks of liver damage if they stay on them for too long) or they will be offered a treatment called radio-iodine (given in the form of a drink) which destroys the thyroid gland, or surgery to remove either one or both lobes of the thyroid (thyroidectomy).

Some patients immediately become hypothyroid and need treatment but for some, they may become hypothyroid within the next few years.

For more information, visit www.thyroiduk.org.

TURNING BLUE INHALERS GREEN

Jackie Reynolds, Pharmacist Prescriber, Oakfield Street Surgery, and Primary Care Respiratory Lead Medicines Management Pharmacist, Aneurin Bevan University Health Board, **casts a light on the importance and implementation of high quality low carbon asthma care – and how it can help secure a better future for patients and the planet as a whole.**

A sustainable Quality Improvement (SUSQI) Project completed as part of the SFERIC Programme, a Sustainability Fellowship for Engagement, Research, Innovation and Co-ordination and with support from the Centre for Sustainable Healthcare. (April-to-September 2022) www.susqi.org

BACKGROUND

The NHS Wales Decarbonisation Strategic Delivery Plan (gov.wales) was published in March 2021 outlining initiatives for the public sector in Wales to become net zero by 2030 with three initiatives specific to inhalers:

- Take a patient-centric approach to optimise inhaler use focusing on a reduction in the over-reliance of reliever inhalers
- Where suitable, transition high global warming potential (GWP) inhalers (MDI devices) to lower carbon alternatives, with the aim of shifting 80 per cent of inhalers to low GWP by 2025
- Encourage responsible disposal of inhalers

Over the last few years, much of the work around 'greener' inhaler prescribing has been focused on switching maintenance (preventer) inhalers from high GWP metered dose inhalers (MDIs) to low GWP dry powder inhalers (DPIs). While this is still relevant, because many patients have poor inhaler technique with MDIs, focusing on reducing over-prescribing of 'blue' reliever inhalers (short-acting beta2 agonists (SABA) inhalers) will deliver greater carbon savings and importantly improve patient outcomes. This is because:

SABA PRESCRIBING RATES IN THE UK ARE HIGH

Approximately 70 per cent of the inhalers prescribed are SABA and is responsible for 67 per cent of the total greenhouse gas (GHG) emissions from all inhalers.[1] SABA is mainly prescribed as a MDI with 83 per cent of the SABA inhalers prescribed for asthma going to patients who are potentially over-using, defined as three or more cannisters per year. [1]

IN ASTHMA, SABA OVER-RELIANCE IS ASSOCIATED WITH POOR CONTROL AND WORSE OUTCOMES

In the UK SABINA study 38 per cent of asthma patients were classified as having high SABA inhaler use (≥3 inhalers/year) which was associated with twice the number of asthma attacks and an increased risk of exacerbations compared with low users (prescribed 0-to-two inhalers/year) regardless of asthma severity.[2]

UNCONTROLLED ASTHMA HAS A HIGH CARBON BURDEN

An asthma patient with uncontrolled asthma has on average three times the carbon footprint of a patient with controlled asthma with SABA use contributing to the majority of the GHG emissions.[3]

I had already started to address SABA over-reliance in my role as a prescribing pharmacist, but I wanted to explore how the whole practice could take a more targeted and environmental approach for the benefit of both patients and the planet, and importantly to raise awareness that inhaler decarbonisation is more than just switching from MDI to DPI.

PROJECT AIMS

- Raise awareness of sustainable respiratory care, in particular SABA over-reliance
- Reduce the number of asthma patients having three or more SABA inhalers per year
- Reduce the total carbon footprint of inhalers

METHOD

The SUSQI framework was used to identify and deliver change. Following engagement with representatives from the whole practice team, ideas for change were then chosen and aligned to the five sustainability principles as highlighted in the driver diagram. (Figure 1)

A PowerPoint presentation was delivered to practice staff to raise awareness of sustainable respiratory care and provide context for the project, including relevance to the new QAIF green inhaler project and the inhaler decarbonisation National Prescribing Indicator. Copies of the NHS Wales Asthma and COPD Guideline posters were also displayed in all clinical rooms.

A PDSA cycle was used to test one of the ideas of change arising from process mapping the journey of a SABA prescription from request to issue. The prescribing clerks flagged patients having three or more SABA to the practice pharmacist for review. The practice pharmacist telephoned the patient to establish if SABA was needed or being over-ordered. If on repeat and not needed, SABA was removed from repeat, environmental issues discussed, and the patient signposted to the NHS Wales app. If SABA was needed, signs of poor asthma control, environmental issues and the asthma app were discussed, and the patient offered a face-to-face or telephone appointment for an asthma review. A SABA prescription was issued but, where appropriate, changed to a lower carbon alternative.

Figure 1.

MEASUREMENT

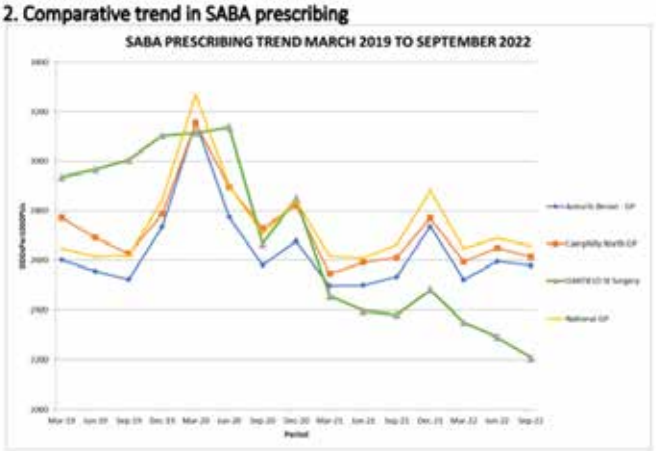
Quantitative and qualitative data was obtained from a variety of sources to measure patient outcomes and environmental, economic, and social sustainability. Data was collected for six months during April-to-September 2022 and compared with the same period in the previous year to avoid the impact of seasonal difference. (Sources used: Astra Zeneca Asthma Care Dashboard, Asthma Control Test (ACT), SPIRA Inhaler Decarbonisation Dashboard, Comparative Analysis System for Prescribing Audit (CASPA) and verbal patient feedback)

RESULTS

PATIENT OUTCOMES

There was a five per cent reduction in SABA prescribing (156 fewer SABA items) in the practice compared to the same period in the previous year which contrasted with an increase in prescribing rates at a national, health board and local cluster level (range 1.8-to-4.5 per cent). The number of patients having three or more SABA inhalers also decreased from 43 per cent-to-30 per cent. In accordance with the SABINA study, these reductions can be used as a surrogate marker of improved clinical outcomes with the caveat that some of the reduction will be due to a reduction in waste from over-ordering. Two patients also showed a clinically significant 10-point increase in their ACT score, following a change in therapy from preventer with separate SABA to maintenance and reliever therapy (MART) in a single inhaler device. The practice was previously a higher-than-average SABA prescriber (Figure 2) with the trend following a similar trajectory to national, health board and cluster prescribing trends until 21st March when the trends diverge, coinciding with earlier SABA over-reliance work and again from 22nd March, clearly highlighting the impact of this project.

Figure 2. Comparative trend in SABA prescribing



ENVIRONMENTAL SUSTAINABILITY

The carbon footprint of SABA inhalers reduced by 28 per cent or 18,823 kgCO2e which reflects fewer SABA items, SABA MDI switched to DPI and SABA MDI switched to lower GWP SABA MDI e.g., Ventolin to Salamol. Projected across a year, this is a saving of 37,646 kgCO2e, equivalent to driving 108,427 miles in an average car. A sample audit conducted during the PDSA cycle identified 25 per cent of patients over-ordering SABA. Although the number of audited patients was small (n=16) there are significant implications for environmental and economic savings if this proportion is representative of and scaled to all the asthma patients in the practice.

ECONOMIC SUSTAINABILITY

The reduction in SABA items equates to an 8.3 per cent reduction in SABA cost, a saving of £649 over six months. (Source: Caspa data) While there are still reductions to be made, SABA cost savings would not be expected to grow year-on-year because as SABA over-reliance is addressed the number of asthma patients on inappropriate SABA should reduce. It also needs to be acknowledged that overall upfront respiratory prescribing costs may increase. This is because patients previously prescribed no or sub-optimal preventer treatment will be prescribed appropriate medication. However, during the six months of the project the practice prescribing spend for inhaled corticosteroids alone and in combination with a long-acting beta2 agonist reduced by 3.85 per cent giving a saving of £3,731. (Source: Caspa data) This compares to an increase of 0.03 per cent and 0.43 per cent in Welsh average and health board prescribing costs. This suggests other cost-saving medicines optimisation initiatives are being implemented but due to time constraints this was not evaluated for this project. There is also an expectation that any potential future increase in respiratory prescribing costs would be offset by healthcare avoidance including reduced hospital admissions, fewer days off work etc. if asthma control is improved as evidenced in the SABINA study.

SOCIAL SUSTAINABILITY

Feedback from patients having the initial telephone call was positive, with most commenting they were unaware of the environmental issues and did not know about returning used / unwanted or expired inhalers to pharmacy for safe disposal and most were happy to change to lower carbon alternatives. Following an asthma review and having treatment optimised to MART therapy one patient commented, 'I didn't realise how bad my asthma was, since starting my new inhaler, I'm no longer waking up at night coughing.' With more time, qualitative surveys could be used to expand this data further.

CONCLUSION

The interventions in this project are not new, they form the routine basics of good asthma care and can easily be applied in day-to day practice without the need for extra staff resource or investment. However, for clinicians not familiar with the basic principles of asthma care there will need to be an investment in staff training. Although the telephone calls and some of the asthma reviews were carried out by a prescribing pharmacist with a specialist respiratory interest, with appropriate guidance, this work could be replicated by any practice pharmacist or other member of the practice team with the clinical asthma review referred to an appropriately trained clinician. Doing what's best for the patient is good for the planet and can have financial savings too but the key to lasting change is engaging the whole practice team in the principles of sustainable respiratory prescribing.

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budesonide/formoterol

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Prescribe DuoResp® Spiromax® for your appropriate patients with asthma aged 12 and above and adults with chronic obstructive pulmonary disease (COPD)[1]

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- 99% of patients found DuoResp® Spiromax® easy to use or very easy to use[4]
- Consistency, with every dose, under real-world conditions†[5,6]
- 160 mcg/4.5 mcg as MART can simplify therapy and improve asthma control*[1,7]

CO_2e, carbon dioxide equivalent; **COPD**, chronic obstructive pulmonary disease; **FEV_1**, forced expiratory volume in one second; **MART**, maintenance and reliever therapy; **NICE**, National Institute for Health and Care Excellence.

Indication:[1]

1. DuoResp® Spiromax® is indicated in adults and adolescents (12 years and older) for the regular treatment of **asthma**, where use of a combination (inhaled corticosteroid and long-acting β_2 adrenoceptor agonist) is appropriate:
   – in patients not adequately controlled with inhaled corticosteroids and "as needed" inhaled short-acting β_2 adrenoceptor agonists.
   Or
   – in patients already adequately controlled on both inhaled corticosteroids and long-acting β_2 adrenoceptor agonists.
2. DuoResp® Spiromax® is indicated in adults (aged 18 and older) for the symptomatic treatment of patients with **COPD** with forced expiratory volume in 1 second (FEV_1) <70% predicted normal (post-bronchodilator) and a history of repeated exacerbations, who have significant symptoms despite regular therapy with long-acting bronchodilators.

*In addition to maintenance dose, patients may take their inhaler as needed. No more than 6 inhalations should be taken on any single occasion. Patients using more than 8 inhalations daily should be strongly advised to seek medical advice. They should be reassessed and their maintenance therapy should be reconsidered. Do not take more than 12 inhalations in total in 24 hours.[1]

**The figure supplied is based on 93 actuations per device – this average was calculated from the number of 160 mcg/4.5 mcg 120 dose inhalers and the number of 320 mcg/9 mcg 60 dose inhalers manufactured during the data recording period sampled in 2020.[3]

†Consistent dose delivery at flow rates of 30–90 L/min;[5,6] held at ±90 degrees from vertical;[6] at temperatures from -20 °C to 40 °C.[6] Results from a dose delivery study using low-, middle- and high-strength DuoResp® Spiromax®. Dose consistency was assessed over inhaler life. Total emitted doses were measured at different flow rates, after exposure to high and low temperature or humidity, at different inhaler orientations and after dropping the inhaler.[6] Low dose was also included in the study but is not licensed for use in the UK.

DuoResp® Spiromax® carbon footprint has been measured and certified by The Carbon Trust[3]

CARBON TRUST
CO2 MEASURED

1. DuoResp® Spiromax® Summary of Product Characteristics, November 2021. 2. National Institute for Health and Care Excellence (NICE), asthma inhalers and climate change. Available at: https://www.nice.org.uk/guidance/ng80/resources/inhalers-for-asthma-patient-decision-aid-pdf-6727144573. Last accessed: November 2022. 3. Teva UK Limited data on file; 226. 4. Spiromax in Real Life, What are the experiences of our DuoResp® Spiromax® patients? Febrary 2018, prepared by *Branding Science*. 5. Chrystyn H, *et al. Int J Pharm.* 2015; 491: 268–276. 6. Canonica G, *et al. J Aerosol Med Pulm Drug Deliv.* 2015; 28: 309–319. 7. Wilkinson A, *et al. Br J Clin Pharmacol* 2022; 88:3016–3022.

Intended for UK healthcare professional audience only.

Approval code: DUOR-GB-00158 Teva UK Limited, Ridings Point, Whistler Drive, Castleford, West Yorkshire, WF10 5HX Date of preparation: November 2022

Please refer to the Summary of Product Characteristics (SmPC) for full details of the Prescribing Information.
DuoResp® Spiromax® (budesonide/formoterol) 160mcg/4.5mcg inhalation powder and DuoResp® Spiromax® (budesonide/formoterol) 320mcg/9mcg inhalation powder Abbreviated Prescribing Information. **Presentation:** *DuoResp® Spiromax® 160/4.5:* Each delivered dose contains 160mcg of budesonide and 4.5mcg of formoterol fumarate dihydrate. This is equivalent to a metered dose of 200mcg budesonide and 6mcg of formoterol fumarate dihydrate. *DuoResp® Spiromax® 320/9:* Each delivered dose contains 320mcg of budesonide and 9mcg of formoterol fumarate dihydrate. This is equivalent to a metered dose of 400mcg budesonide and 12mcg of formoterol fumarate dihydrate. Inhalation powder. **Indications:** Asthma: Treatment of asthma, where use of a combination (inhaled corticosteroid and long-acting β_2-adrenoceptor agonist) is appropriate. COPD: Symptomatic treatment of patients with COPD with forced expiratory volume in 1 second (FEV_1) < 70% predicted normal (post bronchodilator) and a history of repeated exacerbations, who have significant symptoms despite regular therapy with long-acting bronchodilators. **Dosage and administration:** For use in adults and adolescents 12 years and older for Asthma, and adults aged 18 years and older for COPD. Not for use in children < 12 years of age. ***Asthma:*** Not intended for the initial management. If an individual patient should require a combination of doses other than those available in the combination inhaler, appropriate doses of β_2-adrenoceptor agonists and/or corticosteroids by individual inhalers should be prescribed. The dose should be titrated to the lowest dose at which effective control of symptoms is maintained. When control of symptoms is achieved titrate to the lowest effective dose, which could include once daily dosing. *DuoResp® Spiromax® 160/4.5:* maintenance therapy - regular maintenance treatment with a separate reliever inhaler: *Adults (18 years and older):* 1-2 inhalations twice daily (maximum of 4 inhalations twice daily). *Adolescents (12 years and older):* 1-2 inhalations twice daily. *DuoResp® Spiromax®* maintenance and reliever therapy: For patients taking DuoResp as reliever, preventative use of DuoResp Spiromax for allergen or exercise-induced bronchoconstriction should take into consideration the frequency of need. In case of frequent need of bronchodilation without corresponding need for an increased dose of inhaled corticosteroids, an alternative reliever should be used. Regular maintenance treatment and as needed in response to symptoms: should be considered for patients with: (i) inadequate asthma control and in frequent need of reliever medication (ii) previous asthma exacerbations requiring medical intervention. *Adults and adolescents:* The recommended maintenance dose is 2 inhalations per day, given either as one inhalation morning and evening or as 2 inhalations in either the morning or evening. For some patients a maintenance dose of 2 inhalations twice daily may be appropriate. Patients should take 1 additional inhalation as needed in response to symptoms. If symptoms persist after a few minutes, an additional inhalation should be taken. Not more than 6 inhalations should be taken on any single occasion. A total daily dose of up to 12 inhalations could be used for a limited period. Patients using more than 8 inhalations daily should be strongly recommended to seek medical advice. *DuoResp® Spiromax® 320/9:* Only to be used as maintenance therapy. *Adults (18 years and older):* 1 inhalation twice daily (maximum of 2 inhalations twice daily). *Adolescents (12 years and older):* 1 inhalation twice daily. ***COPD:*** *Adults:* 1 inhalation twice daily. *Elderly patients (≥ 65 years old):* No special requirements. *Patients with renal or hepatic impairment:* No data available. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. **Precautions and warnings:** If treatment is ineffective, or exceeds the highest recommended dose, medical attention must be sought. Patients with sudden and progressive deterioration in control of asthma or COPD should undergo urgent medical assessment. Patients should have their rescue inhaler available at all times. The reliever inhalations should be taken in response to symptoms and are not intended for regular prophylactic use e.g. before exercise. In case of frequent need of bronchodilation without corresponding need for an increased dose of inhaled corticosteroids, an alternative reliever should be used. Patients should not be initiated during an exacerbation. Serious asthma-related adverse events and exacerbations may occur. If asthma symptoms remain uncontrolled or worsen, patients should continue treatment and seek medical advice. If paradoxical bronchospasm occurs, treatment should be discontinued immediately. Paradoxical bronchospasm responds to a rapid-acting inhaled bronchodilator and should be treated straightaway. Visual disturbance may be reported with systemic and topical corticosteroid use. Such patients should be considered for referral to an ophthalmologist for evaluation of possible causes. Systemic effects may occur, particularly at high doses prescribed for long periods. Potential effects on bone density should be considered, particularly in patients on high doses for prolonged periods that have co-existing risk factors for osteoporosis. Prolonged treatment with high doses of inhaled corticosteroids may result in clinically significant adrenal suppression. Additional systemic corticosteroid cover should be considered during periods of stress. Treatment should not be stopped abruptly – tapering of dose is recommended. Transfer from oral steroid therapy to a budesonide/formoterol fumarate fixed-dose combination may result in the appearance of allergic or arthritic symptoms which will require treatment. In rare cases, tiredness, headache, nausea and vomiting can occur due to insufficient glucocorticosteroid effect and temporary increase in the dose of oral glucocorticosteroids may be necessary. To minimise risk of oropharyngeal Candida infection patients should rinse mouth with water after inhaling the dose. Administer with caution in patients with thyrotoxicosis, phaeochromocytoma, diabetes mellitus, untreated hypokalaemia, or severe cardiovascular disorders. The need for, and dose of inhaled corticosteroids should be re-evaluated in patients with active or quiescent pulmonary tuberculosis, fungal and viral infections in the airways. Additional blood glucose controls should be considered in diabetic patients. Hypokalaemia may occur at high doses. Particular caution is recommended in unstable or acute severe asthma. Serum potassium levels should be monitored in these patients. As with other lactose containing products the small amounts of milk proteins present may cause allergic reactions. There is some evidence of an increased risk of pneumonia with increasing steroid dose but this has not been demonstrated conclusively across all studies. Physicians should remain vigilant for the possible development of pneumonia in patients with COPD as the clinical features of such infections overlap with the symptoms of COPD exacerbations. **Interactions:** Concomitant treatment with potent CYP3A4 inhibitors should be avoided. If this is not possible the time interval between administration should be as long as possible. Co-treatment with CYP3A inhibitors, including cobicistat-containing products is expected to increase risk of systemic side effects and the use in combination should be avoided. Not recommended with β-adrenergic blockers (including eye drops) unless compelling reasons. Concomitant treatment with quinidine, disopyramide, procainamide, phenothiazines, antihistamines (terfenadine), and Tricyclic Antidepressants (TCAs) can prolong the QTc-interval and increase the risk of ventricular arrhythmias. L-Dopa, L-thyroxine, oxytocin and alcohol can impair cardiac tolerance. Concomitant treatment with MAOIs, including agents with similar properties, may precipitate hypertensive reactions. Patients receiving anaesthesia with halogenated hydrocarbons have an elevated risk of arrhythmias. Hypokalaemia may increase the disposition towards arrhythmias in patients taking digitalis glycosides. **Pregnancy and lactation:** Use only when benefits outweigh potential risks. Budesonide is excreted in breast milk; at therapeutic doses no effects on infants are anticipated. **Effects on ability to drive and use machines:** No or negligible influence. **Adverse reactions:** Since *DuoResp® Spiromax®* contains both budesonide and formoterol, the same pattern of adverse reactions as reported for these substances may occur. No increased incidence of adverse reactions has been seen following concurrent administration of the two compounds. *Serious:* Immediate and delayed hypersensitivity reactions, e.g. exanthema, urticaria, pruritus, dermatitis, angioedema and anaphylactic reaction, Cushing's syndrome, adrenal suppression, growth retardation, decrease in bone mineral density, hypokalaemia, hyperglycaemia, aggression, psychomotor hyperactivity, anxiety, sleep disorders, depression, behavioural changes, cataract and glaucoma, tachycardia, cardiac arrhythmias, e.g. atrial fibrillation, supraventricular tachycardia and extrasystoles, angina pectoris, prolongation of QTc-interval, variations in blood pressure, bronchospasm, pneumonia in COPD patients and paradoxical bronchospasm. *Common:* Candida infections in the oropharynx, headache, tremor, palpitations, mild irritation in the throat, coughing, pneumonia in COPD patients, dysphonia including hoarseness. Consult the Summary of Product Characteristics in relation to other side effects. **Overdose:** An overdose of formoterol may lead to: tremor, headache, palpitations. Symptoms reported from isolated cases are tachycardia, hyperglycaemia, hypokalaemia, prolonged QTc-interval, arrhythmia, nausea and vomiting. Supportive and symptomatic treatment may be indicated. **Price per pack:** *DuoResp® Spiromax® 160/4.5* and *DuoResp® Spiromax® 320/9:* £27.97. **Legal Category:** POM. **Marketing Authorisation Numbers:** *DuoResp® Spiromax® 160/4.5:* EU/1/14/920/001, PLGB 00289/2438. *DuoResp® Spiromax® 320/9:* EU/1/14/920/004, PLGB 00289/2439. **Marketing Authorisation Holder/Business Responsible for Sale or Supply:** Teva UK Limited, Ridings Point, Whistler Drive, Castleford, WF10 5HX. **Job Code:** MED-GB-00056. **Date of Preparation:** October 2021.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard.
Adverse events should also be reported to Teva UK Limited on 0207 540 7117 or medinfo@tevauk.com.

BENEATH THE SURFACE

Plaque psoriasis is the most common type of psoriasis and can pose a significant impact on the day-to-day life of the individual experiencing it, including work and relationships, and even their ability to attain a good night's sleep or wear what they want. In this article, the Psoriasis Association provides an overview of the condition and shares an example of the emotional and physical effects of plaque psoriasis through a person with lived experience.

Most people with psoriasis have plaque psoriasis, either alone or in combination with another type. It gets its name from the 'plaques' that are formed by the build-up of skin cells. These can be very red, itchy and sore, with white or silvery scales. Plaques are very well demarcated, meaning that you can see where the plaque psoriasis starts and regular skin stops. Also, if you close your eyes and run your hand over the skin, you can clearly feel where each plaque begins and ends. The redness is caused by increased blood flow to the area, required for the speed in which the skin cells are being replicated. For some people, plaques of psoriasis may be thin or flat to the skin surface, whereas for others they may be much thicker.

HOW IS PLAQUE PSORIASIS TREATED?

While there is no cure for psoriasis, it can be treated and managed.

Plaque psoriasis can occur more or less anywhere on the body, but psoriasis on the palms and soles, or in areas where skin touches skin (such as in the armpits or genitals) is usually a different type. Different types of psoriasis – or psoriasis on different areas of the body – may need different treatments.

A large variety of treatments can be used to treat plaque psoriasis, depending on how severe the condition is, the age of the individual, and how much success they have had with other treatments. The range includes topical treatments, ultraviolet light therapy, systemic and biologic medications.

Psoriasis is unique to each individual, and a treatment that works for one person doesn't necessarily work for another. Because of this, treating psoriasis can be a process of trial and error, and it can be frustrating.

There may be times when the individual's psoriasis gets them down, and when it can be hard to be motivated to use any treatment at all. However, it's important that they are encouraged to regularly see their doctor to review their condition, and be honest about their treatment. It's the best way of making sure that they get to try as many treatments as possible, and find one that makes a difference to them.

TREATMENTS FROM A GP

Most people with psoriasis start their treatment under the guidance of a GP. Psoriasis treatment usually starts with topical (applied to the skin) treatments, which can come in different formulations (creams, ointments, gels, etc.) and have different active ingredients.

The main topical treatments include:

- Moisturisers and emollients
- Vitamin D-based topicals
- Topical steroids
- Coal tar preparations
- Calcineurin inhibitors

TREATMENTS FROM A DERMATOLOGIST

If psoriasis is severe, or if various types of topical treatments don't work, a GP can provide a referral to a dermatologist who may recommend:

- Ultraviolet light therapy
- Systemic treatments
- Biologic treatments

EMMA'S STORY

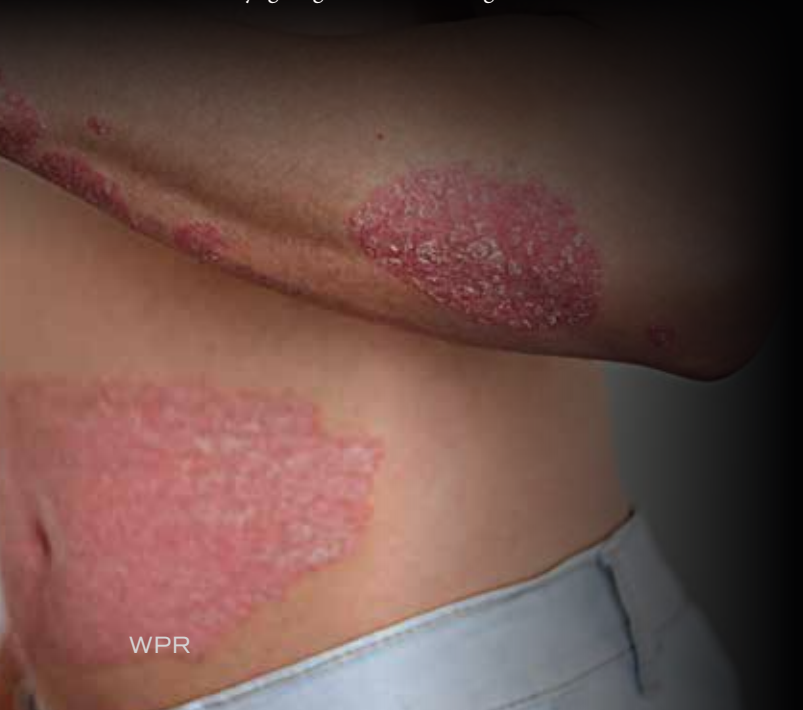
Emma shares her experiences of plaque psoriasis, how she manages the condition, what she'd most like other people to know, and advice which should be given to the newly-diagnosed.

HOW DOES PLAQUE PSORIASIS AFFECT YOU?

For many years it was quite a big burden and big deal, but the more I've got to understand the disease, and understand different treatments and how to watch out for my own triggers, I've actually come to embrace it and accept myself for how I am. It is a part of me now, but it's not all of me. It's actually helped me to learn to respect my body a lot more, understand how I need to look after myself better and, I think, just made me more of a resilient, strong person, which is pretty great really.

HOW DO YOU MANAGE YOUR PLAQUE PSORIASIS?

For years I was using different ointments, moisturisers, creams, lotions. I tried UVB light therapy three times, which in the short-term was great, but I found that I had worse flares after I'd finished having it. I've tried many diets. So now I'm taking methotrexate, which is an immunosuppressant drug, and I have that via subcutaneous injections every week. To help with side-effects I take folic acid, and I also take vitamin D because vitamin D is great. But on top of that, I've completely cut out drinking, which was huge for me, and I make sure I look after my diet and body the best I can: meditation; yoga; light exercise; eating a more balanced diet.



WHAT DO YOU WISH OTHER PEOPLE KNEW ABOUT LIVING WITH PLAQUE PSORIASIS?

The main thing, number one always, is that it's not contagious. There is no way we can pass it on to you. Secondly, there is no cure and, if there was, we all would've taken it by now. And also understanding that it's more than what's on the skin. There are other health complications that come with psoriatic disease and it can be really, really severe, and chronic, and painful, so I think a lot more education and awareness is extremely beneficial so that people are more respectful about it, and a lot of us are more than happy to actually answer questions, so if you have any, just ask away.

WHAT ADVICE WOULD YOU GIVE TO SOMEONE WHO HAS JUST BEEN DIAGNOSED WITH PLAQUE PSORIASIS?

Don't panic. It might feel like the end of the world, it will be terrifying, confusing and daunting, but there is so much information and support available out there. There's a wonderful community of people online ready to welcome you with open arms and share their experiences and guide you through the processes of everything.

Research – research is huge. Get to understand the disease and then get to understand your triggers and how your body reacts to certain things. Push and push and push with healthcare professionals. Don't just accept the first treatment they give you as being the treatment. It won't be the case. Everybody's bodies work differently.

With medication, one size doesn't fit all. For you it might be diet, it might be medication, either or, doesn't matter. Listen to your body, get to understand it, and know how best to treat yourself. And just remember that it doesn't make you hideous or a monster or anything else you might think or feel. You're still beautiful, wonderful, awesome. You're accepted, you're loved. It's just an extra part of you, but it doesn't have to control you. You're the one in control of it.

ABOUT THE PSORIASIS ASSOCIATION

psoriasis association

We are the leading national charity and membership organisation for people affected by psoriasis in the UK. Through our work, we help people whose lives are affected by psoriasis and psoriatic arthritis. We do this through funding research, providing information and raising awareness.

For more information, visit www.psoriasis-association.org.uk, email mail@psoriasis-association.org.uk, or telephone 01604 251 620.

@psoriasisUK ***@psoriasisuk*** ***PsoriasisUK***

PROMOTION

WHO HAS THE TIME TO CHECK PROFITABILITY AGAINST TARIFF?

As the current market conditions continue to result in a squeeze on margin, the importance of profitability, not just best price, is paramount, but who has the time to check pricing against tariff for every item they dispense? This is where membership of a not-for-profit buying group, with its members interests at its core, can have real tangible benefits. Richard Stephenson, Managing Director at Edinpharm, talks to WPR about how the group is helping to protect margins, and much more.

Richard Stephenson

HOW ARE EDINPHARM HELPING INDEPENDENT PHARMACIES WITH SUPPLY AND PRICING?

We provide a simple, time-saving, and cost-effective Order Management System, with a one-click order to multiple suppliers. We have close working relationships with our five main suppliers, and work with these suppliers to ensure that each member receives what they need, at a competitive price, with efficient delivery, regardless of their size.

But it's more than just this! We also check pricing against tariff and provide automatic pack switching, or substitutions from generic to brand, or even prevent orders from processing at all if the price is over tariff. These actions ensure that the pharmacy can dispense the most profitable item without having to spend the time checking all these details themselves, allowing them to spend more time with patients, providing services, or having a better work-life balance!

HOW ELSE ARE YOU SUPPORTING MEMBERS?

A pharmacy is a business, and that involves much more than just the core services to keep it running. So, we help with those other business areas too, like sourcing equipment, negotiating preferential rates on PMRs, stationery, labels and everyday consumables, all things essential to the business. We also enrol our members to Numark membership and contribute towards the Numark membership fee, again helping to ensure that services necessary to the running of the business are available at competitive prices.

The friendly 'family feel' of Edinpharm ensures that members feel comfortable to share ideas or discuss issues, and they regularly do! Support is available, not just from the membership group itself (whose team is always on hand), but from all of the other members, peers can provide an invaluable source of help and support if you're not sure where to find information.

WHAT DOES THE FUTURE HOLD FOR EDINPHARM?

Edinpharm have a desire to continue to support their members in the best way possible. Being a not-for-profit organisation is a unique benefit, as members can be sure that their membership fee is being invested for their benefit, and their benefit only. We are proud to say that we put our members first, and always will do. We continue to grow and evolve, with the flexibility to change when and where pharmacy and market conditions demand it.

INTERESTED IN FINDING OUT MORE ABOUT BECOMING A MEMBER?

We are more than happy to chat through the details of membership with anyone interested. We can be contacted by email, website or phone and from there we can discuss how membership may work for you.

For more information, contact www.edinpharm.com | joinus@edinpharm.co.uk |0131 441 3773.

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TIMES LIKE THESE

LATCH supports the children and their families who are being treated by the Oncology Unit at the Children's Hospital for Wales. As Chair of the LATCH Board, Susan A E Gwyer-Roberts shares her experiences in the role thus far – and looks forward to the opportunities lining the charity's path ahead.

Susan A E Gwyer-Roberts

Looking back over the past three years as chair, the journey has provided quite a rollercoaster of experiences and emotions for me – this includes learning so much about what is at the heart of LATCH, its core values, aims, and objectives.

I have enjoyed meeting the amazing medical and personnel teams in the University Hospital of Wales, and the staff that support, with total dedication, our patients and their families. I have also witnessed the devotion and care of our parents for their children in such difficult circumstances. This has all been while working with our staunch board of trustees and being steadfastly supported by the chairs of the sub-committees.

We realised LATCH's commitment of £1.3 million for the refurbishment of Rainbow Ward in September 2021, which has transformed the children's oncology ward for patients and their families, and for the medical and support staff that work there. This included structural improvements, day beds, enhanced theatre facilities, and the addition of ambulant lighting and distraction techniques.

We have been harnessing the collective expertise of our highly-valued social workers who work tirelessly to ensure family wellbeing and support and maintaining our services for those in the hospital and as outpatients in the face of the COVID challenges.

I have been observing the enthusiasm that Natalie and Viki and Helen, members of the LATCH administrative team, bring to their roles, and have been saying goodbye and sending best wishes to those staff that moved on to pastures anew in 2022.

In 2022, we welcomed Menai Owen-Jones, our consultant chief executive, and Lisa Davies, our consultant communications manager, and witnessed their inspiring contributions to the team. Also in 2022, we introduced Mrs Harriet Morgan, a legal specialist in charity law and governance, who has joined the board.

As you can see from our annual report 2021, the prudent financial management by our treasurer and by the Board of Trustees holds us in good stead to weather the difficulties that all charities will face in the coming years.

On behalf of the board and the LATCH team, may I take this opportunity to thank our branches, our supporters, our volunteers and our fundraisers for their passion, their unfailing commitment and total support for LATCH patients and families.

2023 sees the 40th anniversary of the establishment of LATCH, and a programme of events is being planned to mark this significant milestone, under the leadership of our fundraising and engagement officer, and supported by our trustees and our volunteers. It is our aim to bestow upon LATCH the resilience to weather the financial and social pressures that it will face in the years ahead, and thereby to build on the achievements of its first 40 years. We hope that as many of you as possible will be able to participate in the celebrations.

Let's make this a year to remember for LATCH.

ABOUT LATCH

LATCH supports the children and their families who are being treated by the Oncology Unit at the Children's Hospital of Wales, whose catchment area stretches from Chepstow in the South to Aberystwyth in the North. Around 70 new cases are diagnosed every year.

LATCH is most well-known for its on-site family accommodation at the University Hospital of Wales, Cardiff.

For more information, visit www.latchwales.org.

Welsh Pharmacy Awards 2023

WEDNESDAY 13TH SEPTEMBER

THE VALE RESORT, GLAMORGAN

The Sky's the Limit

As the sterling work of Wales' pharmacy profession shines brighter than ever, the 2023 Welsh Pharmacy Awards wants to put your work front and centre.

Another 12 months have swept by, providing another opportunity to marvel at the triumphs and trails which have been blazed by pharmacy professionals in Wales.

Whether it's the progression of a long-time project, the introduction of an exciting new initiative, or the steadfast contribution of your team within the community, the Welsh Pharmacy Awards is inviting you to showcase your excellence.

The 2023 ceremony is taking place on 13th September at the Vale Resort, Glamorgan – and with journalist and presenter Andrea Byrne once again at the helm of the proceedings, and many of the industry's most esteemed figures making an appearance, you won't want to miss out.

This year, 10 categories are open for entry. The application process couldn't be easier so please don't hesitate in sharing your successes and allow us to celebrate you in return.

Turn the page for this year's categories and how you can enter. Good luck!

Kyron Media

Welsh Pharmacy Awards 2023

The Vale Resort, Glamorgan

Wednesday 13th September

HOSPITAL PHARMACY TEAM OF THE YEAR

SPONSORED BY

Ethypharm

Last year's winner, the Pharmacy Team, Glangwili Hospital, with Paul Concannon, Ethypharm UK

INNOVATIONS IN SERVICE DELIVERY IN COMMUNITY PHARMACY (INDEPENDENT)

Last year's winner, Nrependra Singh and PharmDel, with Samantha Taylor and Chris Taylor, Numark

SPONSORED BY

NUMARK PHARMACY

To apply, visit www.welshpharmacyawards.info.

Welsh Pharmacy Awards 2023

The Vale Resort, Glamorgan

Wednesday 13th September

PHARMACY STUDENT LEADERSHIP

SPONSORED BY

pda

Last year's winner, Harvey John, Swansea University, with Alison Jones, the Pharmacists' Defence Association, and Professor Mark Gumbleton, Cardiff University

BUSINESS DEVELOPMENT OF THE YEAR

Last year's winner, the Caerau Pharmacy Team, Hermon Road, with Brian Chambers, AAH Pharmaceuticals, and Rhodri Thomas, Community Pharmacy Wales

SPONSORED BY

AAH

To apply, visit www.welshpharmacyawards.info.

Welsh Pharmacy Awards 2023

The Vale Resort, Glamorgan

Wednesday 13th September

PATIENT SAFETY DEVELOPMENT IN SECONDARY CARE

SPONSORED BY

CareFlow MEDICINES MANAGEMENT

Last year's winner, the Renal Medicines Service Team, South West Wales, with Alan Mutton and Gareth Bate, CareFlow Medicines Management

INDEPENDENT COMMUNITY PHARMACY PRACTICE OF THE YEAR

Last year's winner, the Fferyllwyr Llyn Cyf Team, Nefyn, with Joe McKenna, Cambrian Alliance Group, and Raj Aggarwal, the Aggarwal Group

SPONSORED BY

Cambrian Alliance Group

To apply, visit www.welshpharmacyawards.info.

Welsh Pharmacy Awards 2023

The Vale Resort, Glamorgan

Wednesday 13th September

FEMALE HEALTH INITIATIVE OF THE YEAR

SPONSORED BY

KENT PHARMA

Last year's winner, the Endometriosis CNS Team, Wales, with Rishi Johri, Kent Pharma, Beth Pucella, Specialist Endometriosis Nurse, and Elen Jones, Royal Pharmaceutical Society for Wales

MANAGEMENT OF SUBSTANCE DEPENDENCY

Last year's winner, Jonathan Smith, Mayberry Pharmacy, Newport, with Ken Sutherland, Ethypharm UK, and Amy David, Primary Care Pharmacist

SPONSORED BY

Ethypharm

To apply, visit www.welshpharmacyawards.info.

Welsh Pharmacy Awards 2023

The Vale Resort, Glamorgan

Wednesday 13th September

COMMUNITY PHARMACY PATIENT INITIATIVE (MULTIPLE)

SPONSORED BY

Kyron Media

Last year's winner, the Boots Mold Team, with Chris Flannagan, Kyron Media, and Elen Jones, Director for Wales, Royal Pharmaceutical Society

SUSTAINABILITY IN HEALTHCARE

NEW CATEGORY

SPONSORED BY

teva

To apply, visit www.welshpharmacyawards.info.

THE NEXT LEVEL

In this article, Claire Sambolino MSc, British Association for Nutrition and Lifestyle Medicine Communications Manager and Registered Nutritional Therapy Practitioner rCNHC, explores the role of nutrition in modulating dietary cholesterol.

Claire Sambolino

Cholesterol is a fatty substance carried in your blood by proteins. When cholesterol and proteins combine, they're called lipoproteins. Everyone has cholesterol and we need a certain amount to stay healthy because it plays an essential role in our body, however, it's important that cholesterol levels remain within healthy parameters and do not become elevated.

Cholesterol metabolism in humans is, however, complex. Cholesterol is either supplied from the diet (exogenous) or synthesised de novo by cells of the body (endogenous). Dietary cholesterol accounts for approximately one-third or less of the pooled body cholesterol, and the remaining 70-to-80 per cent is synthesised via a cascade of enzymatic reactions known as the mevalonate pathway which takes place in the liver. (1)

Most of the attention focused on cholesterol describes its potential for harmful health effects. However, cholesterol is necessary for preserving cell membranes, insulating nerve fibres, and producing hormones, vitamin D, and enzymes needed for digestion. (2) It is also an intrinsic element of brain health and cognition involved in the communication process for neurotransmitters, such as dopamine and serotonin, and makes up most of the myelin in the brain, the white fatty sheath that provides a protective coating on neurons to increase the brain's processing speed.

Understanding that cholesterol is both an essential lipid for mammalian cells whose homeostasis is tightly regulated, and a dietary fat that in excessive amounts can cause harm, is an important distinction when discussing cholesterol.

ENDOGENOUS CHOLESTEROL SYNTHESIS – WHAT YOUR BODY PRODUCES ITSELF

The liver is the major site of endogenous cholesterol synthesis and the pool of cholesterol in the liver is tightly regulated. The liver acts as the gauge for cholesterol levels in the body and reflects the input of cholesterol from the diet, the internal biosynthesis of cholesterol, the secretion and uptake of cholesterol from plasma lipoproteins, the conversion of cholesterol into bile, and the reuptake of biliary cholesterol and bile acids from the intestine to the liver, and then adjusts its production accordingly. Any disturbance or malfunction in the liver, such as non-alcoholic fatty liver disease, will impact this process alongside genetic disorders, such as familial hypercholesterolemia.

If this wasn't complex enough, cholesterol is not one singular lipid but a family of fats, each of which perform different functions:

- LDL (low-density lipoprotein) and VLDL (very-low-density lipoprotein) cholesterol, often referred to as 'bad' cholesterol, makes up most of the body's cholesterol
- HDL (high-density lipoprotein) cholesterol, often referred to as 'good' cholesterol, which helps remove cholesterol from the arteries and prevent fatty build-up by absorbing cholesterol in the blood and carrying it back to the liver to be flushed from the body
- Triglycerides, a type of fat (lipid) found in the blood. Triglycerides store unused calories and provide the body with energy
- Total cholesterol – roughly calculated as HDL, plus LDL, plus one-fifth of total triglyceride

These can all be checked with a simple blood test through the individual's GP. Elevated cholesterol levels (hypercholesterolemia) are harmful as high levels of LDL cholesterol and triglycerides in the blood can lead to the creation of plaques which stick to the artery walls and may contribute to hardening of the arteries or thickening of the artery walls (atherosclerosis). This increases the risk of stroke, heart attack and heart disease, as well as more general metabolic dysregulation, overweight and obesity.

From a health perspective, maintaining the ratio of LDL / HDL cholesterol, and maintaining triglycerides within a healthy range, is the primary focus of interventions to reduce high cholesterol levels.

DIETARY CHOLESTEROL – THE ADDITIONAL CHOLESTEROL YOU EAT

As already mentioned, dietary cholesterol accounts for circa 20-to-30 per cent of total cholesterol in the body which is typically less than most people realise.

CHOLESTEROL

Foods which contain cholesterol are those with a higher saturated fat content, such as dairy foods, animal fats, fatty meats, baked goods, fried foods, ultra-processed foods, and those containing high levels of free sugars which are both easily converted by the body into fat and directly influence endogenous cholesterol production. (3)

Bearing this in mind, the major factors in the diet that may increase blood cholesterol levels are high intakes of foods containing saturated fats, and excessive calories (glucose). Increased dietary cholesterol intake may result in increased serum cholesterol in some individuals, while in others, dietary cholesterol may be less significant as compared to endogenous levels (it's very individual with marked variability between individuals).

Dietary approaches to support hypercholesterolemia include modifying macronutrient composition and energy (glucose) restriction as follows:

- Optimise intake of healthy fats: polyunsaturated fatty acids and monounsaturated fatty acids (4)
- Reduce intake of saturated fatty acids and ultra-processed foods (4)
- Reduce intake of free sugars and high glycemic index carbohydrate foods (5, 6)
- Optimise intake of high fibre foods, such as whole grains and fibre-rich plant foods (6, 7)
- Energy restriction where applicable to the individual's abdominal body fat mass (8)
- Encourage regular physical activity (9)
- Ensure adequate hydration

NUTRITION PRACTITIONERS SUPPORTING HYPERCHOLESTEROLEMIA

Although dietary cholesterol accounts for less than endogenous production, modifying the diet has been shown to have positive results in reducing LDL cholesterol. Adhering to a Mediterranean diet high in fibre and plant foods may reduce LDL cholesterol and lower inflammatory markers. (10) Improved diet, glucose and lipid control and healthy weight maintenance is also recommended to reduce LDL cholesterol. (11)

BANT nutrition practitioners combine a network approach to complex systems, incorporating the latest science from genetic, epigenetic, diet and nutrition research to inform individualised recommendations and support patients with cardiovascular health, including hypercholesterolemia and related conditions of obesity and weight management, diabetes, and blood sugar control.

To find a registered nutritional therapy practitioner, and for more resources on making healthier food choices, visit www.bant.org.uk.

ABOUT BANT

BANT is the leading professional body for registered nutritional therapy practitioners in one-to-one clinical practice and a self-regulator for BANT registered nutritionists®. BANT members combine a network approach to complex systems, incorporating the latest science from genetic, epigenetic, diet and nutrition research to inform individualised recommendations. BANT oversees the activities, training and Continuing Professional Development of its members.

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BANT®
British Association for Nutrition and Lifestyle Medicine

IN THE BLINK OF AN EYE

With dry eye disease being synonymous with a host of uncomfortable and stressful symptoms – yet often low on the radar when it comes to patients' awareness of the causes and courses of action to take – greater education is key. Glaucoma UK help WPR unfold the facts of the condition further.

Dry eye is a common disease where a problem with tears causes inflammation and damages the eye's surface.

It's hard to say how many people have dry eyes. Estimates range from one-in-20 to 10-in-20, but are typically around two-in-20 adults. Women, older people, and those with certain conditions like Sjögren's syndrome or rosacea, are more likely than others to get it.

Some medications increase the risk of dry eyes. For example, 12-in-20 people taking eye drops for glaucoma have dry eyes. This is because, over time, the drops can damage the eye's surface and the glands that make tears.

People with dry eyes might have:

- Watering eyes
- Heavy, tired eyes
- Sandy, gritty feeling
- Red, sore, stinging or burning eyes
- Blurred vision
- Difficulty reading or using computers
- Sensitivity to light
- Discomfort wearing contact lenses

The eye's surface is constantly bathed in a thin film of tears that helps protect it. Tear film has three layers:

- An inner mucous layer made by the conjunctiva
- A middle watery layer made by lacrimal glands in the upper eyelid
- An outer oily layer made by meibomian glands in both eyelids

In dry eye disease, there's too little of one or more of these layers. The most common type of dry eye disease involves meibomian gland dysfunction, causing too little oily tears. The oily layer of tears acts as a waterproof barrier. When there's too little of it, watery tears evaporate more quickly, drying the eye. The eye's natural reaction is to make more watery tears. It's

DRY EYE DISEASE

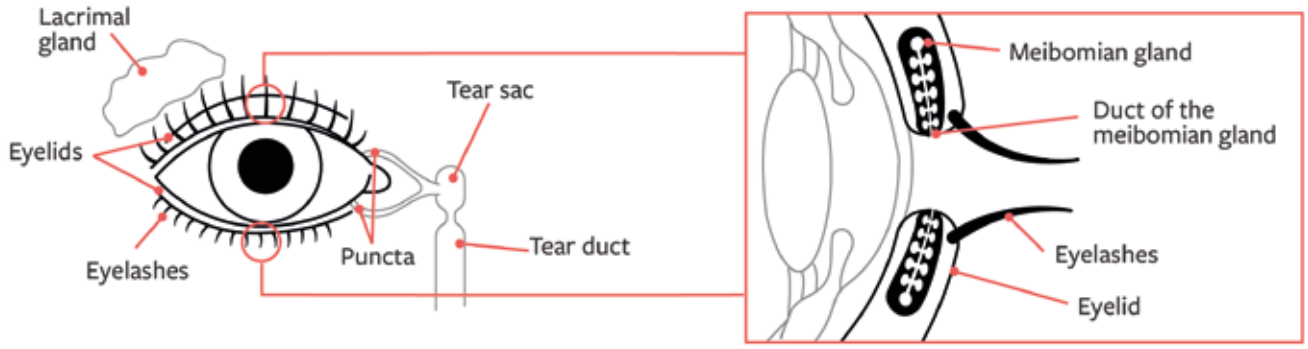

Image provided by Glaucoma UK – visit www.glaucoma.uk to learn more

dry eye, even though the eye might be streaming. The other type is when the lacrimal glands make too little watery tears. Both types can happen together. Managing dry eye disease means repairing the tear film and reducing inflammation.

TIME FOR ACTION

Using warm compresses and gently massaging the eyelids twice daily helps get oily tears out of the glands and onto the eye. People can make their own using a clean flannel heated in water that's been boiled and cooled to a comfortable temperature. Alternatively, they can buy heated eye bags from pharmacists.

Over-the-counter artificial tears replace natural tears. They come as eye drops, ointments, gels or sprays.

Blinking helps spread tears over the eye. It's easy to forget to blink when using screens. The tips below may help:

- Put screens just below eye level
- Use the 20:20:20 rule: every 20 minutes, spend 20 seconds looking at something at least 20-feet away

Anything that dries or irritates eyes makes dry eye disease worse. Encourage people to try, for example:

- Avoiding smokey places and air conditioning
- Taking a break from contact lenses
- Wearing glasses outdoors
- Using humidifiers in heated buildings

Lifestyle matters. Drinking plenty of water, eating a diet rich in omega-3 fatty acids and getting enough sleep help with making tears. Conversely, alcohol and spicy foods might block the meibomian glands, reducing oily tears. Excessive stress may worsen symptoms.

Prescribed treatments for dry eye disease include:

- Anti-inflammatory eye drops, such as steroids or ciclosporin
- Punctal plugs or punctal cautery to block the tear duct, preventing tears draining

If glaucoma eye drops are causing dry eyes, changing glaucoma treatment can help. There are many types of glaucoma eye drops to choose from, including preservative-free ones. Often, it's the preservative, rather than the drug itself, that causes dry eye. Other glaucoma treatments, like laser or surgery, might reduce the need for drops.

Dry eye disease can cause people substantial discomfort and distress. For example, people with glaucoma are often more bothered by dry eyes than by glaucoma. Glaucoma is a group of eye diseases where the optic nerve has become damaged. The optic nerve takes information from the eye to the brain, so damage to it leads to permanent sight loss. It's understandable why dry eyes might bother people more. Glaucoma usually happens slowly. In its early stages, glaucoma sight loss may go unnoticed. Glaucoma might lead to sight loss in the future, but dry eye disease causes symptoms right now. Some people stop using glaucoma eye drops, putting themselves at risk of sight loss. Others suffer in silence.

The most valuable thing you can do is start an open and supportive conversation. Ask people if they have dry eyes. Talk about what dry eye disease is and how to manage it. If they're using glaucoma eye drops, ask about how they're getting on with their eye drops and explain why they should keep using them to protect their sight. Encourage them to raise dry eyes with their eye specialist. Such conversations help people manage dry eyes, improving their quality of life. And, for people with glaucoma, they could help prevent sight loss.

Glaucoma UK is developing new resources to support healthcare professionals to have conversations like this. For more information, visit www.glaucoma.uk.

ABOUT GLAUCOMA UK

Glaucoma UK is the charity for people with glaucoma. We're here for people with glaucoma and their loved ones. We campaign to raise awareness so glaucoma is detected early and can be treated. We support people to live well with glaucoma, and we fund sight-saving research.

We are a membership organisation, and those living with glaucoma are at the very heart of all we do. We support people to live well with glaucoma by providing a telephone helpline, glaucoma support groups, peer support services, and widely-acclaimed information booklets.

For more information, visit www.glaucoma.uk or call the Glaucoma UK helpline on 01233 64 81 70 (Monday-to-Friday, 9.30am-to-5pm.

Simultaneously support **all three layers** of the tear film with Viscotears® **Tri Action**[1]

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1. Viscotears® Tri Action Instructions for Use. March 2021. v1.1-V

Date of Preparation: October 2022

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THE PHARMACISTS' DEFENCE ASSOCIATION

SAFETY FIRST

Keeping patients safe is key to the role of every pharmacist in Wales, but less-than-safe working conditions risk harm to patients as well as damaging consequences for pharmacists, such as impacting on their physical or mental health. Here, the Pharmacists' Defence Association delve deeper and present the findings from the Safer Pharmacies Survey 2022.

The Pharmacists' Defence Association (PDA) is constantly supporting members who experience challenging conditions and less-than-optimal physical work environments, which not only impact patient safety but can impact pharmacists' physical and mental health and wellbeing. To help address these issues and enable them to take a proactive approach to support its members, the PDA created the Safer Pharmacies Charter.

The Safer Pharmacies Charter was launched in 2017 and since then a Safer Pharmacies Survey has been conducted annually to monitor how practise compares to the charter. Combined with handling around 5,000 calls to the PDA's Member Support Centre each year, the PDA can therefore comment from a uniquely-informed position on the state of safe practice environments for pharmacists, and where risk to patient safety occurs. The most recent Safer Pharmacies Survey, conducted in late 2022, saw an increase in participation, in line with the PDA's growing membership numbers.

By design, the Safer Pharmacies Charter commitments are very basic safety factors that always be in place. For each basic element of safe practise detailed in the charter, pharmacists are asked to say if in their actual experience over the preceding 12 months the commitment has been in place: 'All of the time'; 'Most of the time'; 'About half the time'; 'Minority of the time'; or 'None of the time'.

For example, one of the charter commitments concerns Safe Staffing. This is defined in the charter as meaning, 'Staffing levels will be sufficient to allow all legal, contractual and regulatory obligations to be met; to meet the workload involved in following standard operating procedures and to carry out other work in accordance with the organisation's expectations. All staff must be suitably trained and competent to carry out the pharmacy work they are involved in. Providing enough suitably-trained staff improves patient safety, quality of care and service.'

Only seven per cent of pharmacists practising in Wales who responded to the 2022 survey said that this was the situation all of the time. This means that, at least some of the time, for 93 per cent of pharmacists staffing levels were insufficient to allow all legal, contractual and regulatory obligations to be met; to meet the workload involved in following standard operating procedures and to carry out other work in accordance with the organisation's expectations and / or at least some staff were not suitably trained and competent to carry out the pharmacy work they are involved in. 11 per cent said in their experience over the previous year, there was NEVER safe staffing.

The PDA recognise that faced with such conditions pharmacists will sacrifice their own wellbeing to keep patients safe and that this is a major contributory factor to the number of experienced pharmacists who are reducing their working time, becoming locums rather than employees, or leaving practise entirely.

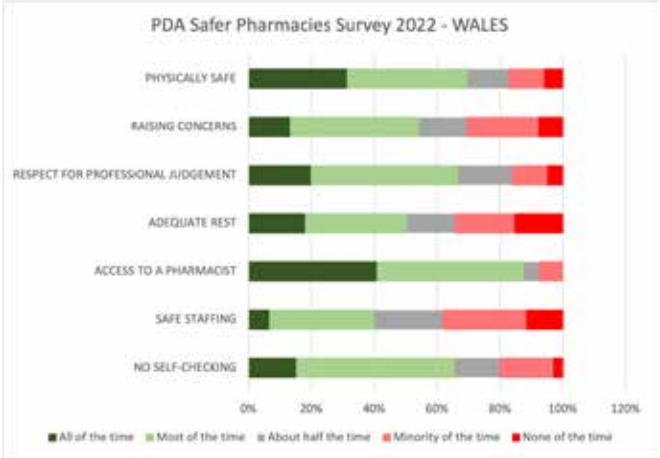
Overall results from pharmacists in Wales were:

	All of the time	Most of the time	About half the time	Minority of the time	None of the time
NO SELF-CHECKING	15%	50%	14%	17%	3%
SAFE STAFFING	7%	33%	22%	27%	11%
ACCESS TO A PHARMACIST	41%	47%	5%	8%	0%
ADEQUATE REST	18%	32%	15%	19%	15%
RESPECT FOR PROFESSIONAL JUDGEMENT	20%	47%	17%	11%	5%
RAISING CONCERNS	13%	41%	17%	11%	5%
PHYSICALLY SAFE	31%	38%	13%	11%	6%

The General Pharmaceutical Council regulates pharmacy owners as part of their purpose to make sure patients receive safe and effective pharmacy care and have trust in pharmacy. Yet, conditions are allowed to exist where these basic elements of safe practise are not present. This makes it harder for individual employed or locum pharmacists to challenge poor conditions.

If each of these basic conditions is not present it should also be of significant concern to the Welsh government and NHS Wales, and of course to patients and their families.

If Wales is to have the pharmacist workforce necessary to care for patients, decision-makers must ensure these basic safety elements are in place in every pharmacy, all the time.



Safer Pharmacies Charter

Keeping patients safe is key to the role of every pharmacist. But less than safe working conditions risk harm to patients as well as damaging consequences for pharmacists, such as impacting on their physical or mental health.

The seven commitments in the charter should be standard practice whenever and wherever pharmacy work is carried out. It defines basic standards to ensure safe practice wherever pharmacists work.

The seven commitments are:

1. NO SELF-CHECKING

Where pharmacists are directly involved in dispensing, or other processes requiring a high degree of accuracy, a suitably trained and competent member of staff will be readily available in the pharmacy at all times to provide an independent accuracy check. When, in the most exceptional circumstances, no such second member of staff is present, the pharmacist must ensure adequate separation of the dispensing and final checking process.

An independent second check improves patient safety by preventing errors.

2. SAFE STAFFING

Staffing levels will be sufficient to allow all legal, contractual and regulatory obligations to be met; to meet the workload involved in following standard operating procedures and to carry out other work in accordance with the organisation's expectations. All staff must be suitably trained and competent to carry out the pharmacy work they are involved in.

Providing enough suitably trained staff improves patient safety, quality of care and service.

3. ACCESS TO A PHARMACIST

A pharmacist is traditionally one of the few healthcare professionals accessible to patients without an appointment. A pharmacist must be available wherever patients expect immediate access to face-to-face expert advice on any medicines-related matters. The pharmacy owner or employer will meet this expectation by ensuring a pharmacist is available to patients and present in the pharmacy throughout its hours of operation.

Pharmacists are the experts in medicines and must be present to ensure that medicines provided to patients are safe and appropriate.

4. ADEQUATE REST

Pharmacists must be able to take at least their statutory and contractual breaks and rest periods, and additional breaks as required to meet their professional obligations. Pharmacists will be enabled to take these without interruption and will not be placed under any direct or indirect pressure to forfeit.

To keep patients safe, pharmacists must be alert at work.

5. RESPECT FOR PROFESSIONAL JUDGEMENT

Pharmacists will be enabled and encouraged to exercise professional decision-making in the workplace, so that patient safety and professional standards can be placed above any commercial or other operational considerations. Organisational and other targets must not inhibit professional autonomy.

As health professionals, pharmacists put patients' health first.

6. RAISING CONCERNS

Pharmacists will be able to raise concerns without reprisal or fear. This will be facilitated by a supportive, open and receptive organisational culture. Issues identified will be promptly addressed and robust and enduring solutions implemented without delay.

Concerns at work which could impact on patient safety need to be raised and resolved without delay.

7. PHYSICALLY SAFE

Pharmacists will not have to work in the pharmacy alone and will have access to the necessary support at all times to perform their roles. Risks will be assessed and preventive measures put in place so that patients and staff are safe – and can feel safe. A zero-tolerance approach will be taken to violence or abuse of pharmacists and other pharmacy staff.

Pharmacies need to be safe places for patients, pharmacists and everyone.

PROMOTION

OPPORTUNITY KNOCKS

In this article, Jon Booth, Director – Pharmacy, North, and Jonathan Board, Director – Pharmacy, South, present an overview of the Welsh pharmacy market on behalf of Christie & Co.

Jon Booth

Of the 715 pharmacies registered with the General Pharmaceutical Council (as of 1st March 2023), nearly half of these (47 per cent) are operated by independent contractors. Encouragingly, the appetite for such independent pharmacy opportunities continues unabated with a constant churn of businesses as new investors and operators see long-term confidence in the Welsh pharmacy sector.

While the pandemic years certainly presented challenges to the sector, beyond those seen in the wider economy, from drug shortages, funding, staffing and the general activity having increased due to more restricted GP access, many still see pharmacy as a safe haven for long-term investment and opportunity.

More recently, the sector across Wales and the UK as a whole has seen large-scale disposals by several corporate operators, as they look to sell off what, in their eyes, have been marginal or non-performing assets. Due to their scale, their need to adopt a 'one-size-fits-all' approach places them at a disadvantage to independent operators who are able to dial into their local patient and community needs in delivering consistency, a more personalised approach to patient engagement, and a plethora of services. As such, where corporate disposals have taken place there has been a steady stream of independent operators eager to take over and develop the businesses further.

Alongside corporate disposals, the independent sector has also fared well, with a range of opportunities currently available, from small independent single-asset sales, to larger group opportunities operating a number of pharmacies within a tight geographical area. Offering consistency in terms of service, day-to-day management and staffing, such businesses offer more security to many looking to buy pharmacies. To add to this, the collaborative support the sector has seen from the Welsh Assembly, none more so than during the COVID-19 pandemic, when pharmacies do come to market interest is readily generated.

A recent example of this is the sale of Hanfords Chemist Limited in Llansamlet, Swansea, which completed in May 2023. A busy health centre pharmacy, independently owned for the last 26 years, the pharmacy dispenses circa 18,400 items per month. The business was placed on the market in July 2022 which, after a brief marketing campaign, generated three offers. A sale was subsequently agreed to a regional independent group operator, in excess of the initial guide price.

So, who is buying? Thanks to an abundance of stock on the market, we are seeing interest from both first-time buyers and new market entrants as well as existing operators looking to expand their portfolios.

In the North, buyers are particularly interested in hotspots, such as Llandudno and Wrexham, while in the South, it is Cardiff given the capital's high population and good transport links. The Welsh School of Pharmacy is also located in Cardiff, resulting in a wealth of industry professionals in the city. We are also seeing interest along the M4 from Newport through to Swansea with their relative accessibility through the main Motorway and A roads network.

If you would like to know more about the Welsh pharmacy market, or for a confidential chat about your pharmacy business, contact: North Wales – Jon Booth: jon.booth@christie.com / 07703 607 122, or South Wales – Jonathan Board: jonathan.board@christie.com / 07775 807 071.

Jonathan Board

In the first 4 months of 2023,
our specialist Pharmacy team has...

Generated **174 offers** on **90 pharmacies**

Completed **26 sales** with a combined value of **c. £27 million**

Agreed sales on **68 pharmacies** with a combined value of **c. £50 million**

What do our clients have to say about us?

Following a recommendation to Christie & Co from a friend, I found Jonathan approachable and reassuring throughout the whole process, and I could not have put the sale in better hands. I would have no hesitation in recommending him to anyone thinking about selling their pharmacy in the future. I am absolutely delighted to have sold my business and look forward to a long and peaceful retirement.

Patricia Edmunds
Former owner of Hanfords Chemist Ltd

If you're thinking of selling your **pharmacy business,** speak to the experts:

JON BOOTH
Director – North Wales
T: +44 (0) 7703 607 122
E: jon.booth@christie.com

JONATHAN BOARD
Director – South Wales
T: +44 (0) 7775 807 071
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NEWS

GRANT SET TO BOOST RESEARCHER'S MISSION TO EXPLORE NERVE DAMAGE IN THE BRAIN

Dr Roberto Angelini has become the latest academic at Swansea University to receive the prestigious Academy of Medical Science Springboard Award.

The Springboard offers a bespoke package of support to biomedical researchers at the start of their first independent post to help launch their research careers. This includes funding of up to £100,000 over two years and access to the academy's acclaimed mentoring and career development programme.

Dr Angelini is a specialist in lipidomics, a science that marries the chemistry, biochemistry and biophysics of the cellular lipids – or fats – that function in our body.

Over the years, Dr Angelini has developed several methods for lipid analyses based on mass spectrometry, applying them to study rare diseases, cancer, and neurological disorders. Once you take away water, half the human brain is made of lipids. Conical lipids, or brain plasmalogens, can support vesicle fusion, required for nerve cells – or synapses – to fire signals along fibres. Plasmalogen levels reduce with age, and at a higher pace in Alzheimer's disease. Here, changes in plasmalogen levels occur earlier, probably causing progressive damage to nerves or neurodegeneration, which in turn gradually affects memory, sensation, and thinking.

The Springboard grant will allow Dr Angelini to cultivate nerve cells and build a model for measuring signal transmission between them and he hopes that this study could provide important evidence to support new therapies to treat neurodegeneration.

COMMUNITY PHARMACY SYSTEM INNOVATION FUND TO HELP DIGITISE PRESCRIPTIONS IN WALES

The Digital Medicines Transformation Portfolio and Life Sciences Hub Wales have launched a new fund to help the suppliers of digital community pharmacy systems in Wales deliver an electronic prescription service (EPS).

The introduction of an EPS in primary care in Wales will make the prescribing and dispensing process safer, easier, and more efficient for patients and healthcare professionals. The work is a key part of the Digital Medicines Transformation Portfolio which is hosted by Digital Health and Care Wales. It will enable prescribers (such as GPs) to send prescriptions electronically to a dispenser (such as a community pharmacy) of the patient's choice.

To accelerate the delivery of this exciting service improvement, a Community Pharmacy System Innovation Fund has been established to provide grants. These will help suppliers of community pharmacy systems to develop their systems to use EPS and receive the electronic transfer of prescriptions. The Community Pharmacy System Innovation Fund also lets applicants submit bids for financial support to deliver innovations that will result in paperless dispensing and integration with the new NHS Wales app.

The fund will be delivered by Life Sciences Hub Wales in partnership with the Digital Medicines Transformation Portfolio on behalf of the Welsh government.

Digital Medicines Transformation Portfolio Senior Responsible Owner, Hamish Laing, commented, 'We are excited to be launching this fund which provides a crucial opportunity to support not just the technical changes needed to implement EPS in Wales but also improvements that will help modernise pharmacy practice and provide a much better service and experience for patients.'

The fund is open until October 2024, and community pharmacy system suppliers are invited to bid across three tiers.

Community pharmacy system suppliers can find out more about the fund, eligibility criteria, and how to apply, by visiting Life Sciences Hub Wales' website or contacting fundingsupport@lshubwales.com.

NEW BOWEL CANCER TOOLKIT LAUNCHED FOR COMMUNITY PHARMACIES IN WALES

Bowel Cancer UK has worked in partnership with community pharmacy staff in Wales to create a free toolkit to help promote early diagnosis of bowel cancer and encourage uptake of bowel cancer screening.

The bilingual toolkit includes:

- Posters about the signs and symptoms of bowel cancer
- Shelf end information pads
- 'Have you completed your bowel screening test?' stickers to use on pharmacy bags
- Credit card-sized information leaflets about bowel cancer and bowel cancer prevention to give to customers
- A bowel screening test kit for demonstration and a step-by-step guide on how to use the test kit
- A guide to speaking with customers about bowel health, bowel cancer and bowel screening

Bowel cancer is the second biggest cancer killer in Wales, but it shouldn't be because it's treatable and curable, especially if diagnosed early. Nearly everyone survives bowel cancer if diagnosed at the earliest stage, however this drops significantly as the disease develops.

Sian Salkeld, Wales Programme Lead, said, 'Pharmacies can play an essential role in supporting early diagnosis. At the forefront of healthcare and often the first port-of-call, pharmacy teams are ideally placed to raise awareness about bowel cancer – in particular the symptoms and the NHS Bowel Screening Programme. We've worked with community pharmacies to create a toolkit that provides staff with everything they need to help improve awareness of bowel cancer within their community.'

The charity has also produced a free short course for community pharmacy staff in Wales, available in English and Welsh. Taking just one hour to complete, the online course helps pharmacy staff understand the symptoms of bowel cancer, prevention advice, the importance of taking part in bowel screening, as well as facts and figures about the disease and the impact of COVID-19 on bowel cancer services in Wales.

For more information, visit www.bowelcanceruk.org.uk/about-us/what-we-do/our-work-in-wales.

IN THE NEXT BREATH

Committed to increasing awareness of asthma and its public health consequences, the Global Initiative for Asthma highlight a number of the chief concerns likely to be expressed by patients, in addition to the guidance update helping to empower the future of the condition's care.

WHAT CAUSES ASTHMA?

The causes of asthma are not fully understood. Its symptoms are caused by inflammation, which makes the airways red, swollen, narrower and extra-sensitive to irritants. Asthma is probably usually caused by a mixture of hereditary factors (those individuals are born with) and environmental factors, but how these factors work together is still largely unknown.

Allergens from house dust mites and pets are the most common causes, but many other allergens, such as pollen and moulds, can cause asthma. Some people with asthma have no obvious allergies.

WHAT CAUSES ASTHMA SYMPTOMS OR AN ASTHMA ATTACK?

Some causes of symptoms (triggers) are common to all people with asthma, and some are more individual, especially allergens. There are very big differences between people in how easily and how severely they react. The severity of the symptoms or an attack can differ in the same person at different times, and treatment can also be more or less effective.

The patient's asthma does not stay the same, but changes over time, and every person with asthma has good days and bad days (or longer periods). However, if asthma is properly treated, there can also be long periods without symptoms or attacks.

WHAT ARE ASTHMA TRIGGERS?

Asthma triggers are factors that start asthma symptoms or an asthma attack by irritating the airways or worsening the inflammation in the airways. These triggers can provoke attacks in individuals who already have a tendency to asthma, but they are not necessarily part of the cause of that tendency.

The following triggers can cause asthma symptoms or start an asthma attack:

- Infections, usually those caused by a virus (e.g. colds or flu)
- Allergens, most commonly from house dust mites, pets or pollen
- Exercise, especially in cold weather
- Emotions, such as excitement, fear or anger
- Irritants, such as air pollution
- Smoking (people with asthma and the parents of asthmatic children should avoid smoking)
- Changes in the weather (e.g. a cold spell)
- Pressure on the chest
- Food additives, such as tartrazine (an artificial food colouring), or food allergens, such as peanuts (sensitised or allergic individuals can have a very severe allergic reaction)
- Certain medications (some people may be allergic to some drugs (e.g. aspirin))

When the airways have been inflamed for a long time, they become extra-sensitive. This means that they react faster and more strongly to various triggers, such as allergens, viruses, dust, smoke and stress.

WHAT ARE THE MAIN ASTHMA TRIGGERS?

Different triggers can start an asthma attack and people differ a lot in how easily and how severely they react. Some triggers (also called inciters) only cause tightening of the airways (bronchoconstriction) that lasts for just a short time. These triggers include:

- Exercise
- Cigarette smoke
- Changes in air temperature
- Laughing
- Strong smells

Other triggers (also called inducers) also increase the underlying inflammation of the airways, and may have longer-term effects.

Such triggers include:

- Allergens (e.g. pets, house dust mites and pollen)
- Infections (e.g. colds, flu)
- Certain chemicals

WHAT CHEMICALS, IRRITANTS OR OTHER SUBSTANCES TRIGGER ASTHMA?

Many irritating particles or chemicals in the air can trigger an asthma attack. Examples include:

- Cigarette smoke
- Diesel exhaust
- Perfume or other strong scents
- Household sprays
- Sulphur dioxide
- Grain or flour dust
- Sawdust

Many people with asthma who work at big industrial factories are often irritated by the poor air quality from the chemicals or fumes that are in the air. If this is affecting an individual then they should suggest to their employer to look into air systems to help stop asthma irritation by improving air quality.

However, there are very big differences between people in how easily and how severely they react. This depends on the severity of the asthma and how well it is treated.

CAN MEDICATIONS TRIGGER ASTHMA?

Only a few medications can trigger asthma. Patients should check with their doctor or pharmacist before starting any new medicine. And if their asthma symptoms are worse after starting a new medication, they should see their doctor immediately.

The most common medicines that can trigger asthma are:

- Aspirin (acetylsalicylic acid) and certain other non-steroidal anti-inflammatory drugs (NSAIDs), which are used as pain-relievers, and to treat arthritis and inflammatory conditions
- Beta-blockers, which are used to treat high blood pressure, heart conditions, migraines or anxiety

Not all patients with asthma react to aspirin or NSAIDs, so some people with asthma can use these drugs. However, beta-blockers are likely to cause asthma symptoms in all patients with asthma and should always be avoided.

CAN WEATHER CHANGES TRIGGER ASTHMA?

Yes, sudden weather changes (e.g. cold winds, humidity and storms) can trigger asthma in some people. Some of these sudden changes can cause the release of allergens, such as pollen, that can make asthma worse in people whose asthma is allergy-related. Cold air can also have a direct irritant effect on inflamed airways.

CAN INFECTIONS TRIGGER ASTHMA?

Yes, viral respiratory infections, such as colds or flu, can trigger asthma symptoms, particularly in children. Individuals should try to avoid contact with people if they know they have a respiratory infection.

CAN AN ALLERGIC REACTION TRIGGER ASTHMA?

Yes. Once an individual is sensitised or allergic, both indoor and outdoor allergens can cause asthma symptoms and attacks, as well as other allergic symptoms, such as sneezing or a runny nose. It is therefore important for individuals to consider whether asthma is caused or worsened by allergens.

Exposure to even small amounts of airborne allergens can cause asthma symptoms. Repeated exposure may not only provoke symptoms, but may also be a cause of long-term (chronic) inflammation in the airways.

Proper advice about which allergens and environments which individuals should avoid can only be given after talking to their doctor and often after they have been tested for allergies.

IS ASTHMA A PSYCHOLOGICAL (PSYCHOSOMATIC) DISEASE?

No, asthma is not a psychological condition, it is a long-term (chronic) inflammatory disease that leads to extra-sensitive and easily irritated airways, especially when it is not properly treated.

Although asthma is not a psychological condition, emotional stress can trigger the symptoms. For example, financial problems, not enjoying their work or worrying about family can all help to trigger symptoms if somebody already has asthma.

WHY IS IT SOMETIMES SO HARD TO KNOW WHAT TRIGGERS AN ASTHMA ATTACK?

People with allergic asthma can often easily identify the most common trigger factor(s) for their asthma (e.g. pets or pollen). But many people with untreated or under-treated asthma have an underlying airway inflammation that they are hardly aware of. These people will react easily to many irritants, allergens and infections, and it can be difficult to identify the most important one.

If the asthma is provoked by more than one trigger at the same time, the reaction can be stronger than if they are only exposed to one trigger. For example, an airway infection may cause them to react to stimuli that they normally would not react to. This is why triggers, such as physical exercise, strong smells, plants, chemicals, smoke, weather changes, anxiety, stress, and some medications, can sometimes cause an asthma attack and sometimes cause no symptoms.

2022 GINA REPORT – GLOBAL STRATEGY FOR ASTHMA MANAGEMENT AND PREVENTION

The 2022 update of the Global Strategy for Asthma Management and Prevention incorporates new scientific information about asthma based on a review of recent scientific literature by an international panel of experts on the Global Initiative for Asthma (GINA) Science Committee. This comprehensive and practical resource about one of the most common chronic lung diseases worldwide contains extensive citations from the scientific literature and forms the basis for other GINA documents and programmes.

For more information, visit www.ginasthma.org/gina-reports.

ABOUT GINA

GINA works with healthcare professionals, patient representatives, and public health officials around the world to reduce asthma prevalence, morbidity, and mortality.

Through resources, such as evidence-based strategy documents for asthma management, and events, such as the annual celebration of World Asthma Day, GINA is working to improve the lives of people with asthma in every corner of the globe.

GINA was launched in 1993 in collaboration with the National Heart, Lung, and Blood Institute, National Institutes of Health, America, and the World Health Organisation.

GINA's programme is determined and its strategies for asthma care are shaped by committees made up of leading asthma experts and patient representatives from around the world.

For more information, visit www.ginasthma.org.

100/6 + 200/6 = £1.06 million

Luforbec could support annual cost improvements of £1.06 million on average per ICS/Health Board vs Fostair pMDIs NHS list price[1,2]

To discuss the cost improvement potential Luforbec could offer your ICS/Health Board and our price reassurance contact: **ukrespiratory@lupin.com**

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beclometasone/formoterol

100/6 & 200/6 Extrafine formulation

Carbon Neutral Product

CARBON NEUTRALITY ACHIEVED THROUGH CARBON OFFSETTING[3-5]

Luforbec 100/6 is indicated for adult asthma and COPD (FEV_1 <50% predicted normal)[6] Luforbec 200/6 is indicated for asthma in adults[7]

Prescribing Information: Luforbec® 100/6 and 200/6 pressurised metered dose inhaler (pMDI) Consult the full Summary of Product Characteristics (SmPC) before prescribing. Presentation: Pressurised inhalation solution. Luforbec 100/6 pMDI: Each dose contains beclometasone dipropionate (BDP) 100 micrograms (mcg) and formoterol fumarate dihydrate 6 mcg. Luforbec 200/6 pMDI: Each dose contains beclometasone dipropionate (BDP) 200 mcg and formoterol fumarate dihydrate 6 mcg. **Indications:** ***Asthma:*** Regular treatment of asthma where use of an inhaled corticosteroid/long-acting $beta_2$-agonist (ICS/LABA) combination is appropriate: patients not adequately controlled on ICS and as needed short-acting $beta_2$-agonist, or patients already adequately controlled on both ICS and LABA. ***COPD*** **(Luforbec 100/6 only):** Symptomatic treatment of patients with severe COPD (FEV_1 <50% predicted normal) and a history of repeated exacerbations, who have significant symptoms despite regular therapy with long-acting bronchodilators. **Dosage and administration:** For inhalation in adult patients (≥18 years); not recommended for children and adolescents under 18 years. ***Asthma:*** **Maintenance therapy:** Luforbec 100/6 pMDI: 1–2 inhalations twice daily. Luforbec 200/6 pMDI: 2 inhalations twice daily. The maximum daily dose is 4 inhalations, ensuring a separate short-acting bronchodilator is available as needed. Patients should receive the lowest dose that effectively controls symptoms. **Maintenance and reliever therapy (Luforbec 100/6 pMDI only):** Luforbec can be taken as a regular maintenance treatment and as needed in response to asthma symptoms: 1 inhalation twice daily (morning and evening) plus 1 additional inhalation as needed in response to symptoms. If symptoms persist after a few minutes, an additional inhalation is recommended. The maximum daily dose is 8 inhalations. Patients should be advised to always have Luforbec available for rescue use. Close monitoring for dose-related adverse effects is needed in patients who frequently take high numbers of Luforbec as-needed inhalations. ***COPD*** **(Luforbec 100/6 pMDI only):** 2 inhalations twice daily. Luforbec pMDI can be used with the AeroChamber Plus® spacer device. BDP in Luforbec is characterised by an extrafine particle size distribution which results in a more potent effect than formulations of BDP with a non-extrafine particle size distribution (100mcg of BDP extrafine in Luforbec are equivalent to 250mcg of BDP in a non-extrafine formulation). When switching patients from previous treatments, it should be considered that the recommended total daily dose of BDP for Luforbec is lower than that for non-extrafine BDP containing products and should be adjusted to the needs of the individual patient. **Contraindications:** Hypersensitivity to the active substances or to any of the excipients. **Warnings and precautions:** Not intended for initial management of asthma. Treatment should not be initiated during an exacerbation, or during significant worsening or acutely deteriorating asthma. Treatment should not be stopped abruptly. Medical attention should be sought if treatment is ineffective. Patients should be advised to take Luforbec every day even when asymptomatic. Treatment should be discontinued immediately if the patient experiences a paradoxical bronchospasm. Use with caution (which may include monitoring) in patients with cardiac arrhythmias, especially third degree atrioventricular block and tachyarrhythmias, aortic stenosis, hypertrophic obstructive cardiomyopathy, severe heart disease, particularly acute myocardial infarction, ischaemic heart disease, congestive heart failure, occlusive vascular diseases, arterial hypertension, aneurysm, thyrotoxicosis, diabetes mellitus, phaeochromocytoma and untreated hypokalaemia. Caution should be used when treating patients with known or suspected prolongation of the QTc interval (QTc > 0.44 seconds). Formoterol itself may induce QTc prolongation. Potentially serious hypokalaemia may result from $beta_2$-agonist therapy and may also be potentiated by concomitant treatments (e.g. xanthine derivatives, steroids and diuretics). Particular caution is advised in severe asthma as this effect may be potentiated by hypoxia. Formoterol may cause a rise in blood glucose levels. Luforbec should not be administered for at least 12 hours before the start of anaesthesia if halogenated anaesthetics are planned due to risk of arrhythmias. Use with caution in patients with pulmonary tuberculosis or fungal/viral airway infections. An increase in pneumonia and pneumonia hospitalisation in COPD patients receiving ICS has been observed. Clinical features of pneumonia may overlap with symptoms of COPD exacerbations. Systemic effects of ICS may occur, particularly at high doses for long periods e.g. Cushing's syndrome, Cushingoid features, adrenal suppression, decrease in bone mineral density, cataract and glaucoma and more rarely, psychological or behavioural effects including psychomotor hyperactivity, sleep disorders, anxiety, depression and aggression. Consider referral of patients reporting blurred vision or visual disturbances to an ophthalmologist as causes may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy. Prolonged treatment with high doses of ICS may result in adrenal suppression and acute adrenal crisis. **Interactions:** Possibility of systemic effects with concomitant use of strong CYP3A inhibitors (e.g. ritonavir, cobicistat) cannot be excluded hence caution and appropriate monitoring is advised. Beta-blockers should be avoided in asthma patients. Concomitant administration of other beta-adrenergic drugs and theophylline may have potentially additive effects, therefore exercise caution. Concomitant treatment with quinidine, disopyramide, procainamide, phenothiazines, antihistamines, monoamine oxidase inhibitors (MAOIs) and tricyclic antidepressants can prolong the QTc interval and increase the risk of ventricular arrhythmias. L-dopa, L-thyroxine, oxytocin and alcohol can impair cardiac tolerance towards $beta_2$-sympathomimetics. Concomitant treatment with MAOIs including agents with similar properties (e.g. furazolidone, procarbazine) may precipitate hypertensive reactions. Concomitant treatment with xanthine derivatives, steroids, or diuretics may potentiate a possible hypokalaemic effect of $beta_2$-agonists. Hypokalaemia may increase the likelihood of arrhythmias in patients receiving digitalis glycosides. There is a small amount of ethanol in Luforbec pMDI hence a theoretical potential for interaction in particularly sensitive patients taking disulfiram or metronidazole. **Pregnancy and lactation:** Use only during pregnancy or lactation if the expected benefits outweigh the potential risks. A risk/benefit decision should be taken to discontinue/abstain from therapy in the mother or discontinue breastfeeding. **Effects on driving and operating machinery:** Unlikely to have any effect on the ability to drive and use machines. **Side effects:** ***Common:*** Pharyngitis, oral candidiasis, headache, dysphonia. ***Uncommon:*** Influenza, oral fungal infection, oropharyngeal candidiasis, oesophageal candidiasis, vulvovaginal candidiasis, gastroenteritis, sinusitis, rhinitis, pneumonia (in COPD patients), granulocytopenia, allergic dermatitis, hypokalaemia, hyperglycaemia, restlessness, tremor, dizziness, otosalpingitis, palpitations, electrocardiogram prolonged QTc interval, ECG change, tachycardia, tachyarrhythmia, atrial fibrillation (in COPD patients), hyperaemia, flushing, cough, productive cough, throat irritation, asthmatic crisis, diarrhoea, dry mouth, dyspepsia, dysphagia, burning sensation of the lips, nausea, dysgeusia, pruritus, rash, hyperhidrosis, urticaria, muscle spasms, myalgia, C-reactive protein increased, platelet count increased, free fatty acids increased, blood insulin increased, blood ketone body increased, blood cortisol decrease (in COPD patients). ***Rare:*** Ventricular extrasystoles, angina pectoris, paradoxical bronchospasm, angioedema, nephritis, increased blood pressure, decreased blood pressure. ***Very rare:*** Thrombocytopenia, hypersensitivity reactions, including erythema, lips, face, eye and pharyngeal oedema, adrenal suppression, glaucoma, cataract, dyspnoea, exacerbation of asthma, peripheral oedema, decreased bone density. ***Unknown frequency:*** Psychomotor hyperactivity, sleep disorders, anxiety, depression, aggression, behavioural changes (predominantly in children), blurred vision. Refer to SmPC for full list of side effects. **Legal category:** POM **Price and Pack:** £20.52 1x120 actuations. **Marketing authorisation (MA) No(s):** PL 35507/0204, 35507/0205 **MA holder:** Lupin Healthcare UK Ltd, The Urban Building, Second Floor, 3-9 Albert Street, Slough, Berkshire, SL1 2BE, United Kingdom. **PI Last Revised:** June 2022. AeroChamber Plus® is a registered trademark of Trudell Medical International.

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Ref: 1. NHS BSA. Drug Tariff. https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff Accessed: October 2022. **2.** UK General Practice Prescribing Data July 2021 - June 2022 https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/. **3.** Carbon Footprint Limited, Life Cycle Assessment Report 2022. Data on File. **4.** Certifications of carbon neutrality for Luforbec 100/6 & 200/6 pMDI. **5.** MIMS: Inhaler Carbon Emissions. https://www.mims.co.uk/inhaler-carbon-emissions/respiratory-system/article/1739635. Accessed: October 2022. **6.** Luforbec 100/6 pMDI. Summary of Product Characteristics (SPC). Lupin Healthcare UK Limited. **7.** Luforbec 200/6 pMDI. Summary of Product Characteristics (SPC). Lupin Healthcare UK Limited. Fostair® is a registered trademark of Chiesi Ltd

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RISKY BEHAVIOUR

Anita Smith, Clinical Advisor for the Royal College of Speech and Language Therapists, talks to WPR about the potential repercussions of a dysphagia diagnosis – particularly among the elderly population – and the effectiveness of a multidisciplinary approach in the assessment and management of the condition.

Anita Smith

TO WHAT EXTENT CAN AGEING IMPACT THE POSSIBILITY OF DYSPHAGIA BEING DEVELOPED AND WHY?

Dysphagia is not a disease, but a symptom of a disease, for example dysphagia (difficulty eating, drinking, or swallowing) can be associated with neurological impairments, such as Parkinson's Disease or Motor Neurone Disease.

An estimated 50-to-75 per cent of nursing home residents have some difficulty swallowing. (1)

As a person ages, their body goes through anatomical changes in muscle mass and function, which means that the muscles that we use for eating, drinking, and swallowing can become weaker or not move as much, which can result in impaired swallow function. The term 'Presbyphagia' refers to the characteristic changes in the swallowing mechanism of healthy older adults that result from the normal ageing process. It is worth noting that the impact of changes with age can vary greatly and not all older people will have Presbyphagia.

Comorbid health conditions greatly increase the risk of dysphagia in older people.

An additional issue in older adults is that up to 50 per cent of them are affected by sarcopenia (loss of muscle mass). (2) Sarcopenic dysphagia occurs as a result of loss of swallowing muscle mass and function associated with generalised loss of skeletal muscle mass and function.

WHAT COMPLICATIONS CAN ARISE AS A RESULT OF DYSPHAGIA?

Aspiration[1] Aspiration pneumonia[1,2] Choking[3] Increased risk of mortality[1]	• 52% of patients with dysphagia suffer from aspiration[1] • Increased risk of aspiration results in a number of serious consequences, including chest infections, aspiration pneumonia and increased incidence of mortality[1,4]
Dehydration[3] Weight loss[4] Malnutrition[4]	• 58-75% of dysphagia patients suffer from dehydration[3,4] • 51% of people with dysphagia are at risk of malnutrition[4] • The severity of dysphagia correlates with incidence of malnutrition[4]
Increased hospital length of stay[1]	• Patients with dysphagia have a 40% increase in length of hospital stay[4]
Reduced quality of life[4,10]	• Over 50% of head and neck cancer patients report a decrease in their quality of life due to dysphagia[10]

WHAT CONSIDERATIONS SHOULD BE TAKEN ON-BOARD WHEN DETERMINING A DYSPHAGIA MANAGEMENT APPROACH FOR PATIENTS? WHAT CAN AN EFFECTIVE STRATEGY LOOK LIKE?

A holistic approach needs to be considered. This starts with early identification of the problems the patient is experiencing, immediate support to limit the consequences, and appropriate and timely referral for specialist support, if required.

Instrumental assessment may be required for some, but not all, patients. This is mainly completed within a hospital setting but some services have access to mobile Fibreoptic Endoscopic Evaluation of Swallowing.

The specialist service should offer advice and support to enable accurate assessment and holistic management, taking into account patient wishes and beliefs e.g. culture or religion.

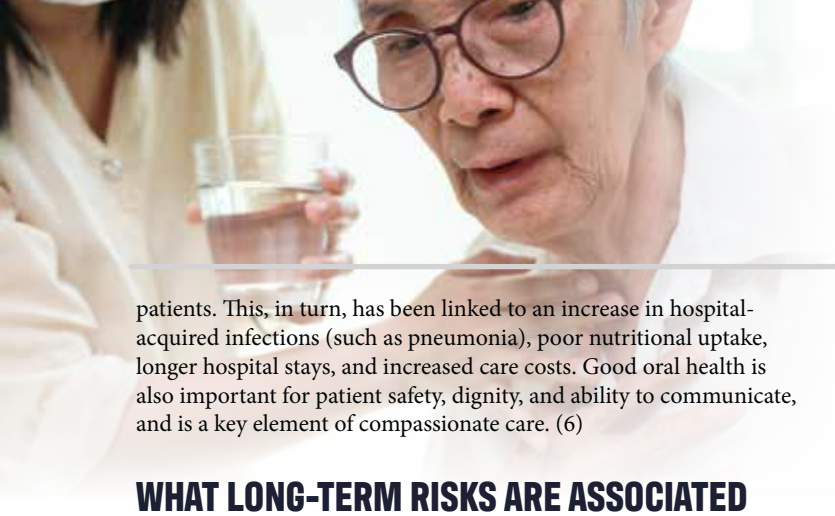
Therapeutic interventions may be implemented, where appropriate, including muscle strength training, postural strategies and compensatory techniques or diet or fluid modifications, environmental adaptations or special eating and drinking equipment to encourage independence.

Where diet or fluid modifications are required, the International Dysphagia Diet Standardisation Initiative should be used to communicate the recommended modification levels. (4)

Some patients may not be able to eat and / or drink without risk of aspiration (food, liquid or saliva entering the airway). Where it is not appropriate or helpful to modify consistencies, the team, including the patient and their loved ones, may consider eating and drinking with acknowledged risks, which can include aspiration of food and fluids into the airway, choking, malnutrition, dehydration, distress, and social isolation. (5)

Close multidisciplinary working ensures optimal management and making sure that the right people are engaged at the right time and in the right place to best manage the individual's needs. The specialist practitioner, who may be a speech and language therapist, will need help from others in the team to optimally support the patient. This care team may include, but not be limited to, care staff, the dietitian, the mouth care lead, the geriatrician, the GP, the specialist nurse, the pharmacist, the physiotherapist, the occupational therapist, and others, depending on any comorbidities.

Good mouth care is an essential part of the support plan for people with eating, drinking and swallowing difficulties. Hospitalisation is associated with a deterioration of oral health in



patients. This, in turn, has been linked to an increase in hospital-acquired infections (such as pneumonia), poor nutritional uptake, longer hospital stays, and increased care costs. Good oral health is also important for patient safety, dignity, and ability to communicate, and is a key element of compassionate care. (6)

WHAT LONG-TERM RISKS ARE ASSOCIATED WITH THE CONDITION BEING LEFT UNAIDED?

Dysphagia, if not assessed and managed, can have major health impacts. Choking, and ultimately death, are serious consequences of poor management. There are many long-term risks.

Health outcomes and aspiration pneumonia – dysphagia and aspiration are common complications of many medical conditions and may slowly worsen as a patient deteriorates. Aspiration pneumonia is not caused purely by food and liquid entering the airway. It can be associated with poor oral hygiene, reliance on support with eating and drinking, being bedbound, and a lack of mobility, need for suction, and presence of a feeding tube, among other factors. It is associated with a high mortality rate. (7)

Malnutrition and dehydration – patients receiving texture-modified diets and fluids frequently fail to meet their nutritional and fluid requirements (8) and have an increased risk of malnutrition.

Social and emotional isolation – there are also psychosocial factors. Dysphagia is a disorder which severely affects quality of life. (9) Dysphagic patients tend to isolate themselves, and many avoid eating out with other people, because they feel embarrassed, or need assistance during meals and / or feel less interested in food.

ARE THERE ANY SUPPORT AVENUES / TRAINING / GUIDANCE WHICH CAN BE IMPLEMENTED IN CARE HOMES TO SUPPORT SAFETY SURROUNDING DYSPHAGIA?

The Eating, Drinking, Swallowing Competency Framework (EDSCF) (2020) (10), referenced in the table below, was developed collaboratively and endorsed by the Royal College of Speech and Language Therapists, British Dietetic Association, National Association of Care Catering, and the British Association of Stroke Physicians, to provide a structured approach to the support and training requirements for people working with people who have swallowing difficulties.

This describes levels of involvement and corresponding competence requirements:

While a specific training programme is not endorsed by this framework, there are programmes available which have been mapped to it.

• Dysphagia – elearning for healthcare (e-lfh.org.uk) (levels 1-3) (11)
• Whole Team Dysphagia Training – EDS Hub – Oak House Kitchen (oakhouse-kitchen.com) (levels one-to-three). (12) This resource also includes modules to support catering staff in producing International Dysphagia Diet Standardisation Initiative (IDDSI) compliant, nutritious and healthy meals and snacks

HOW IMPORTANT IS COLLABORATION BETWEEN HEALTHCARE PROFESSIONALS IN THEIR SUPPORT OF ELDERLY PATIENTS AT-RISK OF AND EXPERIENCING DYSPHAGIA?

The NHS Long-Term Plan (13) aims to ensure models of care and social provision are joined up and provided by the right people, at the right time, and in the right place to meet patients' needs. This 'triple integration' of primary and specialist care, physical and mental health services, and health with social care model, is a system-wide opportunity to support elderly people to live well for longer in their usual residence for as long as possible – supporting patients to remain safe in their homes, preventing admission to hospital, and enabling them to access evidence-based care. It is essential for effective dysphagia management. Where patients are resident in care homes, the enhanced health in care homes (14) agenda will provide a framework to ensure well-co-ordinated access to support, irrespective of home environment. It is only through a collaborative approach that the needs of the patient will be met. Dysphagia awareness is everyone's business. Utilising the EDSCF, health and social care staff can be supported to gain the required knowledge and skills to identify, risk assess, and refer on a person for specialist support as required. By working collaboratively, a joined-up model supporting patients with eating, drinking, and swallowing problems will ensure early identification and timely assessment and management is co-ordinated; while also reducing complications, improving outcomes, and enhancing quality of life.

For more information visit www.rcslt.org.

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*The No.1 dispensed statin in England 2020[1]

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Abbreviated Prescribing Information: Atorvastatin 4mg /ml Oral Suspension **Consult Summary of Product Characteristics before prescribing. Presentation:** White to brownish white oral Suspension, each 1 ml contains 4mg of Atorvastatin (as 4.14 mg atorvastatin calcium trihydrate). **Therapeutic Indications:** Hypercholesterolaemia Atorvastatin Oral Suspension is indicated as an adjunct to diet for reduction of elevated total cholesterol (total-C), LDL-cholesterol (LDL-C), apolipoprotein B, and triglycerides in adults, adolescents and children aged 10 years or older with primary hypercholesterolaemia including familial hypercholesterolaemia (heterozygous variant) or combined (mixed) hyperlipidaemia (Corresponding to Types IIa and IIb of the Fredrickson classification) when response to diet and other nonpharmacological measures is inadequate. Atorvastatin Oral Suspension is also indicated to reduce total-C and LDL-C in adults with homozygous familial hypercholesterolaemia as an adjunct to other lipid-lowering treatments (e.g., LDL apheresis) or if such treatments are unavailable. Furthermore, atorvastatin oral suspension is also used to prevent cardiovascular events in adult patients estimated to have a high risk for a first cardiovascular event. **Posology and Method of Administration:** The patient should be placed on a standard cholesterol-lowering diet before receiving Atorvastatin Oral Suspension and should continue this diet during treatment with Atorvastatin Oral Suspension. The dose should be individualised according to baseline LDL-C levels, the goal of therapy and patient response. The usual starting dose is 10 mg (2.5 ml) once a day. Adjustment of dose should be made at intervals of 4 weeks or more. The maximum dose is 80 mg (20 ml) once a day. For primary hypercholesterolaemia and combined (mixed) hyperlipidaemia the majority of patients are controlled with Atorvastatin Oral Suspension 10 mg (2.5 ml) once a day. A therapeutic response is evident within 2 weeks, and the maximum therapeutic response is usually achieved within 4 weeks. The response is maintained during chronic therapy. For heterozygous familial hypercholesterolaemia patients should be started with Atorvastatin Oral Suspension 10 mg (2.5 ml) daily. Doses should be individualised and adjusted every 4 weeks to 40 mg (10 ml) daily. Thereafter, either the dose may be increased to a maximum of 80 mg (20 ml) daily or a bile acid sequestrant may be combined with 40 mg (10 ml) atorvastatin once daily. For homozygous familial hypercholesterolaemia. Only limited data are available. The dose of atorvastatin in patients with homozygous familial hypercholesterolemia is 10 to 80 mg (2.5 to 20 ml) daily. Atorvastatin should be used as an adjunct to other lipid-lowering treatments (e.g., LDL apheresis) in these patients or if such treatments are unavailable. **Paediatric population:** Paediatric use should only be carried out by physicians experienced in the treatment of paediatric hyperlipidaemia and patients should be re- evaluated on a regular basis to assess progress. For patients with Heterozygous Familial Hypercholesterolemia aged 10 years and above, the recommended starting dose of atorvastatin is 10 mg (2.5 ml) per day. The dose may be increased to 80 mg (20 ml) daily, according to the response and tolerability. Doses should be individualised according to the recommended goal of therapy. Adjustments should be made at intervals of 4 weeks or more. The dose titration to 80 mg (20 ml) daily is supported by study data in adults and by limited clinical data from studies in children with Heterozygous Familial Hypercholesterolemia. There are limited safety and efficacy data available in children with Heterozygous Familial Hypercholesterolemia between 6 to 10 years of age derived from open-label studies. Atorvastatin is not indicated in the treatment of patients below the age of 10 years. Currently available data are described in the SmPC but no recommendation on posology can be made. Other pharmaceutical forms/ strengths may be more appropriate for this population. **Contra-indications:** Atorvastatin Oral Suspension is contraindicated in patients: with hypersensitivity to the active substance or to any of the excipients; with active liver disease or unexplained persistent elevations of serum transaminases exceeding 3 times the upper limit of normal; during pregnancy, while breast-feeding and in women of child-bearing potential not using appropriate contraceptive measures and treated with the hepatitis C antivirals glecaprevir/pibrentasvir. **Special Warnings and Precautions for use:** Liver function tests should be performed before the initiation of treatment and periodically thereafter. Atorvastatin Oral Suspension should be used with caution in patients who consume substantial quantities of alcohol and/or have a history of liver disease. In a post-hoc analysis of stroke subtypes in patients without coronary heart disease (CHD) who had a recent stroke or transient ischemic attack (TIA) there was a higher incidence of haemorrhagic stroke in patients initiated on atorvastatin 80 mg compared to placebo. Atorvastatin, like other HMG-CoA reductase inhibitors, may in rare occasions affect the skeletal muscle and cause myalgia, myositis, and myopathy that may progress to rhabdomyolysis, a potentially life-threatening condition characterised by markedly elevated creatine kinase (CK) levels (>10 times ULN), myoglobinaemia and myoglobinuria which may lead to renal failure. Furthermore, there have been very rare reports of an immune-mediated necrotizing myopathy (IMNM) during or after treatment with some statins was reported. Atorvastatin should be prescribed with caution in patients with pre-disposing factors for rhabdomyolysis. A CK level should be measured before starting statin treatment in patients with renal impairment; hypothyroidism; personal or familial history of hereditary muscular disorders; previous history of muscular toxicity with a statin or fibrate; previous history of liver disease and/or where substantial quantities of alcohol are consumed; in elderly (age >70 years), the necessity of such measurement should be considered, according to the presence of other predisposing factors for rhabdomyolysis, situations where an increase in plasma levels may occur, such as interactions and special populations including genetic subpopulations. If CK levels are significantly elevated (>5 times ULN) at baseline, treatment should not be started. Risk of rhabdomyolysis is increased when atorvastatin is administered concomitantly with certain medicinal products that may increase the plasma concentration of atorvastatin such as potent inhibitors of CYP3A4 or transport proteins (e.g. ciclosporin, telithromycin, clarithromycin, delavirdine, stiripentol, ketoconazole, voriconazole, itraconazole, posaconazole, letermovir and HIV protease inhibitors including ritonavir, lopinavir, atazanavir, indinavir, darunavir, tipranavir/ritonavir etc). The risk of myopathy may also be increased with the concomitant use of gemfibrozil and other fibric acid derivates, antivirals for the treatment of hepatitis C (HCV) (boceprevir, telaprevir, elbasvir/grazoprevir), erythromycin, niacin or ezetimibe. If possible, alternative (non-interacting) therapies should be considered instead of these medicinal products. Atorvastatin must not be co-administered with systemic formulations of fusidic acid or within 7 days of stopping fusidic acid treatment. There have been reports of rhabdomyolysis (including some fatalities) in patients receiving fusidic acid and statins in combination. The patient should be advised to seek medical advice immediately if they experience any symptoms of muscle weakness, pain or tenderness. For Paediatric population no clinically significant effect on growth and sexual maturation was observed in a 3-year study based on the assessment of overall maturation and development, assessment of Tanner Stage, and measurement of height and weight. Exceptional cases of interstitial lung disease have been reported with some statins, especially with long term therapy. Presenting features can include dyspnoea, non-productive cough, and deterioration in general health (fatigue, weight loss and fever). If it is suspected a patient has developed interstitial lung disease, statin therapy should be discontinued. Some evidence suggests that statins as a class raise blood glucose and, in some patients, at high risk of future diabetes, may produce a level of hyperglycaemia where formal diabetes care is appropriate. Patients at risk (fasting glucose 5.6 to 6.9 mmol/L, BMI>30kg/m2, raised triglycerides, hypertension) should be monitored both clinically and biochemically according to national guidelines. **Any warning from the MC, CHM CSM or MHRA. Black Triangle notice:** Not applicable. **Legal Category:** Prescription only medicine. **A list of common and serious adverse reactions (include statement to consult the SmPC for full details of other adverse reactions):** nasopharyngitis, allergic reactions, hyperglycaemia, headache, pharyngolaryngeal pain, epistaxis, constipation, flatulence, dyspepsia, nausea, diarrhoea, myalgia, arthralgia, pain in extremity, muscle spasms, joint swelling, back pain, liver function test abnormal, blood creatine kinase increased. **Pack Size and NHS Price:** 150ml - £198.76. **Marketing Authorisation Number:** PL 00427/0256 **Marketing Authorisation Holder:** Rosemont Pharmaceuticals Ltd, Rosemont House, Yorkdale Industrial Park, Braithwaite Street, Leeds, LS11 9XE, UK. **Date of Preparation:** November-2022.

Reference: 1. Statista. Leading chemical substances dispensed in England in 2020. Available at: https://www.statista.com/statistics/378445/prescription-cost-analysis-top-twenty-chemicals-by-items-in-england/ Accessed 28 February 2022.

Rosemont Pharmaceuticals Ltd. Rosemont House, Yorkdale Industrial Park, Braithwaite Street, Leeds LS11 9XE **T** +44 (0)113 244 1400 **F** +44 (0)113 245 3567
E infodesk@rosemontpharma.com Sales/Customer Service: **T** +44 (0)113 244 1999 **F** +44 (0)113 246 0738 **W** www.rosemontpharma.com

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Rosemont Pharmaceuticals Ltd on 0113 244 1400

DTM365.1 December 2022

A SORE SUBJECT

Often the subject of dismissal and generalisation, psoriatic disease is 'more than just skin'. David Chandler, Chief Executive, the Psoriasis and Psoriatic Arthritis Alliance, surveys the wider scope of the condition's impact, including its lived reality.

There is often a widely-held view, where arthritis is dismissed and accepted as getting old and an inevitable consequence of being human and part of a wear and tear process.

For those who develop psoriatic arthritis, which affects around one-in-four of people with skin psoriasis, this dismissal of symptoms is not only frustrating, but also insulting. Early development of joint and connective tissue pain and swelling can be very alarming, particularly when tests fail to identify the cause.

The prior development of psoriasis, often as a teenager, has an enormous detrimental effect on those affected, to then develop joint and connective tissue disease a few years later perhaps, before the age of 30, can make life very difficult.

This early onset not only comes as a surprise, but also is not always identified as a diagnosis is often missed due to the intermittent symptoms, lack of radiographic changes, and limited available inclusive tests. Therefore, people are often dismissed or not believed when reporting symptoms.

Those symptoms include pain, swollen joints, fatigue, a general tiredness and lethargy, which is added to an itchy, dry scaly skin, where painful disfigured nails also cause dexterity and mobility issues.

It's unsurprising that people with psoriatic arthritis find it too difficult to cope. Many find that they can no longer continue in their chosen profession or work activity. The psychological effect is also an issue, with uncertainty of whether the condition will progress, causing permanent disability, and how that will affect lifestyle, relationships and long-term future, all weigh heavily.

The surprise, and sometimes sudden, initial flare of the condition also affects family and carers, particularly given that the onset at such a relatively young age is when people are in relationships, thinking about starting families and looking towards a long and perhaps fruitful career, which is often stopped or totally destroyed. For those who do get a diagnosis and some form of treatment, given there is no cure but just progression, they have to come to terms with being blighted by a condition that may progress slowly or flare and cause irreversible joint damage.

This brings with it a lifetime of medication, tests, appointments, daily treatments, and constant awareness that psoriatic arthritis is an unpredictable disease that will get in the way of daily life. A destroyer of hopes, dreams and ambition.

LIVED EXPERIENCES

To understand what it's like to live with both conditions, the Psoriasis and Psoriatic Arthritis Alliance (PAPAA), a patient-centred charity, has been gathering the lived experiences and direct feedback from people affected by psoriasis and psoriatic arthritis since 2014 via its PAPAA survey. The survey is available continuously and can be completed anonymously. A key part of the survey is to get qualitative data to add context to the statistical submitted information.

The following are a few quotes submitted online via the PAPAA survey:

'I had to give up work and felt I couldn't do much, was unreliable, felt useless and I'm self-conscious of my deformed fingers.'

'I feel self-conscious that I cannot do things, I feel my family don't realise how bad it is at times, and I am sure they think that I am making it up.'

'Psoriatic arthritis has really turned my day-to-day life, relationship and mental health upside down.'

'It's hard to plan ahead as you just don't know how you are going to be feeling, so have had to cancel so many things as I was in a flare or just down to the pain and fatigue.'

'I often think how to prepare financial, health and home. The future is unknown and a little concerning. It worries and saddens me.'

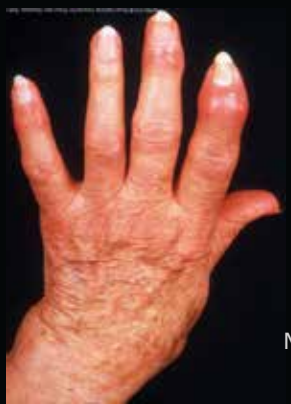
'It's getting worse so I don't know how long I'll be able to work and consequently I can't plan for anything.'

'I will have to choose things to do that are within my physical capabilities and comfort levels. I don't go on holiday abroad and even in the UK as I find beds make my condition worse.'

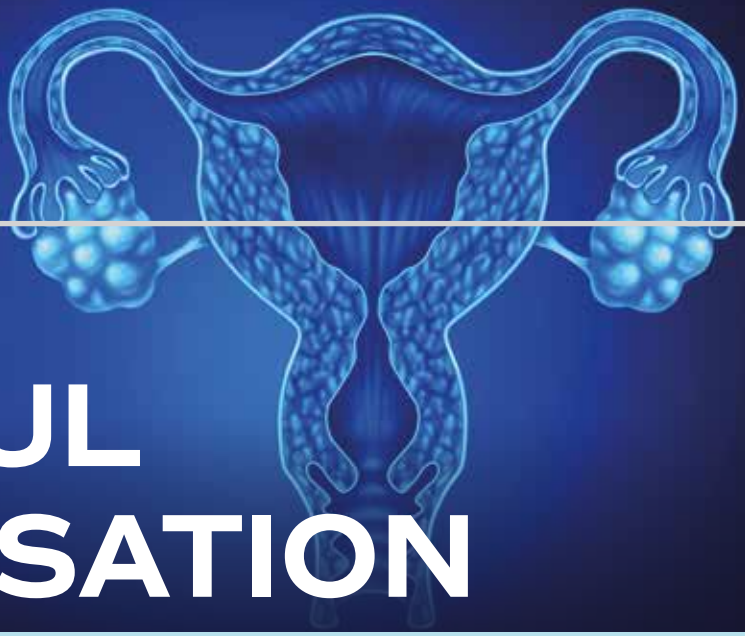
From these few lines it is obvious that the burden of disease weighs heavily. Of course, with the development of newer therapies, the condition can be controlled and people can live a life which is not impacted, but only if the condition is spotted and diagnosed quickly and appropriate care is instigated – sadly this isn't always the case. In the NICE Psoriasis: Assessment and Management Clinical Guideline [CG153], published 24th October 2012, last updated 1st September 2017, it states, 'Offer annual assessment for psoriatic arthritis to people with any type of psoriasis. Assessment is especially important within the first 10 years of onset of psoriasis.'

Making those aware of this guideline and the possibility of psoriatic arthritis in people with skin psoriasis will go a long way to helping people to avoid the consequences of joint damage and potential disability.

For more information, visit www.papaa.org.



ENDOMETRIOSIS



A PAINFUL CONVERSATION

Endometriosis UK is urging everyone with endometriosis symptoms to visit their GP, as worrying data shows that three-in-four women and those assigned female at birth would put off seeking help.

New research shows that three-quarters (75 per cent) said they would put off going to see a doctor if they were experiencing painful periods which were interfering with day-to-day activities. This figure rises to 92 per cent of those aged 16-to-34.

- 75 per cent would not go to the doctor with potential endometriosis symptoms, which include chronic pelvic pain, painful bowel movements, pain when urinating, painful sex, fatigue and difficulty getting pregnant
- More than a fifth would worry doctors might not take these symptoms seriously
- Many would not feel comfortable talking about periods and menstrual health with family, friends, colleagues or medics
- A diagnosis is needed to access management and treatment options; left unmanaged, endometriosis may progress

The data is from a survey of 2,000 UK respondents conducted by Endometriosis UK.

Among those who said they would put off going to see a doctor in this situation, 24 per cent said it was because they considered painful periods to be a normal part of life, while 23 per cent said they would think it was 'not serious enough to bother a doctor with'.

Chronic pelvic pain and painful periods that interfere with your everyday life can be symptoms of endometriosis. This common, sometimes debilitating, but often-ignored, disease affects one-in-10 women and those assigned female at birth, and can impact all areas of life including mental health, career and relationships.

Common symptoms include:

- Chronic pelvic pain
- Painful periods
- Pain during or after sex
- Painful bowel movements
- Pain when urinating
- Fatigue; and
- Difficulty getting pregnant

Those with one or more of these symptoms may want to keep a pain and symptoms diary to help them in discussion with their doctor to help diagnosis, Endometriosis UK advises. Getting an earlier diagnosis of endometriosis allows access to treatment and management options; without this, the disease may progress.

Emma Cox, CEO of Endometriosis UK, said, 'If you're experiencing chronic pelvic pain or other symptoms of endometriosis, talk to your GP. In the past, endometriosis symptoms may have been shrugged off as 'normal' or 'not serious' – these myths are slowly but surely being eradicated, although there is still a long way to go. Keeping a pain and symptoms diary can help when speaking to your GP, helping them understand what you're experiencing and supporting a diagnosis.

'These findings must be a wake-up call for society as a whole, including governments and the NHS: we cannot continue to ignore and normalise the sometimes debilitating symptoms of endometriosis, and the impact of this disease and other menstrual health conditions. With an average time to diagnosis of eight years, urgent action is needed to ensure all those affected by endometriosis have a prompt diagnosis and access to the right care.'

Endometriosis UK's new data shows that just 49 per cent of the public are aware that endometriosis is a gynaecological health condition – a figure which drops to just 31 per cent of men.

The data also shows that half (51 per cent) of women and those assigned female at birth would feel comfortable talking about periods with their parents or guardians. The figures varied when it came to talk to their spouse (73 per cent), friends (67 per cent), colleagues (33 per cent), medical professionals (72 per cent) or 'someone I have just met' (15 per cent) – meaning many feel uncomfortable with such discussions.

The symptoms of endometriosis can begin at puberty, and in some cases the impact may last for life, including after the menopause.

Currently, it takes an average of eight years to get a diagnosis of endometriosis in the UK; without a diagnosis, treatments can't be accessed and the disease may progress. While the taboo around menstrual health, and a lack of awareness of endometriosis, may contribute to this, Endometriosis UK believes that it is essential that the NHS and governments take action to ensure that healthcare practitioners recognise the symptoms, and that pathways and services are improved.

WHAT IS ENDOMETRIOSIS?

Endometriosis is a condition where cells similar to the ones lining the womb are found elsewhere in the body. Each month these cells react to the menstrual cycle in the same way to those in the womb, building up and then breaking down and bleeding. Unlike the cells in the womb that leave the body as a period, this blood has no way to escape. This leads to inflammation, pain, and the formation of scar tissue (adhesions). The condition affects 1.5 million in the UK; approximately one-in-10 women and those assigned female at birth. The condition is most active from puberty to menopause, although the impact can be felt for life.

Zalkya® 2 mg

film-coated tablets

dienogest

A significant progress in the **treatment of endometriosis**[1]

LACTOSE FREE

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Suitable for vegetarians and vegans

Dienogest is a 4th generation selective progestin having anovulatory and anti-proliferative effect in endometrial cells, as well as anti-inflammatory and anti-angiogenic actions.[2]

- Reduces endometrioma volume[3]
- Preserves the ovarian reserve[4]
- As effective as GnRH agonists in relieving pain associated with endometriosis[5]
- Presents a favourable adverse events profile vs GnRH agonists[5]

In addition to a significant pain reduction, **women treated with Zalkya® 2mg experienced hypoestrogenic symptoms less frequently** than women treated with Leuprolide acetate.[5]

References

1. Vercellini et al., Fertility and Sterility Vol. 105, No. 3, March 2016. **2.** Sasagawa S et al, Steroids 2008; 73: 222-231. **3.** Angioni et al. Gynecological Endocrinology 2019. **4.** Muzii et al., Gynecological Endocrinology 2019. **5.** Strowitzki T. et al, Human Reproduction, Vol.25, No.3 pp. 633–641, 2010.

Prescribing information

Please refer to the Summary of Product Characteristics (SmPC) before prescribing.
Name and active ingredient: Zalkya® 2mg film-coated tablets. Each tablet contains 2mg of dienogest. **Indications:** Treatment of endometriosis. **Posology and method of administration:** One tablet daily without any break, taken preferably at the same time each day with some liquid as needed. The tablet can be taken with or without food. For oral use. **Contraindications:** Zalkya® should not be used in the presence of any of the conditions listed and should any of the conditions appear with first use of Zalkya® treatment must be discontinued: active venous thromboembolic disorder, arterial and cardiovascular disease, past or present (e.g. myocardial infarction, cerebrovascular accident, ischemic heart disease), diabetes mellitus with vascular involvement, presence or history of severe hepatic disease as long as liver function values have not returned to normal, presence or history of liver tumours (benign or malignant), known or suspected sex hormone-dependent malignancies, undiagnosed vaginal bleeding or hypersensitivity to the active substance or to any of the excipients listed (see section 6.1 of the SmPC). **Special warnings and precaution for use:** Precautions should be taken regarding serious uterine bleeding, changes in bleeding pattern, circulatory disorders, tumours and osteoporosis (see SmPC section 4.4). **Interactions:** Inducers or inhibitors of CYP3A4 may affect the progestogen drug metabolism. An increased clearance of sex hormones due to enzyme induction may reduce the therapeutic effect of Zalkya® and may result in undesirable effects e.g. changes in the uterine bleeding profile. Substances increasing the clearance of sex hormones (diminished efficacy by enzyme-induction), e.g.: phenytoin, barbiturates, primidone, carbamazepine, rifampicin, and possibly also oxcarbazepine, topiramate, felbamate, griseofulvin, and products containing St. John's wort (Hypericum perforatum). See section 4.5 of the SmPC for full information. **Adverse reactions:** The most commonly reported adverse reactions of Zalkya® are: weight increase, depressed mood, sleep disorder, nervousness, loss of libido, altered mood, headache, migraine, nausea, abdominal pain, flatulence, abdominal distension, vomiting, acne, alopecia, back pain, breast discomfort, ovarian cyst, hot flushes, uterine / vaginal bleeding including spotting, asthenic conditions, irritability. See section 4.8 of SmPC for full information. **Presentation:** 2 x 14 white film-coated tablets packed in PVC (250 µm)-Aluminium (20 µm) push-through-blister. Pack Size: 28 film-coated tablets. NHS Cost: £20.50. **Legal Classification:** POM. **MA Number:** PL 21844/0037. Distributed by Kent Pharma UK Ltd. Date of preparation: February 2023. UK21/007/01 SmPC Sept 2019.

Adverse events should be reported: Reporting forms and information can be found at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Kent Pharma UK Ltd on 01233 506574 or medical@kent-athlone.com. For a copy of the SmPC or further medical information, please contact: medical@kent-athlone.com. Additional information available on request.

Date of preparation: February 2023 Ref: UK22/17/01

For further information on this product, please contact your Kent Pharma Hospital Key Account Manager or our customer service team.

KENT PHARMA

Kent Pharma UK Ltd | 2nd Floor | Connect 38 | 1 Dover Place | Ashford | Kent | TN23 1FB
Tel 0845 437 5565 | Email: customer.service@kent-athlone.com
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THE SLEEP CHARITY

GIVE IT A REST

Sleep is an essential part of our health – it decreases the risk of heart attacks, diabetes, strokes, and it helps us fight off minor ailments, deal better with stress, anxiety and depression and even tackle weight problems. When it comes to the impact of sleep deprivation, what can healthcare professionals do? Lisa Artis, Deputy CEO, The Sleep Charity, investigates.

Lisa Artis

Even though we spend a third of our life asleep, its importance is often overlooked and millions of people across the UK suffer from poor sleep. A survey carried out in August 2022 by The Sleep Charity and OnePoll found that over 50 per cent of British workers say that they take time off work due to feeling tired or not having enough sleep; and 38 per cent of workers admitted to forgetting things and being less productive as a result of not having enough shut eye.

This sleep crisis is costing the UK economy up to £40 billion a year. As a result, the charity launched The Charter for Sleep Equality at the House of Commons in January 2023 to tackle this issue. But it's not just workers suffering from sleep deprivation, it affects all demographics with; age; medical and mental illnesses; young families; menopause; bed poverty, and SEND being just some of the reasons.

It's not a one-size-fits-all scenario which can make it difficult for healthcare workers to a. diagnose and b. provide the right solution / treatment. Here is some advice we can offer:

WHAT ADVICE WOULD YOU GIVE HEALTHCARE PROFESSIONALS WHEN DEALING WITH PATIENTS / CLIENTS WITH POOR SLEEP?

It's important to remember that each case is individual so listen with empathy. Take an interest in what they are saying, and take these concerns seriously. Open questions can be great to get the conversation going and finding the root of what the issue may be when it comes to sleep.

These discussions can be emotional – especially for those who suffer from insomnia as their moods and emotions will be seriously affected by lack of sleep. We would ask you to acknowledge how difficult sleep issues can be and reassure them that they aren't alone and you're here to help.

WHAT ARE YOUR TOP TIPS THAT HEALTHCARE PROFESSIONALS CAN GIVE TO PATIENTS / CLIENTS WHO ARE STRUGGLING?

Sleep is as critical to a healthy lifestyle as diet and exercise, and they should be advised on what the effects are from lack of sleep – which includes reduced energy levels, low mood, irritability, and poor concentration and memory.

It's important that healthcare professionals encourage clients to look at their sleeping patterns and their habits in the run up to bedtime. Key things to consider are; keeping bedtime and wake-up times the same where possible (even on weekends) as this helps set your circadian rhythm; having a wind down routine so that the body and brain are relaxed; turn off all tech at least an hour before bed; and put the day to bed before yourself i.e., write down any worries or concerns and make a to-do list of things that you need to sort the next day / week. It's also essential to encourage good lifestyle habits and to eliminate factors that are causing disturbed sleep. For example, making sure that the bedroom is the right environment, that the bed is up to scratch, looking at the lighting in the home, and avoiding foods and drinks that can hinder sleep.

Handing out our advice leaflets, directing them to www.thesleepcharity.org.uk, and / or putting up our posters can provide a reference point.

IN YOUR OPINION, HOW IS THE INSOMNIA CRISIS BEING FELT BY THE HEALTHCARE SECTOR?

As the statistics show, there is a sleep crisis among the nation and that is now being recognised at a political level – which will gradually filter down into the community providing better education, more practitioners and more readily-available advice and treatments.

We are seeing more and more people being urged to seek help regarding sleep issues. It is relatively new in terms of research but as we learn more about the importance of sleep and what happens to our bodies when we sleep, solutions and treatments are improving.

Cognitive Behavioural Therapy for Insomnia (CBT-I) is the NICE guideline for first-line treatment of insomnia and yet it is not widely-available. The Sleep Charity has launched a course this year with world-leading sleep expert, Professor Jason Ellis, which is available for all healthcare professionals.

CAN YOU GIVE SOME EXAMPLES OF SYMPTOMS THAT CAN OFTEN BE CONFUSED BETWEEN INSOMNIA DISORDER AND OTHER DISORDERS?

The new CBT-I course goes into much more detail about this but top line: there is a difference between a sleep difficulty and insomnia. Insomnia is defined as at least three nights per week for a period of three months and is where you would struggle to either fall asleep, stay asleep or wake too early.

Other sleep disorders may have lack of sleep as part of their symptoms but often have other significant symptoms that set them apart from insomnia. For example, Restless Legs Syndrome would have poor sleep accompanied by tingling, throbbing and itchy legs. Narcolepsy, people will fall asleep suddenly in strange places.

WHAT ARE SOME COMMON BAD SLEEP HABITS THAT HEALTHCARE PROFESSIONALS COULD HELP WITH?

Using alcohol as a sleep aid – while alcohol may relax you and make you feel sleepy, it is a big culprit in sleep interference. Not only does it act as a diuretic (which means you need the loo more!) but it leads to dehydration. You'll also find that while you initially fall asleep quickly, your sleep is shallower so you don't feel as rested when you wake.

Drinking too much caffeine – it blocks sleep-inducing chemicals and increases adrenaline production which reduces sleep quality and prevents you feeling rested. Try to avoid eight hours before bed.

Using screens before bedtime – switch off the TV at the mains and don't be tempted to charge your mobile phone in the bedroom. Even this small amount of light disrupts your internal body clock and decreases your melatonin production, making you feel less sleepy.

Lazy lie-ins – trying to make up for lack of sleep with extra time in bed the following morning, or even a few days later, throws off your internal body clock. Where possible try to keep to a regular bedtime and wake up time. Our bodies (and minds) thrive on routine.

IF HEALTHCARE PROFESSIONALS WOULD LIKE TO ACCESS SUPPORT RESOURCES / TRAINING OUTSIDE OF THE CBT-I OFFERING, DO YOU OFFER ANYTHING SPECIFICALLY FOR THEM? (I.E OTHER TRAINING GEARED TOWARDS THEM OR PACKS THEY CAN USE TO PASS ON SLEEP ADVICE TO PATIENTS ETC.)

Yes, we offer our mini-series of adult sleep modules with Professor Jason Ellis or we can also offer bespoke training. We have resources available on our website that are available for downloading or printing.

For more information, visit www.thesleepcharity.org.uk.

NEW REQUIREMENTS ON THE NHS TO IMPROVE SERVICES FOR PATIENTS AND STAFF

Two new legal duties to improve services, openness and transparency in the NHS have come into force, Health Minister Eluned Morgan has announced.

The duty of candour is a legal requirement for all NHS organisations in Wales to be open and transparent with people if something goes wrong and they experience harm while receiving healthcare. Under the duty, health boards and NHS trusts must apologise and support people while an investigation into the incident happens and, importantly, ensure incidents are investigated through the Putting Things Right process and learning is shared to help prevent similar incidents from occurring again.

The duty of quality will apply to all NHS bodies and to Welsh ministers to ensure that the decision-making actively considers improvement in the quality of health services and outcomes for people in Wales. The duty also includes new health and care quality standards.

A new citizen voice body, which will strengthen the representation of people in health and social care services and empower people to influence and shape services, is also being introduced. Llais, a new independent national body, will replace and build on the work of Wales' seven community health councils.

CLINICAL TRIAL LAUNCHES FOR NEW SCHIZOPHRENIA DRUG

A potential new treatment for schizophrenia developed by Cardiff University's Medicines Discovery Institute (MDI) is entering the first phase of a clinical trial.

The drug – MDI-26478 – is designed to target specific receptors that play a key role in brain health.

Cognitive decline is a core element of schizophrenia and current treatments fail to treat this effectively. The Cardiff team expects MDI-26478 to enhance cognitive performance, focused initially on schizophrenia. The drug has been invented by the MDI team and this study marks a major milestone, completing the 'bench to bedside' journey.

Professor Simon Ward, Director of Cardiff University's Medicines Discovery Institute, commented, 'We are immensely proud of the achievement of the Cardiff team. To take a compound from initial discovery through to clinical studies is the dream of many life science researchers.

'In the UK about one-in-six people will need treatment for mental ill health during their lifetime. Schizophrenia is a poorly-treated condition and about one-in-100 people will suffer an episode of schizophrenia. We hope that once trials are complete, our drug will help patients manage these episodes and offer a completely novel treatment for this poorly-served community.

'Developmental drugs go through several stages of clinical testing before they are available for patients, but we hope to have initiated an exciting leap forward in the way we will treat schizophrenia in the future.'

This project has nucleated existing healthcare and drug development expertise within South Wales to accelerate the investigation of the drug. The clinical study will run in Merthyr Tydfil, at Simbec-Orion's MHRA Phase I Accredited Unit. Neuroimaging studies will take place in tandem at Cardiff University's Brain Research Imaging Centre, and neurophysiological screening and monitoring will be provided by the Science Behind, a Cardiff-based clinical trial research service.

PRIMARY CARE SAVES 44,000 KG CO2 IN FIRST YEAR OF GREENER SCHEME

GPs, community optometrists, community pharmacy and primary care dental practices across Wales have saved an estimated 44,088 CO2 this year – the equivalent of four round-the-world flights, or boiling more than seven million litres of water, by taking part in the Greener Primary Care Wales Framework and Award Scheme from Public Health Wales.

Launched in June 2022, the free, online scheme is designed to help independent primary care contractors to improve the environmental sustainability of their day-to-day practice.

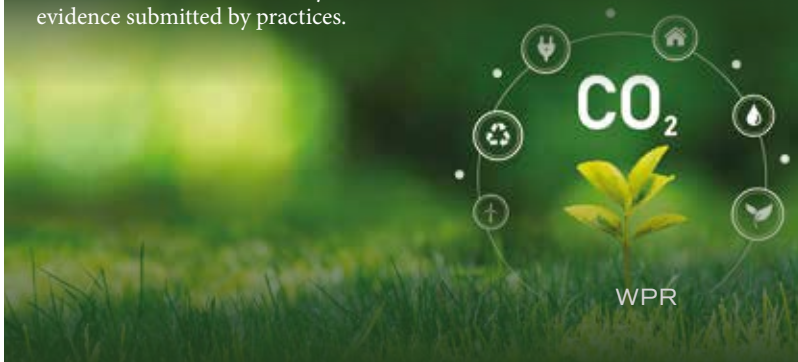
Zoe Wallace, Director of Primary Care, Public Health Wales, explained, 'At the end of year one over 100 practices had registered, including 162 individuals, and as a result of their involvement, an incredible 638 climate-mitigating actions were implemented. These actions ranged from installing more energy-efficient lighting options, to reviewing their choice of business bank.

'We have now relaunched the scheme and would encourage all primary care teams in Wales to register. By taking positive action together, primary care can make a large cumulative impact. As trusted healthcare professionals, our behaviours in a work setting can also inspire others to act personally. If we all take small steps, reaching the end goal will be achievable.'

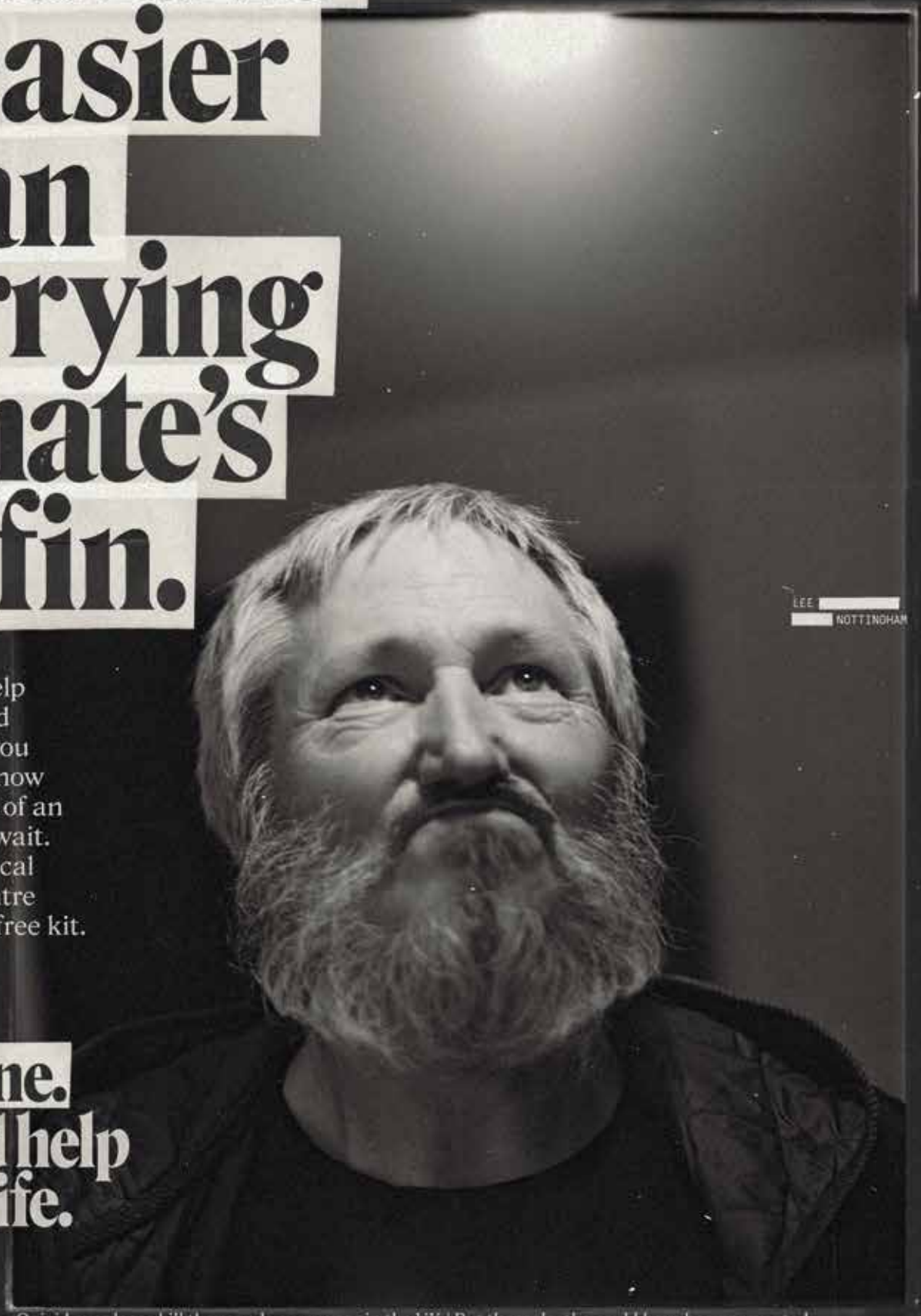
The framework and actions were developed by the Primary Care Hub, Public Health Wales, supported by the Strategic Programme for Primary Care, and in collaboration with a wide range of external stakeholders.

Each action has been carefully designed to align to the NHS Wales Decarbonisation Strategic Delivery Plan, the Wellbeing of Future Generations (Wales) Act 2015, Prudent Healthcare principles and the UN Sustainable Delivery Goals where possible, and has full support of the Minister for Health and Social Services, Minister for Climate Change and the Wellbeing and Future Generations Commissioner.

The scheme has been developed in partnership with the charity, Students Organising for Sustainability UK, who will manage its use and train Welsh university students to become auditors of the evidence submitted by practices.



Carrying naloxone is easier than carrying a mate's coffin.



Naloxone can help reverse an opioid overdose. So if you use opioids or know someone at risk of an overdose, don't wait. Speak to your local drug service centre about getting a free kit.

Carry naloxone. It could help save a life.

Opioid overdoses kill thousands every year in the UK.[1] But those deaths could have been prevented – with naloxone. It's a drug that can help reverse an opioid overdose and help save lives. Signs of an opioid overdose include pinpoint pupils, unconsciousness, or breathing problems. Always call an ambulance first if you think someone is having an opioid overdose. For more information, go to naloxone.org.uk.

This campaign is sponsored by Ethypharm and made in conjunction with real naloxone carriers.

1. Parsons G. Prescriber 2019; 30(12):19–23. Date of preparation: February 2021 | Job number: UK-PREN-17a

CUT COSTS BY 81%

on metformin oral solution prescribing[1,2]

Metformin Hydrochloride 500mg Powder for Oral Solution, **a cost effective alternative** vs. Metformin 150ml oral solution 500mg/5ml.[1,2]

A convenient alternative to metformin tablets for people with type 2 diabetes and difficulty swallowing tablets.[3–5]

Packaged in single-dose sachets for convenience and less waste[3]

Morningside has sufficient stock to supply current demand and has an extensive track record of supplying to the NHS.[6]

Scan the QR code for Prescribing information
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Or visit www.morningsidehealthcare.com/files/MetforminPowderWAL_28006.pdf

All pictures shown are for illustration purposes only.

Metformin Hydrochloride 500mg Powder for Oral Solution for patients with type 2 diabetes and difficulty swallowing tablets. Requires only 150ml of water to dissolve both a 500mg or 1g dose in solution.[3-5,7*]

*All 150ml must be swallowed to ensure entire dose is taken.

References: 1. Morningside List Prices from dm+d.. Available at: https://services.nhsbsa.nhs.uk/dmd-browser/(accessed October 2022); **2.** NHS Electronic Drug Tariff. Available at: https://www.drugtariff.nhsbsa.nhs.uk/#/00834576-DD_1/DD00834564/Home (accessed February 2023); **3.** Morningside Healthcare Ltd. Metformin 500mg Powder for Oral Solution. Summary of Product Characteristics. February 2023. Available at: https://www.medicines.org.uk/emc/product/11980/smpc (accessed February 2023); **4.** Christofides EA. Clin Diabetes. 2019;37(3):234–41; **5.** Derosa G, et al. J Clin Pharmacol. 2015;55(4):409–14; **6.** Morningside Healthcare Ltd. Data of file 1; **7.** Morningside Healthcare Ltd. Data of file 2.

Date of Preparation: March 2023 Code: MET/PRI/28006/0323c

Metformin

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