

Lipid management and long-term conditions

How to promote self-care in challenging situations

Learning from the #AskAboutAsthma campaign

Overcoming compression bandaging challenges with Portrait of a Patient™

Sjögren's syndrome: a snapshot to increase awareness

Gout and your diet

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Managing director

Alec O'Dare
alec@woundcarepeople.com

Editor-in-chief

Jaqui Walker, general practice nurse/
advanced nurse practitioner,
Stirling, Scotland

Editor/publisher

Binkie Mais
binkie@jcn.co.uk

Sales and marketing executive

Ed Clews
ed.clews@jcn.co.uk
017985 731016

© Wound Care People Limited 2024
Unit G, Wixford Park, George's Elm Lane,
Bidford on Avon, Alcester B50 4JS

ISSN 2057-6021

t: +44(0) 1789 582000
e: binkie@jcn.co.uk
w: www.gpnursing.com

Published bi-monthly and distributed
free of charge to general practice
nurses based at primary care locations
throughout the United Kingdom. Also
available on subscription.

Institutional/overseas subscription rates:
United Kingdom: £160.00
Overseas: £295.00

UK subscription rates:
Four issues per year: £60

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Journal of General Practice Nursing (GPN)
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Opinions expressed in the articles are
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Practice Nursing*. Any products referred
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Printed in England by Blackmore Limited

Photograph on front:
Shidlovski/Shutterstock

To comment on any of the articles in GPN,
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article, please contact: binkie@jcn.co.uk

Personal self-care is not a luxury, but a necessity



It is exciting to see a growing editorial board for our journal, and we are fortunate to have some excellent clinicians with wide and varied experience to help inform our content and direction as we move into 2025. The December issue reflects this with a range of articles including advanced clinical decision-making, patient safety, and clinical articles on the rare but important disease bullous pemphigoid, gout and dietary changes, asthma, and managing urinary tract infections (UTIs) in men.

I really enjoyed attending the 'Simplifying lower limb care with a systematic approach: assess, dress, compress' study day on 24th September in Glasgow and found I benefitted enormously from networking, listening to some excellent speakers and updating my wound care skills — realising that there was a lot I did not know I needed to know until I attended. I also attended one of the Facebook Live events on 'Portrait of a patient™' — a useful and innovative learning resource about which you can find out more on *page 20* of this issue.

It was funny to see an editorial I had written on self-care in 2021 feature in one of the journal's social media posts during National Self-

Care week 18–24th November, but it struck home to me how important self-care was and still is for us and our patients in this busy, complex and often stressful modern world. If we are going to make a difference to others, we must also remember to look after ourselves. The practice matters piece in this issue features self-care and includes the importance of looking after our physical and mental health and finding time to 'walk the talk' and take the advice we give to our patients. At educational sessions I have attended recently, overwhelming evidence has been presented on the benefits of, for example, exercise and mental health, low salt and hypertension, avoiding being sedentary, weight loss, smoking cessation, keeping alcohol within recommended limits, healthy diet, etc — we all know the list, but do we manage to achieve it? The practice matters article looks at how sharing our own self-care journeys can be useful when we are helping patients develop their self-care skills. I have sometimes done this and found it to be well received — small hints and tips about how I have managed to build more exercise, mindfulness, relaxation or changes towards healthier eating into my routine have helped to enable patients to find their own ways to set achievable goals for change.

Why not make 2025 the year you write an article on your area of interest for our journal? We would love to hear from you with ideas and continue to build on our community and educational resources.

With warm wishes for Christmas and the festive period and 2025.

Jaqui Walker, editor-in-chief



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Jaqui Walker, general practice nurse/
advanced nurse practitioner, Stirling

Jennifer Aston, primary care educator
and ACP ambassador, Cambridge and
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College of General Practitioners
AHP/nurse representative

Susan Brown, advanced nurse practitioner/
general practice nurse, Alba Medical Group,
Bannockburn Health Centre

Matthew Cain, senior lecturer in adult
nursing and MSc nursing course leader,
University of Huddersfield; primary care
educator, NHS England; Queen's Nurse

Edwin Chamanga, head of nursing, tissue
viability and fundamentals of care, Epsom
and St Helier University Hospitals NHS Trust

Cheryl Crawford, practice sister, South
Beach Medical Practice, Ardrossan

Jude Harford, paediatric nurse practitioner,
Adam Practice, Poole, Dorset

Steve Holmes, general practitioner partner,
The Park Medical Practice, Shepton Mallet,
Somerset; clinical respiratory lead, NHS
England and Improvement South West

Leanne Hume, lead nurse for independent
health and social care, Royal College of
Nursing; Queen's Nurse

Julie Lennon, Queen's Nurse; ANP/GPN;
NES education supervisor/adviser,
Aultbea and Gairloch Medical Practice

Joanne Loades, independent nurse
consultant in cardiovascular disease, Norwich

Caroline McIntyre, primary care
pharmacist, Forth Valley Royal Hospital,
Larbert

Callum Metcalfe-O'Shea, UK professional
lead for long-term conditions, Royal College
of Nursing (RCN)

Rebecca Penzer, dermatology specialist nurse,
honorary lecturer, University of Hertfordshire

Michelle Phillips, head of quality and
governance, Willows Health

June Roberts, consultant nurse, assistant
director of nursing, Salford Royal NHS
Foundation Trust

Michelle Treasure, clinical nurse
educator (primary care), Cardiff and Vale
Healthboard; respiratory nurse specialist,
Asthma & Lung UK



I'm really excited to be part of the editorial board and be an integral part of helping GPNs to develop and share innovative practice and drive the profession forward. With unprecedented pressures on our service, it is fantastic to be involved with an easily accessible journal that addresses the many services that we deliver, and shares best practice so that we can reach our goal of providing safe and effective care.

Jude Harford



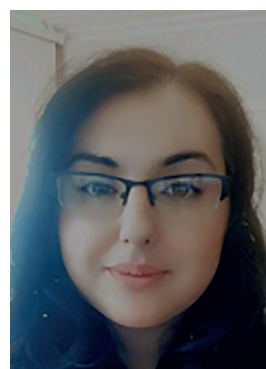
I am honoured to join the editorial board, bringing with me extensive experience in general practice nursing, where I developed a strong commitment to long-term condition management and preventative healthcare. I believe general practice nursing teams play a crucial role in delivering high-quality, safety-critical care that not only improves patient outcomes, but also reduces hospital admissions. Throughout my career, I have had the privilege of leading multisite healthcare organisations, with a particular focus on training and developing nursing teams. Supporting the next generation of nursing professionals has always been a key priority in my work. In my recent role with the Royal College of Nursing, I have been closely involved in promoting innovative practices and knowledge sharing across the sector. I am excited to contribute to the editorial board's mission of providing vital, up-to-date educational resources that support the ongoing professional development of nursing staff.

Leanne Hume



I am thrilled to join the editorial board. I am passionate about improving quality of care across primary care. I enjoy acting as a change agent in general practice to improve patients' experiences and always strive to ensure that high quality, person-centred care is achieved. I am excited to be able to share ideas and discuss topics imperative to our role with like-minded healthcare professionals.

Cheryl Crawford



I am delighted to have been invited to represent the *Journal of General Practice Nursing* editorial board. It is a privilege to review and contribute to the work of our incredible colleagues and authors. As a primary care pharmacist, I work closely and collaboratively with experienced general practice nurses (GPNs) and understand and appreciate the dedication, compassion and diverse skill mix GPNs bring to the multidisciplinary team. In these uncertain times, when the challenges and pressures faced in primary care and the health service as a whole are unprecedented, it has never been more imperative for us to keep up to date with current best practice and to be proactive in developing interprofessional relationships to support the delivery of high-quality patient care. I feel the journal is an excellent resource to promote evidence-based, person-centred care across the multidisciplinary team, and I look forward to supporting the up and coming content.

Caroline McIntyre



I am delighted to join the editorial board of the *Journal of General Practice Nursing* so that I can better

contribute to advancing the standards of care within healthcare services. With over 22 years of experience in clinical governance, quality assurance, and leadership, I am dedicated to improving patient outcomes and promoting collaboration across multidisciplinary teams. As a Queen's Nurse and a strong supporter of evidence-based practice, I am committed to facilitating discussions on best practices and sharing insights gained from my work at local and national levels. I see this opportunity to be part of the board as a chance to contribute to developing strategies that will empower healthcare professionals and enhance patient care.

Michelle Phillips



It is a privilege to be invited to join the editorial board. I have been nursing for 30 years and in general practice

for over 16 years. The change in general practice is nothing short of amazing. I am currently working in a dual ANP/GPN role which I am passionate about and proud of the way we can make a difference to our patients' lives. My love of chronic disease management pushed me into finding a dual role where I can utilise all my skills, sometimes in every consultation. I am also a keen supporter of new GPNs embarking on their careers, and this journal is a fantastic tool to learning. I love reading the articles and look forward to recapping, updating and broadening my knowledge in other areas.

Susan Brown



It is a real honour to be invited to the editorial board of such a prestigious nursing publication, especially when I have been using the *Journal of*

General Practice Nursing to guide my own clinical practice over the last decade. With a passion for education within primary care, I am very aware of the rapidly changing landscape of practice nursing, the role of the GPN as a 'gatekeeper' to the NHS and the increased workload that is expected of us on a daily basis. Education is fundamental to achieving a stronger, more informed nursing workforce who are better prepared to meet the diverse needs of the ever-changing population. Patient outcomes are improved when nurses are confident and able, readily employing their skills of critical thinking and using evidence-based principles of care. Education, of course, is key in achieving all of this. I am excited for the opportunity to contribute to such a valuable publication and I hope I will be able to bring some positive insights and facilitate the growth and development of the journal going forward.

Michelle Treasure



Having the opportunity to review and share knowledge around long-term conditions and primary care nursing is a great honour as part of the editorial board.

The GPN workforce is crucial to providing high standards of care across multimorbidity, and promoting best practice through the journal will only serve to enhance standards further. Primary care continues to shine as a diverse care sector that requires GPNs to be versatile, competent and confident in their daily practice, and this journal aims to inspire all GPNs to provide the best, evidence-based care possible.

Callum Metcalfe-O'Shea



It is an honour and such an exciting opportunity to have been invited to represent the *Journal of General Practice Nursing* editorial

board. As an academic, nurse and NMC registered nurse teacher, this opportunity will give me the chance to review contemporary research and share evidenced-based practice to deliver high quality patient-centred care, as well as raising the profile of practice and community nursing. I am so proud to be a nurse and Queen's Nurse and the impact that all of us in this profession have on patients' lives. I am a big advocate for working in primary care and promoting the career opportunities that are available to nurses and other healthcare professionals within the sector. This journal is a great platform for collaborating with like-minded healthcare professionals working in primary care and I look forward to representing the journal as a board member.

Matthew Cain



My passion for education has given me such an amazing general practice nursing career. To be invited

to become a member of the editorial board for the *Journal of General Practice Nursing* provides the opportunity to contribute to a journal with high standards and vision. Education is what drives good clinical practice; the characteristic adaptability and resilience demonstrated by staff is founded on sound principles. It is a privilege to be part of the editorial board, contributing to the strategic commitment of enabling access to educational material, which is contemporary, relevant and valued.

Julie Lennon

In each issue we investigate a topic affecting you and your practice. Here, we look at...

How to promote self-care in challenging situations

We've all been there. That 'leave it to me' moment when frustration gets the better of us and we decide that we'd rather finish a task ourselves than let someone else 'help'.

We might be trying to teach a patient to self-catheterise or educating them on how to monitor their blood glucose levels, but sometimes, whether it's through tiredness, others' lack of ability, or simply not having the time, it can seem easier to finish the job yourself than to watch someone else struggle.

With an increasing focus on self-care in the NHS, resisting the urge to take over is more important than ever. General practice nurses (GPNs), like all healthcare staff, are having to get used to the idea that prevention is better than cure, and that sometimes helping our patients to help themselves will have better results in the long term.

But what happens if a patient doesn't want our help, or lacks capacity to learn? Or if a shortage of equipment or skilled colleagues mean that we don't have the resources we need to educate patients or their carers about managing a long-term condition?

With the recent self-care week (18–24 November), it's a good time to refresh our memory of what self-care actually is, and how to manage challenging situations where it might just be easier to take matters into your own hands.

WHAT IS SELF-CARE AND WHY DO WE NEED IT?

According to the World Health Organization (WHO), self-care is



We can only look after others if we look after ourselves — something that GPNs need to consider in the busy world of primary care. Having enough time to provide care, let alone self-care, is a common issue due to the increased complexity and number of patients in primary care. It is vital that GPNs practice self-care through adequate hydration, taking allotted breaks and seeking support from others when needed.

For patients, this is also a crucial part of their long-term condition management, as self-care will be required for the rest of their lives to manage their condition. The challenges around this are usually linked to the biopsychosocial burden a diagnosis of a long-term condition brings. It is important to remember that patients on average spend one to three hours a year with a professional such as a GPN to support them living with their condition. Therefore, promoting self-care is crucial to prevent exacerbations and reduce complication risk. GPNs are best placed to provide health promotion and prevention strategies, building strong therapeutic relationships with patients to help them reach their goals and maintain good health. This article gives the right foundations to start those conversations around change and self-management, and GPNs should recognise their value in supporting patients through a life-long condition.

Callum Metcalfe-O'Shea

UK professional lead for long-term conditions, Royal College of Nursing

'the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker' ('Self-care for health and well-being' — www.who.int).

For community nurses such as GPNs, self-care is a pivotal role, with NHS England stating that they 'can promote health working in partnership with patients about their condition and supporting informed choices about the

management of their own health' ('Supporting patients to self-monitor in the community' — www.england.nhs.uk).

On a more practical level, self-care has been described as a continuum, ranging from GPNs educating patients on everyday well-being in terms of diet and lifestyle, to the self-monitoring of conditions such as diabetes and the management of recovery after trauma ('Empowering people to self-care — www.pagb.co.uk).

All of this requires GPNs to work with their patients as equal partners to enhance their understanding of their condition. This might involve educating them about medication and vaccinations, managing their long-term health such as in patients with asthma, diabetes and cardiorespiratory conditions, or providing advice and information on family planning and smoking cessation ('What is a general practice nurse? — gpnen.org.uk).

And why is self-care so important? According to the NHS Federation, it is vital not only for people's general wellbeing, but also to protect the NHS, with more and more people turning to overstretched healthcare services because of lifestyle-related conditions, many of which are preventable and linked to obesity, smoking, lack of exercise and poor diet ('The importance of self-care for local populations and for the healthcare system' — www.nhsconfed.org).

WHY DO SOME PATIENTS NEGLECT THEIR OWN HEALTH?

For all the good intentions we may have about providing self-care, some patients may simply not want, or be unable, to look after their own health. Such neglect can have any number of causes, for example ('What is self-neglect?' — www.scie.org.uk):

- A person may have cognitive issues such as dementia or other mental health conditions
- Physical conditions such as frailty or chronic pain may affect a person's energy levels, attention span or motivation
- Some medicines can leave people lacking the energy or will to complete self-care tasks
- Addictions to drugs or alcohol may leave a person unwilling to change their behaviour
- Traumatic events such as the death of a partner or relative can affect people's motivation to care for themselves.

Some patients may have valid reasons for not wanting to self-care. For example, those who find themselves having to self-catheterise may simply be embarrassed, have



Encouraging patients to embrace self-care isn't always easy, but the benefits are undeniable. By guiding patients to take charge of manageable aspects of their health, GPNs help reduce the need for frequent appointments and empower individuals to feel more in control of their own health. It's all about setting realistic goals, offering practical tips, and providing a bit of friendly encouragement along the way. As GPNs, we're here to make self-care achievable and positive, building a partnership that supports patients in leading healthier, more independent lives. And let's never forget that we, too, need to look after ourselves — after all, we can't pour from an empty cup!

Leanne Hume

Lead nurse for independent health and social care, Royal College of Nursing; Queen's Nurse

been given poor information by previous healthcare staff, or have experienced repeated complications such as urinary tract infections (UTIs) and catheter blockages ('Nurses as key advocates of self-care approaches to chronic disease management' — www.tandfonline.com).

It is also easy to simply underestimate the strain that having a long-term condition such as Parkinson's disease can have, with the constant need to manage symptoms, attend endless medical appointments and manage medicines wearing patients down and sapping their energy to self-care. In some cases, we might even encounter hostility from a patient. Those with diabetes for example can often rebel against the discipline required to monitor their blood glucose levels, while injecting insulin can also cause stigma, especially for young people who may not want to expose their condition in social situations ('Barriers to diabetes self-management in primary care settings' — www.sciencedirect.com).

AVOIDING THE BLAME GAME

It can be tempting to blame patients for not wanting to self-care, or suspect them of not putting in the effort to get better. We might even secretly suspect that they enjoy being looked after or find comfort in the 'sick' role. This is particularly true of those in chronic pain who may not have a visible disability and appear to be avoiding

exercise or treatment. However, it is important to always remember that a person's reason for avoiding self-care may be complex and involve any number of circumstances, including embarrassment about their situation, family commitments or stress at work ('A reflection on steps and support to enable good self-care' — www.bma.org.uk).

Another modern barrier to self-care is the amount of medical information (or disinformation) available on the internet, which can lead people to diagnose themselves with all manner of serious conditions and reject the advice of healthcare professionals. We have all experienced those irate patients who insist that they have a serious illness and have 'researched' the latest medicine or miracle treatment online, but who refuse to take steps to improve their general health and lifestyle ('Self care nation: self care attitudes and behaviours in the UK' — www.pagb.co.uk).

Geography can also be a factor, especially for GPNs who work in remote locations, or with a caseload spread across rural communities. In these situations, a lack of resources and the inability to consult with other staff can mean that GPNs may not have the 'quality' time to spend with patients resulting in 'quick-fixes' rather than sustained patient education ('The delivery of primary health care in remote communities' — www.sciencedirect.com).



Patient self-care has emerged as a critical topic within the general practice nursing and community workforce, particularly in light of winter pressures, shifting government leadership, and ever increasing workloads with varying complexities.

Self-care encompasses proactive strategies for maintaining physical, mental, and emotional well-being, recognising that it is not a one-size-fits-all approach and holds unique significance for each individual. It is essential to collaborate with patients to identify what self-care means to them, particularly in managing their own health and long-term conditions.

The application of specific, measurable, achievable, realistic, and timely (SMART) goals extends beyond educational contexts; it can be used as an effective method for enhancing self-motivation among patients managing health conditions. This tool is particularly beneficial during the implementation of new treatment plans or when patients experience challenges with adherence. I have found this tool to be useful, and recommend it to both patients and colleagues as it helps to provide clarity and identify priorities when feeling overwhelmed.

When developing care plans and recommendations, it is important that you are not on your own and a collaborative approach to decision-making should be adopted. Shared decision-making, supported by a multidisciplinary approach, can significantly empower patients and optimise care outcomes. Collaborative working is increasingly accessible within the ever-evolving landscape of general practice and primary care, particularly with the introduction of new roles that enhance the patient journey. It is important to familiarise yourself with the various roles within your clinical setting, as this knowledge allows for effective referrals and maximises each patient interaction for education and empowerment.

Matthew Cain

Senior lecturer in adult nursing and MSc nursing course leader, University of Huddersfield; primary care educator, NHS England; Queen's Nurse

to persuade someone with mobility problems to join an exercise class in your practice? Having defined aims with a specific end-point will help you achieve your goal

- Are you being realistic: asking someone with a cardiovascular condition who visits the pub each night to simply give up alcohol and fast-food is possibly not going to work. Remember the principles of person-centred care and try and involve them in designing a reduction strategy that they might actually stick to
- Planning: consider the best way to reach your patients. For example, advertising a smoking cessation group via email and social media may not be the best approach if you are trying to reach older people or those with limited access to technology
- Work with outside experts and agencies: this can be a useful way of reaching people who may not be keen to self-care. For example, older men may be reluctant to attend a fitness class held in a GP surgery, but they might sign up for a walking football session in the local football club
- Engage with your audience: targeted messaging, for example speaking to patients who visit your practice about a new vaccination programme may be more effective than blanket coverage using emails or leaflets.

Another way to encourage patients to self-care is to use the nursing skills you already have but can take for granted. One study found that establishing cooperative relationships through communication skills and nurses' knowledge of therapeutic alliances was key to getting patients to reduce risky behaviour ('Understanding how general practice nurses support adult lifestyle risk reduction' — onlinelibrary.wiley.com).

Even sharing personal stories of your own self-care journey, such as how you managed to cut out processed foods, can have a significant effect on patients' motivation to change. This is where GPNs' skill in areas such as empathy, trust and self-disclosure can create an

In some cases, with the best will in the world, a GPN's ability to promote self-care is just a victim of circumstance. For example, during the Covid-19 pandemic, the need to wear personal protective equipment (PPE) and shield vulnerable patients, as well as the pure volume of cases, made face-to-face contact very challenging and meant that patient education often fell by the wayside ('Nurses' strategies for overcoming barriers to fundamental nursing care in patients with COVID-19' — onlinelibrary.wiley.com).

HOW TO MANAGE SELF-CARE IN DIFFICULT CIRCUMSTANCES

When a patient or their carers are struggling to engage with self-care, it can be tempting to take over. However, there are some strategies that you can try before you step in, and which will improve the chances of your self-care strategy working ('How community nurses can promote self-care' — www.jcn.co.uk):

- Consider your aims and preferred outcomes: for example, are you trying to help someone with asthma give up smoking, or trying

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'Tell me and I will forget, teach me and I may remember, show me and I will learn' (Benjamin Franklin).

Whenever I think about promoting self-care with my patients in general practice, I often think about the relevance of this quote and how true it is in relation to a patient's ability to manage their health. Self-care and patient empowerment are both at the centre of the NHS's future planning, not least because it offers patients the opportunity to be involved in and manage their own health, but because the sustainability of our National Health Service is reliant on the population taking ownership and responsibility for their own general well-being. For years we have been moving away from a traditional biomedical approach to medicine and the divide that so often exists between patients and their healthcare providers; with the doctor or nurse holding the power within the relationship. It is now well-recognised that positive patient outcomes are strongly linked to self-care practices and these behaviours also contribute to improved physical and mental wellbeing, a decrease in GP and hospital visits, and overall a better quality of life.

Promoting self-care can be extremely challenging within primary care and, in my experience, the barriers that exist lie both with the patient and the provider. As healthcare practitioners, we want to 'fix' problems and often find it difficult to accept that what we think is best for the patient, is not necessarily what the patient thinks is best for them. Approaches to self-care which are compassionate, individualised and motivational are effective and will facilitate a more 'balanced' interaction with co-created patient objectives.

As healthcare professionals, we need to take a step back sometimes and consider what it is that can be realistically achieved with our patients, and, more importantly, not to feel disappointed or attribute blame when things do not work out exactly as we had hoped.

Encouraging patients to build healthier habits and having open and honest discussions on making better life choices are key messages that should be embedded within all our consultations. However, we should remember that for these messages to be received and acted upon, any goals set must be patient-centred, achievable, well-supported and sustainable.

Michelle Treasure

Clinical nurse educator (primary care), Cardiff and Vale Healthboard; respiratory nurse specialist, Asthma + Lung UK

environment of psychological safety, where patients feel they can discuss any barriers or fears preventing them from changing their behaviour

LOOKING AFTER NUMBER ONE

It is also important to remember that as well as trying to persuade patients to prevent long-term conditions, it is also important for GPNs to look after their own health. After all, no patient is likely to take advice from a nurse who is obviously neglecting their own wellbeing ('Self-care is vital for practice nurses' — www.practicenursing.com).

In the busy working life of a GPN, it can be hard to take a break, eat a healthy nutritious lunch, or even find time to spend with colleagues to decompress. Remember that role-modelling is an important skill in self-care and it is vital to demonstrate

to patients the potential benefits of looking after themselves, rather than simply handing out advice.

While it can be difficult to take a step back from the caring role, supporting a patient to manage their own health can have long-term benefits, both for their wellbeing and for our overstretched NHS. While in some cases you will still have to provide advice or use your clinical skills, stay patient, persevere, and remember that often the best way to help someone is to give them the tools to help themselves. **GPN**

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ARION
SLIDE SOLUTIONS



Increasing proportions of illnesses are related to lifestyle so it is becoming more and more important to explore this with patients at every opportunity. GPNs have many opportunities to build trust with patients and encourage appropriate self-care, but the amount of influence we can have with patients is limited as there are so many other influences such as friends, family and social media. It is therefore just as important to correct disinformation as it is to guide patients to well-evidenced and appropriate information. In many respects, there is too much available information which can either be conflicting, confusing or overwhelming. Worryingly, 'Dr Google' is often the patient's first choice when seeking advice on medical issues. This can either give false reassurance or cause fear or overwhelm patients. It is important that GPNs do some research so that they are able to guide patients to reliable information sources such as NHS choices, British Heart Foundation, Diabetes UK, or other disease-specific websites.

When discussing self-care with patients, we need to be careful to acknowledge what they already know and work with them to explore realistic changes, being careful not to be judgemental. It can be very revealing to ask patients what they already know about their health issue. When running group clinics for new diabetic or pre-diabetic patients, I am often surprised at how little they understood about diabetes and how important lifestyle is to manage their health well. Few people seem to know that diabetes is a cardiovascular disease and what can go wrong if sugar levels are not controlled. Even fewer understand what 'HbA1c' means and why it is important in diabetes. Diet is also poorly understood by many diabetics, so patient-centred guidance is needed so that they can manage their diabetes well. Helping patients understand their weight history, or relationship with food can be really helpful when exploring why patients are overweight. It can lead to much more successful weight loss and may help empower them to engage with self-help or weight loss activities.

GPNs need to be aware of the increasing numbers of health apps which are available so that they can suggest appropriate ones to patients. There is an important role for health visitors to make sure that 'new mums' have good information about self-care at the start of their parenting journey, as so few 'new mums' have good family support close by.

Pharmacists can also play a role in guiding people with self-care. Many pharmacies have information leaflets and access to a pharmacist. The only downside is the cost of even quite basic medicines, which many may struggle to afford.

A GPN's role is to make sure that we are well informed so that we can guide patients towards reliable self-care information and encourage them to be confident in managing simple illnesses themselves while supporting them to seek medical help where appropriate.

Jenny Aston

Primary care educator and ACP ambassador, Cambridge and Peterborough Training Hub; Royal College of General Practitioners (RCGP) AHP/nurse representative

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As a leader in primary care, I recognise the importance of incorporating self-care and well-being practices into general practice nursing team meetings to foster a supportive and positive workplace culture. Nursing teams in primary care face demanding, fast-paced days with heavy workloads and emotionally charged encounters. As a result, burnout and stress are common challenges. Embedding self-care activities within team meetings offers a structured way to address these issues, creating intentional space for relaxation and reflection amid the pressures of the work environment. In this way, meetings become not only an opportunity for operational updates, but also for reinforcing the message that well-being is a team priority.

One impactful way to promote self-care is through individual catch-up calls with team members, intentionally scheduled without any set agenda. These calls create a private space for nurses to share whatever is on their minds, whether work-related or personal, allowing team leads to better understand each team member's unique challenges and successes. These check-ins often provide invaluable insights, building trust within the team and allowing issues to be addressed early. This practice also ensures that staff feel valued and heard, which can improve their overall morale and job satisfaction. Regular individual touchpoints, free of formalities, help cultivate an environment where well-being is seen as a shared responsibility.

Taking team meetings outdoors to a local park or green space can also significantly shift team dynamics and uplift the group's mood. Changing scenery, even for a short time, allows staff to step out of the high-pressure clinical setting and breathe fresh air, which has both physical and psychological benefits. Team members often feel more relaxed and engaged, finding it easier to open up in a neutral setting. Outdoor meetings can include activities like a short walk or stretching exercises before diving into the agenda, giving team members a chance to unwind and re-energise.

In addition to these changes, introducing team-building activities that encourage social connection is vital. For example, initiating a dance group within the organisation has brought together nurses and staff from the wider team, offering a creative, fun way to engage in physical activity and release stress. The group serves as a low-pressure space for staff to bond outside of work, strengthening relationships and promoting a positive work culture. Likewise, organising activities like treasure hunts, team-building games, or arts and crafts sessions can bring fresh energy to team meetings and foster a sense of playfulness and camaraderie. These activities are simple but impactful, offering moments of joy and a break from daily routines, nurturing a supportive and connected team spirit.

Structured self-care discussions can also be integrated into meetings. A quick 'well-being check-in' at the beginning of each meeting, where team members rate their current stress level or share a positive moment, can help leaders gauge overall team morale and respond proactively. Other activities, like a mindfulness exercise or a short segment on stress management, provide valuable tools that staff can use beyond the meeting room. Providing refreshments, such as herbal teas or healthy snacks, reinforces the focus on health and well-being, helping staff to feel valued and cared for by the organisation.

All the above suggestions are initiatives I have successfully implemented within my workplace, and the positive impact on the team's morale and resilience has been evident. While leaders face many challenges in balancing administrative demands with supporting staff well-being, the time and effort spent on creating these activities is worth it. Prioritising self-care and a positive workplace culture not only supports staff in managing their personal and professional responsibilities, but also contributes to the quality of patient care. The benefit of nurturing a well-supported, cohesive team is clear: when staff feel connected and valued, they are more resilient, engaged, and equipped to deliver compassionate, high-quality care.

Michelle Phillips
Head of quality and governance, Willows Health

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Raising awareness around asthma and how to manage it

Learning from the #AskAboutAsthma campaign

Asthma is the most common long-term condition in children and young people (CYP), affecting one in 11 five to 18 year olds (Asthma + Lung UK, 2024a). That is around three in every classroom. Most cases are mild to moderate and, in most children, a few simple interventions can vastly reduce asthma symptoms and risk of attack (Bush and Fleming, 2015; British Thoracic Society/ Scottish Intercollegiate Guidelines network [BTS/SIGN], 2019; Levy, 2020; National Institute for Health and Care Excellence [NICE], 2021). The awareness campaign, #AskAboutAsthma, was established to encourage everyone seeing CYP with asthma to have these interventions front and centre of their minds.

The campaign has gone from strength to strength over the years. Originally designed to educate and support those working in paediatric asthma in London and focused around a one-day in-person event, it now draws in colleagues from all over the country and involves an online conference, webinars and focused content released every day of the campaign week.

Here, the organisers reflect on the 2024 campaign and its development over the past eight years, both in terms of the spread of knowledge and of the idea that anyone living or working with children also needs to be thinking about children’s asthma.

#ASKABOUTASTHMA 2024

This year’s #AskAboutAsthma campaign took place from the 9th to 15th September 2024 — timed to just precede the annual spike in asthma admissions to hospital that are seen when children return to school after the summer holidays (Asthma + Lung UK, 2024b).

As always, the campaign focused on four specific areas, described in *Box 1*.

The NHS England London children and young people’s asthma programme involves several clinical networks:

- An overarching leadership group
- An asthma clinical nurse specialist (CNS) network
- A severe asthma group
- A pharmacy group.

Every year, a theme that reflects what is being heard from these groups, and in the wider media, that we think will resonate with clinicians and families is chosen. For 2024, we honed in on the concept of CYP living their ‘best lives’, unimpeded by asthma. Through this theme, quality of life, and the idea of CYP not ‘missing out’ due to their asthma, was considered. This included the tenet that well controlled asthma means having few or no symptoms.

A week of events based around helping CYP with asthma to live their best lives was therefore designed, with different days focusing on different audiences or professional groups. Key among these are professionals working in primary care

and nurses, including those working in a specialist capacity as well as within general practice and general paediatrics.

Examining feedback and data from previous years suggested that the daily webinars and the one-day conference are particularly well received. In addition, of all the types of pre-recorded content included, short videos are the most often downloaded, followed by podcasts and blogs. Efforts for 2024 therefore focused on commissioning a series of short videos from diverse professional groups, young people and families, which aimed to appeal to as wide an audience as possible. Where a particular subject did not fit the format of a short film — for example, we wanted to hear from a larger group, or explore a subject in depth, or if the speaker/author wanted to remain anonymous — podcasts or blogs were used instead.

We were keen to ensure that the voices of CYP were at the heart of the 2024 campaign and so went out to various groups in the planning stages and used every opportunity to gauge their views. This year’s campaign included a very eloquent young person with asthma opening the



Christine Kirkpatrick (left) and Georgie Herskovits (right), both programme managers, babies, children and young people’s team, NHS England, London

conference, describing her experience of severe asthma and the impact of stigma — in films and other media as well as at school — on her life. In addition, two separate groups, one from a primary school, another with older teenagers, recorded podcasts about their views of air pollution, its impact on their lungs and, in one case, how they are working with their school to address it. We also heard from a young boy about how asthma is not holding him back from his passion for football.

The content commissioned often reflects issues commonly found in poorly-managed asthma and will resonate with those familiar with the 'brilliant basics of asthma education' (King, 2024). This includes increasing awareness of the dangers of over-use of short-acting beta-agonists (SABA), often combined with underuse of inhaled corticosteroids, under-diagnosis, poor inhaler technique, lack of spacer/use of the wrong spacer, the need for timely follow-up after an asthma attack and encouraging all young patients to have a personalised asthma action plan (PAAP).

THIS YEAR'S HIGHLIGHTS

This was the most successful year in the history of the campaign with more people from a greater number of organisations registering for a live event. Total social media reach was over 3.9 million (up from 3.5 million last year), and over 330 different organisations engaged online through social media and posting on their websites. We were particularly pleased to see increased engagement among primary care organisations (144, up from 59 last year). More important than online engagement, of course, is



Practice point

The London CYP asthma programme has produced a set of digital PAAPs, which all are welcome to use: www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/clinical-care/personal-asthma-action-plans-paap/.

Box 1

The four 'asks' of #AskAboutAsthma

- Get an **asthma action plan** in place (www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/clinical-care/personal-asthma-action-plans-paap/)
- Understand how to use **inhalers** correctly (www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/pharmacy/inhaler-technique/)
- Schedule an **asthma review** — every year and after every attack (www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/clinical-care/asthma-reviews/)
- Consider **air quality** and its impact on lung health (www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/air-quality-asthma-trigger/)

on-the-ground engagement among practitioners. Feedback from the '#AskAboutAsthma ambassadors', who promote the campaign in their local areas, has suggested greater involvement here too, but more evaluation on this is needed.

Highlights included a video from the Mayor of London, Sadiq Khan, recorded specially for #AskAboutAsthma (<https://x.com/MayorofLondon/status/1833031212698636758>), and the appearance of clean air activist and long-time supporter of the campaign, Rosamund Adoo-Kissi-Debrah, at the one-day conference. A broadcast into schools with two paediatricians, an asthma nurse and young person with lived experience answering questions from primary school children on topics such as 'can asthma be cured?' and 'can you catch asthma?', was seen by over 6,600 children. Bringing the topic into the classroom to target children with asthma and their classmates, as well as teaching staff offers a great opportunity for learning. We shared this film as part of the broadcast, as it demonstrates clearly how and why young people and all those around them day to day — friends and school staff particularly — have a role to play in ensuring good asthma care is in place (www.youtube.com/watch?v=w2hKHzH4b4s).

We were also delighted to provide a refresher education session for primary care staff, which is particularly relevant given the new NICE/BTS/SIGN guidelines expected soon and increased availability of maintenance and

reliever therapy (MART) and as needed anti-inflammatory reliever (AIR) inhalers. Our dedicated nursing webinar focused on the great work that nurses are leading in the areas of reducing reliance on SABAs and new pathways for CYP asthma, as well as an educational presentation on dysfunctional breathing from a specialist physiotherapist.

Other highlights included a blog about asthma education for primary care networks (PCNs), delivered through protected learning time sessions by asthma CNSs, and a podcast on a place-based approach to improving asthma care.

The schedule of the week's events can be viewed online at: www.transformationpartners.nhs.uk/askaboutasthma-2024/#schedule.

HOW THE CAMPAIGN HAS DEVELOPED OVER THE YEARS

When the campaign originated, it focused on the first three 'asks' of #AskAboutAsthma, as practical examples of what healthcare professionals and families could focus on to directly improve CYP asthma. With the growing realisation of the impact of air pollution on asthma and on developing lungs particularly (United States Environmental Protection Agency, 2018; Tiotui et al, 2020; Altman et al, 2023), the fourth 'ask', to encourage families, healthcare professionals, schools and others to consider air pollution as a part of standard asthma care and management has been added. This has also encouraged the

involvement of partners such as the Greater London Authority, local authorities and social care providers — which might not otherwise have considered asthma as ‘their business’ — to get involved in the campaign and incorporate its themes within their planning. Widening the type of content to include indoor and outdoor air pollution, alongside issues such as vaping, has helped increase the appeal of the campaign and encouraged those who might not have considered lung health to be relevant to them, to get involved.

This type of partnership work has expanded beyond air pollution. This year’s campaign involved the charities Asthma+Lung UK, Barnardos and Over The Wall, as well as the Medicines and Healthcare products Regulatory Agency (MHRA), which used #AskAboutAsthma as a means of promoting its recent warnings in relation to the use of montelukast through two short videos — one for healthcare professionals (www.youtube.com/watch?v=EFamfnOYkeI) and one for patients and families (www.youtube.com/watch?v=gOTtwv1oSs).

Since the inaugural campaign in 2016, #AskAboutAsthma has expanded its reach from a predominant focus on those already engaged with CYP asthma care, to everyone coming into contact with young people with asthma. At the same time, we have tried to provide education and resources dedicated to individual professional groups, recognising that, while the same core messages are relevant to everyone, people are at different stages of their journey, and have a different role to play in ensuring excellent asthma care for young patients.

The inclusion of more diverse voices, more children’s voices and those of parents and families is key, not only to making the content relevant to other patients and families, but also to remind treating clinicians that the patient is central to everything they do. The most positive feedback received has been around the information included from the young people and their families who feel able to share their experience.

Recognising how stretched NHS, social care and school staff are currently, we particularly appreciate the feedback received from these groups over the years. In addition to the content included, we have also tried to make information about the campaign and its aims, and how different groups can get involved, as simple as possible to access. For example, in 2024 we created a set of one-page factsheets for different audiences to help them find the information they need quickly and easily. For those who are interested, the primary care factsheet can be found at: www.transformationpartners.nhs.uk/askaboutasthma-2024/#Factsheets.

CONCLUSION

There is a very active and dedicated children’s asthma workforce in London, as elsewhere in the country. However, most asthma care is delivered by those who are dedicated to all aspects of health, for both adults and children. Those working hard in primary care to take care of their local populations are key to achieving the outcomes of well controlled and managed asthma at all stages of life.

Key lessons learned from this year’s #AskAboutAsthma campaign are the value of the multidisciplinary workforce, their dedication to developing their knowledge and practice, and how the patient voice is an invaluable reminder of our purpose. **GPN**

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Useful resources

London Asthma Toolkit: www.transformationpartners.nhs.uk/resource/london-asthma-toolkit/

#AskAboutAsthma 2024: www.transformationpartners.nhs.uk/askaboutasthma-2024/

Asthma + Lung UK: www.asthmaandlung.org.uk

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Overcoming compression bandaging challenges with Portrait of a Patient™

Compression bandaging can present a challenge to healthcare professionals. Some clinicians may not have the necessary skills and training to safely and competently apply it, while others may be using it but not in accordance with the evidence base. As clinicians, it is our responsibility to make sure that our knowledge and skills are up to date so that we can deliver evidence-based care to patients and do no harm (Abu-Baker et al, 2021). The *NHS Long Term Plan* emphasised the importance of placing the patient at the heart of their care with their experiences, needs and preferences considered when developing a care plan with them (NHS England, 2019).

Evidence shows that for people with venous leg ulceration, a negative experience of care can have a detrimental impact on their treatment journey and ultimately, overall health and wellbeing (Phillips et al, 2018). This also applies to the use of compression therapy — the gold standard for long-term prevention and treatment of venous leg ulcers (Perry et al, 2023).

Unfortunately, evidence has shown that it is not being used consistently by clinicians in the community setting. Indeed, many components of evidence-based practice for the treatment of people with a venous leg ulcer, including a confirmed diagnosis

documented in the notes and an ankle brachial pressure index (ABPI) measurement not being carried out or recorded (Guest et al, 2020).

PATIENT CHALLENGES

For patients placed into compression bandaging, usually traditional four-layer bandaging, common issues of pain, discomfort, and reduced mobility are often reported (Phillips et al, 2018). Patients may cope with this by removing their compression, and may then be labelled as non-compliant as a result. This time out of compression will lead to increasing severity of the underlying venous disease, and worsening of symptoms. The patient either may not recognise the link in the removal of compression and deterioration, or sometimes, if they do, would rather that than the restrictions that bandaging can place on their life (Phillips et al, 2018). It is important for clinicians to be aware of this and to work with each patient to find a compression solution.

With these factors in mind, Portrait of a Patient™ has been developed. This new learning platform uses animation to present a patient, Cynthia, in a clinical scenario where she presents with a venous leg ulcer. She has had the wound for a while, but her symptoms are becoming unbearable and impacting on all aspects of her life.

The platform guides the user through a series of prompts to ask Cynthia about her experience and challenges in relation to compression therapy. She is questioned about her understanding of how compression works, and presented with a short cartoon to aid her knowledge. Finally, 3M™ Coban™ 2 Layer

Compression System is introduced as an evidence-based solution to overcome Cynthia's previous concerns about bandaging. A video demonstrates the benefits and ease of use of the Coban 2 Compression System, overcoming issues with skills and training.

While recognising that compression therapy and patient adherence is a complex topic (Phillips et al, 2018), Portrait of a Patient does challenge us as clinicians to reflect upon how we approach conversations with our patients around compression therapy. It also reminds us of our duty to keep up to date with practice, including knowledge of the products available that can help simplify care delivery (Abu-Baker et al, 2021). Visit Portrait of a Patient today — www.portraitofapatient.com — to see how it can help you to improve your clinical skills to enhance both your patient interactions and their outcomes. **GPN**

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Maria Hughes, nurse consultant, tissue viability, Countess of Chester Hospital NHS Foundation Trust, Chester; Queen's Nurse



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Why supportive care is vital to manage this autoimmune disease's impact on overall health

Sjögren's syndrome: a snapshot to increase awareness

Sjögren's syndrome. Never heard of it? No, neither had I. In fact, a nurse I spoke to only a few weeks ago hadn't either.

Sjögren's syndrome (hereafter known as Sjögren's) is a chronic autoimmune disorder of unknown origin (Carsons and Patel, 2023), which attacks the secretory glands that produce fluid for the eyes, mouth, skin, gastrointestinal and genital tract resulting in decreased fluid production (Lackner et al, 2017). Essentially however, the condition has the potential to affect virtually any organ system leading to extreme clinical symptoms (Negrini et al, 2022), the impact of which can be severely debilitating.

Common clinical manifestations associated with Sjögren's include dry eyes (keratoconjunctivitis) and a dry mouth (xerostomia) resulting from inflammation of the lacrimal and salivary glands (Baer and Walitt, 2017). Others may include fatigue and arthralgia (Price et al, 2024), anxiety, depression and decreased physical functioning (Negrini et al, 2022).

Symptoms associated with the eyes include a burning sensation, eyestrain, photophobia, blurred vision, and the sense of having something in the eye(s) (Wu et al, 2023). Dry and cold environments in

“... the condition has the potential to affect virtually any organ system leading to extreme clinical symptoms (Negrini et al, 2022), the impact of which can be severely debilitating.

particular can present problems, as can prolonged visual effort, such as computer screen use and reading (Wu et al, 2023).

Research undertaken by Blochowiak et al (2016) found that the most frequent symptoms associated with a dry mouth include dryness of the throat and nasal mucosa, dry lips, a burning sensation in the mouth, sensation of regurgitation of stomach contents and predisposition to mouth ulcers and mouth sores.

While there is currently no cure for Sjögren's, there are treatments that can make it possible to live a fairly normal life, the mainstay of which is treatment for dry eyes and a dry mouth (NHS, 2020). Treatment essentially replaces the reduced secretions.

While Sjögren's is primarily associated with diminished fluid production and the impact of this on organ function, research undertaken by Milic et al (2019) found that those with Sjögren's can also experience increased levels of emotional instability and anxiety when compared to more healthy participants. This can frequently lead

to those with Sjögren's leading a more introverted lifestyle.

While the condition can present at any age (Carsons and Patel, 2023), Sjögren's typically affects women aged between 40 and 60 years old (Angum et al, 2020). Furthermore, mild symptoms may essentially be overlooked leading to a potential delay in diagnosis (Angum et al, 2020). Moreover, presenting non-specific symptoms and a lack of knowledge regarding Sjögren's can delay an early diagnosis (Kumar et al, 2019), and yet it is known to be one of the most common rheumatological diseases there is (André and Böckle, 2022).

Once diagnosed it may not be unusual for someone with Sjögren's to require multiple healthcare interventions, which may typically involve rheumatologists, GPs, ophthalmologists and dentists, opticians, optometrists and specialist nurses (Price et al, 2024). Others may include gynaecologists, pulmonologists and neurologists, depending on organs involved and symptoms presented (Stefanski et al, 2017).

SO, WHAT NEXT?

A multitude of factors can cause a dry mouth and dry eyes to occur simultaneously or individually (Webster, 2023). For example, dehydration, certain types of medication, environmental factors, allergies, a person's lifestyle choices and underlying health conditions (of which Sjögren's may be only one of them) can all play a part (Webster, 2023).

This can make it difficult to diagnose Sjögren's and in fact there is currently no specific diagnostic criteria that will conclusively



Catherine Best, nursing lecturer, Birmingham City University; Queen's Nurse

diagnose Sjögren's and the clinician's judgement is considered gold standard (Vivino, 2022). Instead, diagnosis is based on symptoms experienced and a series of tests, examples of which include serological tests (which look for the presence of certain antibodies); eye tests, such as Schirmer's test (which identifies the amount of tears being produced), and histological tests, such as labial salivary gland biopsy (which helps to establish if inflammation is present) (Stefanski et al, 2017).

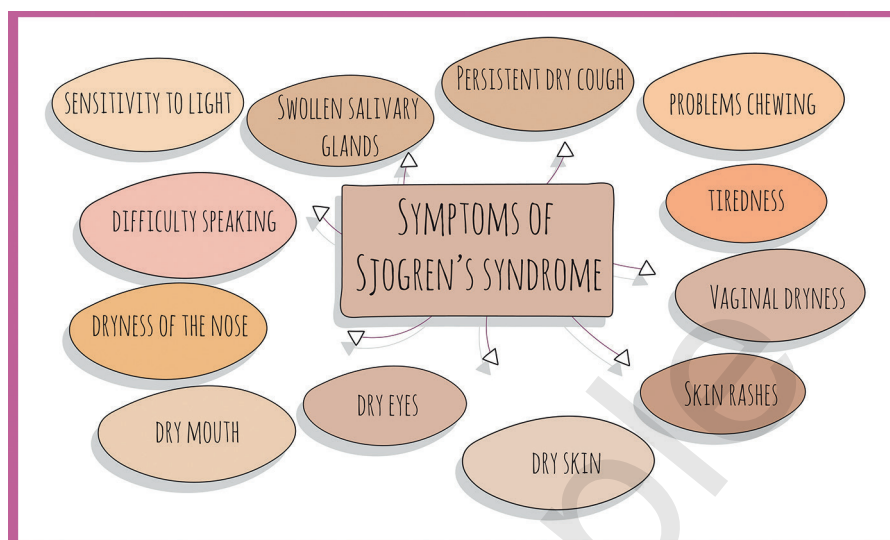
In view of the difficulty of diagnosis, it is important that healthcare professionals, including nurses, are not only aware of this relatively unknown condition, but are also vigilant to the signs and symptoms and know how to take a detailed clinical history to ensure prompt referral to specialist care.

It is equally vital to refer on, as symptoms do not miraculously go away. Those diagnosed with Sjögren's need to be supported to live life to the full and with the right treatment encouraged to self-manage their condition (Price et al, 2024). This can be particularly challenging for the patient with multiple problems.

Finally, while it is difficult to find any information about any associated stigma, using multiple eyedrops several times a day and oral sprays could make patients feel self-conscious. It is important therefore that nurses encourage them to override any feelings of embarrassment to reduce the risk of potential complications.

As a nurse, if you want more information, you can look at the various websites that discuss Sjögren's in more detail (but always check that they are reputable). It is also possible to talk to specialists previously mentioned and, most importantly, patients with lived experience, who can be the best teachers.

Equally you might want to become involved in World Sjögren's Day held on the birthday of Dr Henrik Sjögren — 23rd July — a Swedish ophthalmologist who in 1933 first identified the condition.



This piece is only a snapshot of Sjögren's syndrome. By understanding the complex nature of this condition, nurses can increase their own and public knowledge around this often-debilitating condition and essentially facilitate the level of support needed. **GPN**

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■ ■ ■ Lipid management is a vital component in the care of patients with long-term conditions

Lipid management and long-term conditions

In the final part of our **Monitoring matters** series, Callum Metcalfe-O'Shea, advanced nurse practitioner and UK professional lead for long-term conditions with the Royal College of Nursing (RCN), discusses lipid management. Again, the term long-term conditions covers type 2 diabetes, asthma/chronic obstructive pulmonary disease (COPD), autoimmune rheumatic diseases and inflammatory bowel diseases (Crohn's/colitis). Lipid management is ever evolving with new and emerging treatments available, and many both positive and difficult conversations often occur between general practice nurses (GPNs) and patients around this clinical issue. This article defines lipid management in the context of long-term conditions, highlighting assessment tools alongside treatments to help GPNs identify the evidence needed to have discussions with patients around lipid management. Treatment options will be considered, but application to local formulary and policy is required.

WHY IS LIPID MANAGEMENT SO IMPORTANT?

Essentially, high lipids increase the risk of cardiovascular events (British Heart Foundation [BHF], 2024). In the UK, 25–28% of cardiovascular disease (CVD) death is due to raised cholesterol (BHF, 2024). Having a high cholesterol level is the second most significant risk factor after high blood pressure (BP), and for every 1mmol/L reduction in low-density lipoprotein cholesterol (LDL-C) there is a 23% reduction in major CV events (BHF, 2024) — indicating the seriousness of having high lipids.

To further understand the implications, it is important to recognise that the pathophysiology can be caused by raised lipids in the blood (Jebari-Benslaiman et al, 2022). It should be noted that damage to endothelial cells allows LDL access to subintimal space, and LDL then becomes oxidised by 'foam cells' (Jebari-Benslaiman et al, 2022). Accumulation of these foam cells creates a bulge in the vessel wall, causing plaque formation and a fibrous collagen cap (Jebari-Benslaiman et al, 2022). Continued inflammatory processes produce proteinase enzymes which degrade the fibrous cap, then when the plaque ruptures, the interior is exposed to circulation activating clotting mechanisms (Jebari-Benslaiman et al, 2022). This ultimately causes the clot

to clog arteries preventing blood flow and oxygenation of tissues (Jebari-Benslaiman et al, 2022).

Particular risk factors need to be considered in a primary care setting, including:

- Dyslipidaemia (high LDL)
 - Family history/genetic disposition
 - Smoking (free radicals in blood)
 - Hypertension (chronic high pressure forces)
 - Diabetes (high glucose alters endothelial cell metabolism)
 - Increasing age
 - Gender — females are at twice the risk
 - Ethnic minorities
- (BHF, 2024).

GPNs should be aware of the pathophysiology underlying raised lipid levels and work with patients to assess their risks using structured assessment tools (Nuttall, 2024).

WHAT ASSESSMENT TOOLS ARE AVAILABLE?

To ensure appropriate assessment and recognition of those who may require intervention for lipid lowering therapy, the QRISK (cardiovascular risks score) prediction model is recommended by the National Institute for Health and Care Excellence (NICE, 2014) for calculating the 10-year risk of a CVD event to guide treatment decisions for the primary prevention of CVD

(Pate et al, 2020). QRISK^{®2} is used widely across primary care. This is an algorithm which calculates an individual's 10-year risk of having a heart attack or stroke (Pate et al, 2020). However, a NICE guideline on lipid modification and cardiovascular risk assessment published in 2014 highlighted a number of conditions associated with increased cardiovascular risk that may not be fully captured by QRISK2 (Hippisley-Cox et al, 2017).

Therefore, it may be argued that the use of QRISK^{®3} may be required, which is an updated version of the QRISK^{®2} risk calculator (BNF, 2024). It considers additional risk factors such as chronic kidney disease (stage 3 or above), migraine, corticosteroid use, systemic lupus erythematosus, atypical antipsychotic use, severe mental illness, erectile dysfunction, and a measure of systolic blood pressure variability (BNF, 2024). This is all dependent on local systems and what is available, but use of a QRISK score essentially will help identify those at risk (Hippisley-Cox et al, 2017).



Practice points

How do you assess risk factors in individuals with a long-term condition for CVD? Make a list of ways you can do this in a practice setting?



Practice points

When can you undertake risk assessments for CVD in primary care? Think about what opportunities you may have with patients to calculate their risk.

However, it should be noted that there are times when a QRISK score cannot be used, including:

- People with established CVD or those who are at high risk of developing CVD because of familial hypercholesterolaemia (FH), or other inherited disorders of lipid metabolism, as they are already aware of the risk
- People aged >85 years, as these individuals are already at increased risk due to age alone, particularly if they smoke or have high BP

(Public Health England [PHE], 2021).

GPNs play a vital role in the identification of patients at risk through long-term condition reviews, health checks and lifestyle education delivery. Therefore, awareness of assessment tools available will support identifying patients who may need further investigations and possible treatment (Pate et al, 2020).

WHAT TESTS DO YOU NEED TO UNDERTAKE AND HOW DO YOU INTERPRET THEM?

Once patients have been identified, it is important to check that they have had up-to-date blood tests to understand their level of risk and what treatments may be required (Fernando and Diggle, 2023).

Particular tests recommended are:

- Total cholesterol
- Triglycerides
- High-density lipoprotein (HDL) — cholesterol 'good'
- LDL — cholesterol 'bad'
- Non-HDL cholesterol — total cholesterol minus HDL component, measure of all the 'bad' cholesterol
- The ratio of HDL compared to the total cholesterol (total: HDL cholesterol) (BHF, 2024).

However, it is vital to remember that total cholesterol alone provides limited information on risk as includes both HDL and LDL, with LDL being the focus for treatment and intervention (Fernando and Diggle, 2023).

Low-density lipoprotein cholesterol is a fat that circulates in the blood, moving cholesterol around the body to where it is needed for cell repair, but if there is too much, it is deposited inside the artery wall (BHS, 2024). Hypercholesterolemia occurs from excess cholesterol from diet, bile, or intestines, and increased LDL is associated with an increased risk of CVD (BHF, 2024). It is commonly associated with diabetes, hypertension, hypertriglyceridemia, and atherosclerosis (BHF, 2024). Again, GPNs will be key to identifying areas of concern during long-term condition reviews.

It is important that GPNs are aware of the identification of LDL-C, as it has been the primary goal for prevention of CVD and drug therapy targets to lower LDL levels (Fernando and Diggle, 2023).

Table 1 shows the BHF's (2024) recommended levels for the different investigations. Note the difference in HDL cholesterol requirements for males and females. This is mainly due to females having a higher risk of CVD and so need more HDL to support risk reduction (BHF, 2024).

TRIGLYCERIDES — WHY DO THEY MATTER?

Triglycerides are a combination of both saturated and unsaturated fat and glycerol (BHF, 2024). They act as our main source of energy and come from diet and are also produced in the liver (BHF, 2024). Raised levels can indicate CVD risk, and the concentration of triglycerides can increase in a non-fasting state and impact on LDL calculation.

However, raised triglycerides can also be elevated in association with high haemoglobin A1c (HbA1c), alcohol intake, raised body mass index (BMI), kidney disease, gout, pregnancy and thyroid disorders

(Parhofer et al, 2020). GPNs should therefore ensure that they have discussions with patients around when tests are taken and consider their previous history and other conditions (Parhofer et al 2020). Additionally, having a raised triglyceride level could be an indicator for FH (BHF, 2024). This is a genetic disease which results in the reduced clearance of atherogenic LDL-C in the blood, and an increased risk of early heart disease (NICE, 2024). FH in the UK population is believed to be approximately one in 250, meaning that about 220,000 people in the UK have FH, of whom less than 8% are currently identified (NICE, 2024). It should be suspected in adults with a total cholesterol of >7.5mmol/L or FH of premature coronary heart disease (before 60 years of age) (NICE, 2024).

Again, the BHF (2024) lists results for triglycerides as the following parameters:

- Fasting triglyceride = below 1.7mmol/L
- Non-fasting triglyceride = below 2.3mmol/L.

GUIDELINES

There are many different guidelines available to support GPNs in practice around lipid management. However, the most common is the *Summary of national guidance for lipid management for primary and secondary prevention of CVD* (NHS England, 2024). This guidance provides a flowchart approach to understanding what treatments are

Table 1: Overview of recommended levels for different investigations (BHF, 2024)

	mmol/L
Total (serum) cholesterol	Below 5.0
Non-HDL cholesterol	Below 4.0
LDL-C	Below 3.0
HDL-C	Above 1.0 for a man, above 1.2 for a woman (ideally around 1.4. Very high levels may not give extra protection)
Total cholesterol (TC):HDL ratio	Above 6 is considered high risk — the lower this figure is, the better



Practice points

Thinking of the different investigations available, use this to create a discussion note you may have with patients about why these different tests are required in practice?

available, what investigations are needed initially and for monitoring, as well as how to address concerns around oral treatment tolerance and use in practice (NHS England, 2024). Following the primary prevention pathway for assessing patients' risk, treatment options are outlined as:

■ Statins

- Statins reduce the synthesis of cholesterol in the liver by competitively inhibiting 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase
- Reduction in intracellular cholesterol promotes increased LDL receptor expression at the surface of the hepatocytes, resulting in increased uptake of LDL from the blood

■ Ezetimide

- Works by blocking absorption of cholesterol in small intestine
- Less cholesterol enters blood from food and bile, so the liver has to take more cholesterol out of blood to make more bile — increasing LDL receptor numbers on hepatocytes
- Side-effects — usually mild, indigestion, abdominal pain, diarrhoea
- Can lower LDL-C by 15–20% when used as monotherapy or 21–27% if used with a statin

■ Ezetimide/bempedoic acid

- Lowers LDL-C by inhibition of cholesterol synthesis in the liver
- Nilemdo recommended dose 180mg OD or combined with ezetimide 10mg
- Activated in the liver (not peripheral muscle); lower risk of myalgia
- Need regular monitoring of liver enzymes — transaminase levels, discontinue if 3 x upper normal limit
- 17–28% reductions in LDL-C

with bempedoic acid alone, 38% reduction when used with ezetimide

■ Injectable treatment — inclisiran and PCSK9 inhibitors

- PCSK9 destroys LDL receptors on the liver which capture LDL-C in blood — pull it into liver to be broken down
- Inhibiting PCSK9 stops destruction of LDL receptors — meaning that a sufficient number remain to clear LDL-C from the blood
- Currently two available — Repatha® (evolocumab) and Praluent® (alirocumab) (Fernando and Diggle, 2023; NHS England, 2024).

However, the most commonly used treatment within primary care is statins, about which many GPNs will often have in-depth conversations (NHS England, 2024).

WHY USE STATINS?

The use of statins remains the cornerstone of lipid management within primary care due to their clinical effectiveness in reducing LDL-C levels and lowering the risk of CVD (Nuttall, 2024). However, despite many clinical trials identifying that compared with placebos statins are mostly tolerable, it is apparent that many patients still struggle with tolerating or even wanting to start statins (Nuttall, 2024). This can be due to reasons such as:

- Side-effects, including myalgia
- Polypharmacy burden
- Previous experience with statins or other lipid lowering therapies causing unwanted side-effects
- Experiences of others, such as friends or relatives, who have not been able to tolerate statins
- Lack of understanding as to why required
- Awareness that these are usually life-long medications and again link to polypharmacy
- Feeling of 'failure' in lifestyle changes and so need medication (Nuttall, 2024).

Intolerance for statins can be defined as:

... the presence of clinically significant adverse effects from

statin therapy that are considered to represent an unacceptable risk to the patient or that may result in adherence to therapy being compromised.

(NHS England, 2024)

This concept is crucial for GPNs, as while some GPNs may not be initiating and monitoring statin therapy, they will encounter many patients on this treatment who may have issues around tolerance and adherence (Nuttall, 2024). Some ideas to support with issues around intolerance include:

- Suggest 'statin holiday' — do symptoms resolve without the medication? If not, explore other causes of the symptoms but continue the statin as primary prevention
- Consider lower dose within same intensity group — this may reduce side-effects while providing adequate level of protection and non-HDL reduction
- Consider a lower dose — many statins have lower doses available, and still provide a level of risk reduction
- Consider switch to different group, e.g. rosuvastatin — swapping between groups of statins can support reduction in side-effects (Fernando and Diggle, 2023; NHS England, 2024).

For GPNs who are prescribers and competent to initiate and monitor statins, NHS England (2024) guidance provides recommendations for baseline measurements alongside extent of lipid lowering therapy intensification with available therapies. For initiation, it is important that an initial liver function test (LFT), including liver transaminase (ALT or AST) is



Practice points

Think of your practice population and the patients you see, how would you address statin intolerance in your consultations? Make a checklist of the different considerations and solutions that could help patients.

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undertaken and then repeated at three months and then 12 months after starting therapy (NHS England, 2024). On reviewing these results, the primary aim is to reduce non-HDL cholesterol by 40% and intensify treatment accordingly, as per guidance if this is not achieved with initial treatments (NHS England, 2024). However, GPNs are advised to follow local guidance, policy, formulary and consider risks versus benefits of treatment intensification depending on patient preference and assessment (Nuttall, 2024).

Thus, for long-term condition management, no matter the condition, GPNs should be ready to address the conversation of therapy utilising NHS England (2024) guidance to support risk reduction.

DIABETES AND LIPID MANAGEMENT

For many GPNs supporting patients living with diabetes, a discussion around lipid lowering therapy is likely to occur during the consultation process (Nuttall, 2024). For patients living with diabetes, particularly type 2, there is heightened risk of CVD due to hyperglycaemia, metabolic syndrome and hyperlipidaemia (Chait et al, 2024). However, it should also be noted that there is an increased risk in type 1 diabetes, as early onset atherosclerosis is more common (Chait et al, 2024). Therefore, GPNs should be aware of the need for the conversation of lipid management in both types of diabetes.

Chait et al (2024) identify that an increased risk of CVD with diabetes is characterised by high triglycerides, low levels of HDL-C, and usually elevated levels of LDL-C. This, in turn, can facilitate the retention of atherogenic lipoproteins in the arterial wall which then undergo oxidative stress and enzyme modification, generating toxic products that can promote atherogenesis (Chait et al, 2024). Additionally, with hyperglycaemia coupled into this, it can lead to endothelial dysfunction, promoting more inflammatory processes that contribute to atherosclerosis and plaque formation (Chait et al, 2024).

Extent of lipid lowering with available therapies					
Approximate reduction in LDL-C					
Statin dose mg / day	5	10	20	40	80
Fluvastatin			21%	27%	33%
Pravastatin		20%	24%	29%	
Simvastatin		27%	32%	37%	42%
Atorvastatin		37%	43%	49%	55%
Rosuvastatin	38%	43%	48%	53%	
Atovarstatin+Ezetimibe 10mg		52%	54%	57%	61%

Low intensity statins	will produce an LDL-C reduction of 20–30%
Medium intensity statins	will produce an LDL-C reduction of 31–40%
High intensity statins	will produce an LDL-C reduction above 40%
Simvastatin 80mg	is not recommended due to risk of muscle toxicity

FIGURE 1. Extent of lipid lowering therapy with available therapies for consideration (NHS England, 2024).

In type 1 diabetes, even in normalised glycaemic levels, having a prolonged period of hyperglycaemia that may have occurred prior to diagnosis could trigger actions to increase risk of atherosclerosis (Matuleviciene-Anängen et al, 2017). Furthermore, hypoglycaemia, which is often more present in this patient group, can induce endothelial dysfunction thus contributing to the risk further (Matuleviciene-Anängen et al, 2017).

GPNs should ensure that they recognise the increased risk of CVD associated with both type 1 and 2 diabetes and follow the guidance for initiation, titration and intensification of treatment where appropriate (Nuttall, 2024).

LIPID MANAGEMENT AND COPD/ASTHMA

Arguably, for those patients living with COPD it is imperative to understand that with smoking being the main cause for this condition, there will be an increased CVD risk associated with diagnosis (Vlahos, 2020). However, with the link to chronic airway inflammation associated with COPD, it results in altered inflammatory processes increasing macrophage and neutrophil presence (Vlahos, 2020). This, in turn, can contribute to atherosclerosis and plaque formation (Vlahos, 2020).

Asthma, while mainly variable and of different aetiology, also follows similar links to that of airway inflammation (Monga et al, 2020). This is characterised by an increase in eosinophils, lymphocytes, neutrophils and macrophages that all produce an acid-derived lipid mediator which furthers pro-inflammatory molecules impacting on endothelial dysfunction (Monga et al, 2020). Thus, while it may not directly increase LDL-C levels, if further damage is caused to the endothelium it can result in plaque formation (Monga et al, 2020).

For GPNs, the use of statins, particularly in COPD, may be common due to associated conditions such as cardiac and renal disease increasing CVD risk (Vlahos, 2020). In asthma it may be less common, but with an increased risk of obesity attributing to asthma causes, this may contribute to CVD risk alongside inflammatory processes resulting in lipid lowering therapy (Monga et al, 2020). These are important considerations when assessing and reviewing patients for chronic disease management.

LIPID MANAGEMENT AND RHEUMATOLOGY CONDITIONS

Again this section will consider patients with autoimmune rheumatic diseases, such as systemic lupus erythematosus (SLE), rheumatoid

arthritis (RA), and psoriatic arthritis/psoriasis (PsA), who have prominent immune system dysfunction (Taylor et al, 2019). While a decrease in mortality linked to these conditions has been seen over the years, there has been an increased risk of CVD (Venetsanopoulou et al, 2020). This, again, has been mainly attributed not only to chronic inflammatory processes, but also certain treatments. This is particularly so in RA, which can cause physical inactivity due to side-effects and lethargy (Venetsanopoulou et al, 2020).

As this patient cohort has a chronically elevated C-reactive protein and erythrocyte sedimentation rate, this promotes the pro-inflammatory processes that can cause endothelial dysfunction impacting on atherosclerosis and plaque formation (Venetsanopoulou et al, 2020). Moreover, the impact on HDL-C is attributed directly to increased inflammation (Venetsanopoulou et al, 2020). This is because during inflammation HDL-C loses its ability to remove cholesterol from atherosclerotic plaques and becomes proatherogenic in nature (Venetsanopoulou et al, 2020). These are important factors to understand with regards to autoimmune rheumatic disease.

However, GPNs also need to consider the usual treatments for patients with these conditions of both DMARDs (disease modifying antirheumatic drugs) and corticosteroids (Venetsanopoulou et al, 2020). Unfortunately, these treatments can produce many side-effects, including hyperglycaemia, carotid plaque formation and hypertension, thus increasing CVD risk (Venetsanopoulou et al, 2020).

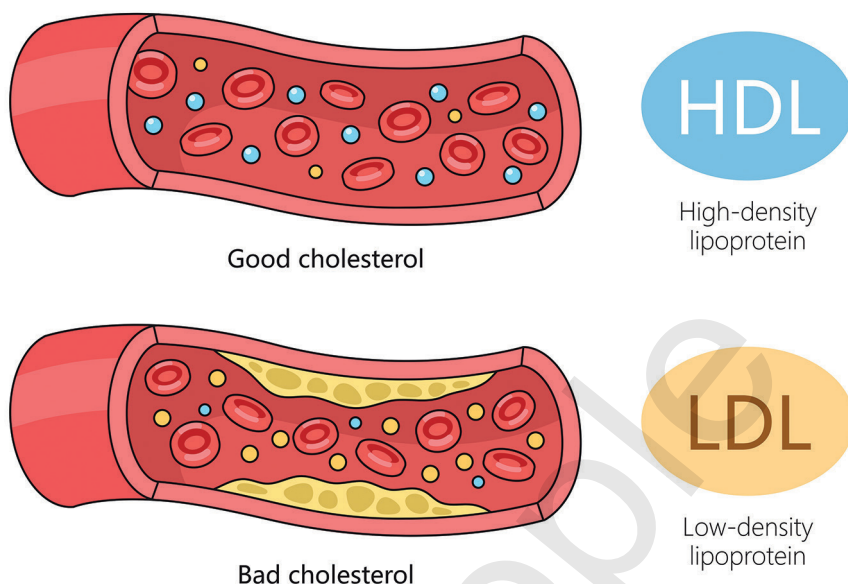


FIGURE 2.
Types of cholesterol.

LIPID MANAGEMENT AND INFLAMMATORY BOWEL DISEASE (CROHN'S/COLITIS)

With regards to lipid management, evidence indicates that patients with inflammatory bowel disease (IBD) often have high levels of LDL-C, triglycerides and low levels of HDL-C contributing to increased risk of CVD (Tao et al, 2023). Interestingly, dyslipidaemia itself can be considered a risk factor for developing IBD, thus again identifying the need for GPNs to be aware of this clinical concern in this patient group (Koutroumpakis et al, 2016).

However, for IBD there is much debate in the evidence on the link with altered lipid profiles, with inflammatory processes again playing a key role (Tao et al, 2023). However, HDL-C has recently been acknowledged to play an immune-modulatory role by promoting removal of cholesterol from peripheral cells. This results in decreased cholesterol level in the cell membranes, which reduces T-cell activation and enhances inflammatory processes (Soh et al, 2019). Hence, a decrease in HDL-C may lead to immune-mediated inflammation, increasing the association with CVD (Soh et al, 2019).

Again, GPNs need to note a common treatment for IBD is

corticosteroids, which can impact on glucose metabolism, blood pressure and endothelial cell function, thus contributing to an increase in CVD risk (Tao et al, 2023). This, alongside a raised cholesterol level, can lead to increased risk of complications requiring lipid lowering therapy (Tao et al, 2023).

WHAT IS THE ROLE OF THE GPN?

With long-term condition management being a main part of the GPN role, it is essential to feel confident in being able to have conversations and, where appropriate, initiate, titrate and monitor treatments (Nuttall, 2024). GPNs can provide support and advice for patients on lipid management by:

- Using appropriate risk assessments to support education and advice on treatment
- Educating on lifestyle changes and benefits versus risk of treatments available
- Following evidence-based guidance alongside local formulary to recommend treatments in line with national recommendations
- Working with the patient to understand their risk and consider alternative therapies if unable to tolerate
- Working with peers and/or refer to specialist services for support should it be needed (Fernando and Diggle, 2023).

Practice points

Think about long-term conditions and association with inflammatory processes and common treatments. How can you educate your fellow GPNs on this topic? Create some flashcards that could help support conversations in practice.

The role of the nurse is valuable for addressing lipid concerns, and through strong therapeutic relationship development and assessment skills, supportive advice can be offered to reduce patients' CVD risk (Nuttall, 2024).

CONCLUSION

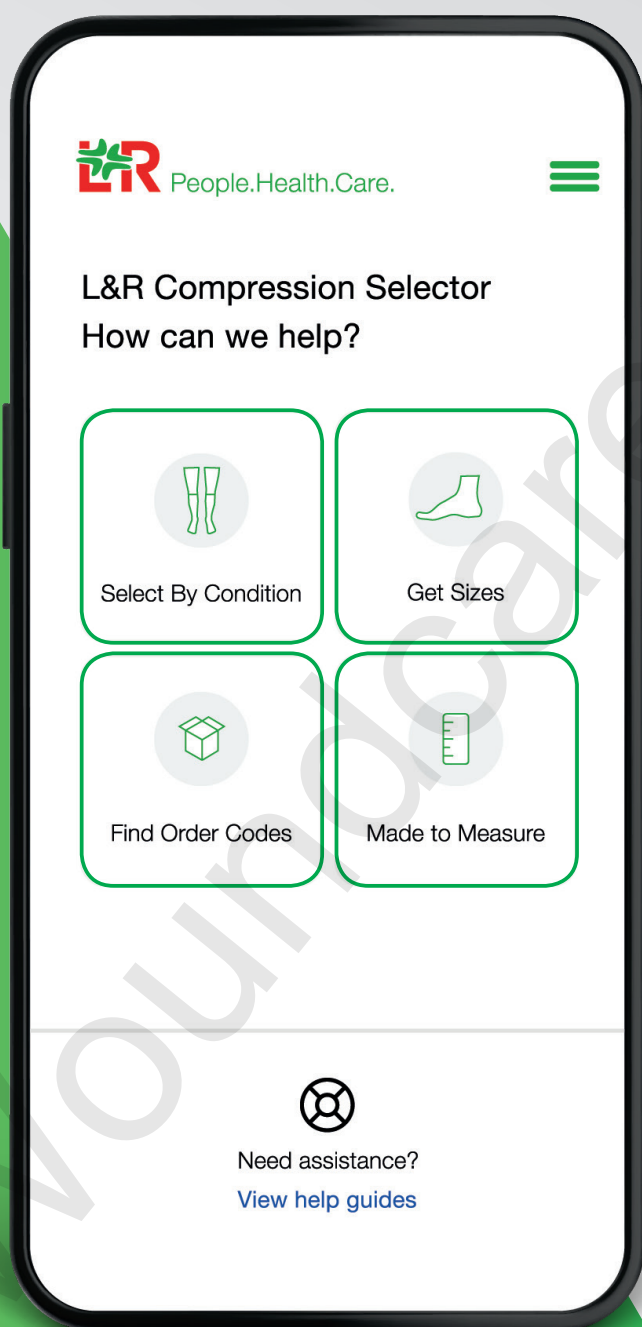
Overall, lipid management and associated long-term conditions is a vital consideration for GPNs in the practice setting. This article has looked at treatment options alongside national guidance, as well as ways to address patients' concerns around the use of certain treatments to support appropriate management in primary care. GPNs play a crucial role in identifying those at risk, communicating effectively about the risks versus benefits of both dyslipidaemia and treatments and, where appropriate, intensification of treatment. By developing strong therapeutic relationships with patients, GPNs can offer supportive advice and interventions to reduce CVD risk and ultimately save lives.

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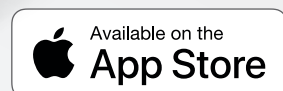
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Gout and your diet

Although most healthcare professionals agree that medication is the only real treatment for gout, addressing diet can help to prevent its development and possibly help ease symptoms, especially when it comes to weight issues and avoidance of alcohol. Observational data shows some dietary treatment to be effective, in particular healthy diets such as DASH and the Mediterranean diet. Gout usually presents with other comorbidities which benefit from a healthy diet. The author recommends that all gout patients should have a dietary assessment and then guidance on how diet can be improved.

KEY WORDS:

- Gout
- Diet
- Uric acid
- Excess weight
- Comorbidities

Gaynor Bussell

Nutritionist and writer, with over 30 years' experience as a dietitian. Specialises in diabetes, women's health and weight issues

Gout is considered a lifestyle disease and is the most common form of inflammatory arthritis; affecting 41 million adults worldwide in 2021 (Danve et al, 2021). The global burden of gout has been increasing over the last three decades, yet its management remains suboptimal (Danve et al, 2021). In the US, gout has more than doubled in recent years, tracking the skyrocketing rates of obesity (Medscape, 2022).

When flare-ups develop in joints, much of the painful irritation is caused by the immune system's response as it fights to break down the crystals. Indeed, flare-ups can be so intense that the joints can turn a cherry red and vibrate with intense, and sometimes seemingly intolerable pain (Medscape, 2022). If allowed to continue unchecked, it can get much worse and cause permanent damage to the joints

“ ... certain evidence seems to suggest that diet can work to help prevent a rise in uric acid levels as an adjunct to treatment.

(Medscape, 2022). Thus, treatment options are very sought after.

The main form of treatment is medication (GP Evidence, 2023) and several guidelines, such as a best practice paper by Danve et al (2021), state that overall dietary factors may have a small effect on serum urate levels. However, certain evidence seems to suggest that diet can work to help prevent a rise in uric acid levels as an adjunct to treatment (Medscape, 2022).

WHAT IS GOUT?

Gout is caused by having too much uric acid in the bloodstream for prolonged periods. Uric acid is a waste product created when the body breaks down a group of proteins called purines. Purines occur naturally in many foods including liver, shellfish, and alcohol. The UK Gout Society claims that eating a diet that is rich in purines can result in a five-fold increase in gout attacks (UK Gout Society, 2024). Purines can also be formed in the body when DNA is broken down. Therefore, purines can develop intrinsically from natural breakdown of cells and also extrinsically from food and drink. High uric acid levels can also be caused by the kidneys being unable to remove uric acid effectively, such as in chronic kidney disease (CKD) or due to a rare genetic abnormality. There is an

element of genetic predisposition to getting gout and it is often associated with other conditions such as diabetes, hypertension, obesity, high cholesterol and cardiovascular disease (UK Gout Society, 2024).

DANGER OF EXCESS WEIGHT

Carrying excess weight is a major factor in gout (National Institute for Health and Care Excellence [NICE], 2022; Rassy et al, 2023). About half the people with gout are overweight or obese, and carrying extra weight means that the chances of developing gout occur a decade sooner than for healthy-weight people (Arthritis Foundation, 2024a).

Weight loss is beneficial for prevention as well as treatment of gout due to the fact that it can reduce levels of uric acid in the blood (Danve et al, 2021). Weight loss also helps to reduce the stress on weight-bearing joints, e.g. hips, knees, ankles and feet. Steady, sustainable weight loss is advised, aiming to lose fat mass rather than muscle mass (Mayo Clinic, 2022). The diet should be balanced and include the right proportions of protein, fat and carbohydrates. The use of fad or crash diets or fasting is strongly discouraged, as being in a state of ketosis may increase uric acid levels and induce gout attacks (Mayo Clinic, 2022).

People who have visceral fat (belly fat), even if they are not technically overweight, are more likely to develop gout (Arthritis Foundation, 2024a). This is because this central obesity (carrying weight around your middle) increases inflammation which can further exacerbate gout attacks, as well as increasing the risk of developing heart disease, diabetes and metabolic syndrome (UK Gout Society, 2024).

CAN ADDRESSING GENERAL DIET HAVE A ROLE IN GOUT TREATMENT?

NICE recommends that patients with gout should follow a healthy, balanced diet (NICE, 2022).

Observational studies show that a

range of dietary factors are associated with an increased risk of gout attacks, such as:

- Excessive meat or seafood consumption
- Excessive alcohol (especially beer and spirits)
- Sugar-sweetened soft drinks, fructose-containing foods (GP Evidence, 2023).

A study of thousands of women found that sticking to recommended healthy dietary patterns could lessen the risk of new-onset gout (Yokose et al, 2022; see *Box 1*).

Thus, it seems certain that healthy diets mentioned in *Box 1* can decrease the chance of getting gout, possibly due to the fact that they can lead to weight loss and reduce inflammation (Danve et al, 2021).

PROTEIN INTAKE AND GOUT

Many high protein foods are high in purines, but this is more likely to be animal sources of protein, especially if they have been cured

Practice point

Losing weight is an efficient way to lower uric acid in individuals that have excess weight to lose (Danve et al, 2021).

in some way (see *Table 1*). Thus, the UK Gout Society recommends that gout sufferers opt for fresh cuts of meat, vegetable-based protein, dairy and eggs. Studies have shown that vegetarian diets that are high in purines (e.g. from lentils etc) are far less likely to lead to gout (UK Gout Society, 2024).

Red meat is a good source of iron and is easily absorbed by the body, but should not be eaten every day by gout sufferers. Foods such as eggs and pulses contain iron, but in a form that the body finds hard to absorb. However, the absorption of iron can be improved if vitamin C-rich foods are eaten in the same meal, e.g. adding green and red peppers to scrambled eggs (UK Gout Society, 2024).

Box 1 Healthy eating to prevent gout (Yokose et al, 2022)

To determine whether consistent healthy eating plays a role in preventing gout in women, Yokose et al (2020) carried out a prospective cohort study tied to the Nurses' Health Study (an ongoing endeavour that has been questioning its participants' food and beverage intake since 1984).

Based on the 2020 to 2025 Dietary Guidelines for Americans, four healthy eating patterns were identified for assessment: the 'Dietary Approaches to Stop Hypertension' (DASH), the 'Mediterranean diet', the 'Alternative Healthy Eating Index', and the 'Prudent diet', as well as the unhealthy Western dietary pattern for comparison.

Over 34 years of follow-up, the researchers identified 3,890 cases of gout among 80,039 women with an average age of 50.5 and an average body mass index (BMI) of 25.0 kg/m². Women who strongly adhered to either of the four healthy dietary patterns had a significantly lower risk of gout, especially those who stuck to DASH and Prudent.

In contrast, women with high Western diet scores had a 49% increased risk of gout, compared with those who had low scores.

After additional analysis that factored in variables like diuretic use, alcohol, and obesity, the associations between each diet and their risk of gout persisted in almost every instance. In particular, the most DASH adherent women with normal BMI had a 68% lower risk of gout, compared with the least adherent women who were overweight or obese. Strong DASH adherence and no diuretic use also led to a 65% gout risk reduction (Yokose et al, 2020).

SUGARS AND HIGH GLYCAEMIC INDEX (GI) CARBOHYDRATES

Some manufacturers use a man-made glucose-fructose syrup (also known as high fructose corn syrup) to sweeten foods, especially soft drinks. It is made from corn, grown readily in the US, where it is subsidised (White, 2008). It is not used in the UK or EU as extensively as the US. When the body breaks down fructose, purines are released which when broken down lead to uric acid production (Healthline, 2018). Fructose can also increase the risk of metabolic syndrome, also a risk factor for gout (Hannou et al, 2018; Lubawy and Formanowicz, 2023; Medical News Today, 2023).

A randomised, crossover feeding trial in overweight or obese adults (without cardiovascular disease) looked at the individual and combined effects of carbohydrate quality (glycaemic index [GI]) and quantity (the proportion of total daily energy [percentage of carbohydrates]) on uric acid (Jurascheck et al, 2016). The combined effect of lowering GI and increasing the percentage of carbohydrate showed a significant lowering effect on uric acid and was observed even after adjustment for concurrent changes in kidney function, insulin sensitivity, and products of glycolysis. The authors added that future studies should examine whether reducing GI can prevent gout onset or flares. (Jurascheck et al, 2016).

ALCOHOL

NICE suggests that people who drink excessive alcohol, especially beer and spirits, may exacerbate gout flares and symptoms (NICE, 2022).

In support of this, a recent Chinese study showed that the length of time a person had been drinking alcohol, as well as the kind and amount consumed could predict gout tophi (Han et al, 2023).

Tophi are large bumps that form where uric acid gout crystals have accumulated and settled in a joint. Tophi may be underdiagnosed because they are hard to find with

Table 1: Summary of dietary advice for gout (author's own work)

Avoid over consumption	Consume in moderation	Can have regularly
Alcohol during a chronic attack Binge drinking seems to set off a gout attack Beer seems to trigger gout flares	Alcohol >2 units/day for men; >1 unit/day for women	Alcohol-free drinks provided not sugary
Offal (organ meat), e.g. liver and kidneys, heart and sweetbreads Game (pheasant, rabbit, venison)	Processed meat, red meat	Fresh white meat, such as chicken
	Mushrooms and mycoprotein (Quorn™)	
	Dried peas, beans and legumes — baked beans, kidney beans, soya beans and peas	All other beans and pulses
	Asparagus, cauliflower, spinach	All other vegetables
	Wholegrains, oatbran	White bread
Meat and yeast extracts — Marmite, Bovril, commercial gravy		Homemade gravy
	Stick to three portions of low-fat dairy products daily, e.g. a 200ml glass of milk, a 125g pot of yoghurt and a 30g (matchbox-sized) portion of hard cheese	Low fat/non-fat dairy products, eggs Low fat dairy consumption may be protective
High fructose corn syrup, sweetened fizzy drinks or other beverages	Pure fruit juice	Sugar-free drinks
	Table sugar, sweetened beverages and desserts	Cereals, grains and starches (e.g. bread, pasta, potatoes, rice), noodles (except wholegrain), pasta
Seafood with high purine content, e.g. sardines, shellfish (crab, mussels, shrimp) anchovies, fish roe, mackerel, sprats, whitebait	Oily fish such as anchovies, herring, mackerel, sardines, sprats, whitebait, trout	White fish
		Tea and coffee There seems to be an inverse link between coffee and the risk of gout (Hak and Choi, 2008) Tea also seems protective (Yu et al, 2024)

only a physical exam, but they can be detected early by ultrasound (US). Compared with non-drinkers, excessive drinkers (more than 70g/week), long-term drinkers (at least 10 years), and spirits drinkers, had a significantly greater proportion, size, and number of US-detected tophi and subtophi. The authors of this study suggested exploring alcohol history with patients with gout and if they are frequent drinkers, they should be encouraged to cut back and warned that for some patients, even minimal amounts of alcohol intake can be associated with the development of flares (Han et al, 2023).

FLUID INTAKE

Patients with gout should aim for at least two litres of (sugar-free) fluid per day, unless guided otherwise by a healthcare professional. Drinking this much fluid is important for people with gout, as it can reduce the swelling associated with the condition. Fluid helps lubricate the joints, preventing further symptoms, and flushes out uric acid from the body, preventing their crystal formation (MedicineNet, 2024). All drinks, except alcohol, count towards fluid intake, including caffeine-containing drinks such as tea and coffee. However, drinking

sugar-sweetened beverages (e.g. fizzy drinks) regularly can increase the risk of gout (UK Gout Society, 2024).

A recent paper suggested that there was a genetic predisposition effect of increased tea intake on the reduced risk of gout due to impairment of renal function, whereas there was no such effect on gout, idiopathic gout, and uric acid. The authors concluded that tea intake may become an important option in the dietary treatment of gout due to impairment of renal function (Yu et al, 2024).

Some people find that certain foods, such as strawberries, oranges, tomatoes and nuts, will trigger their gout even though they are not high in purines. Although there is no clear evidence to suggest why this happens, it is probably best to avoid them if you have had this experience (UK Gout Society, 2024).

SUPPLEMENTS

Some observational studies have shown that men whose diet is higher in vitamin C are less likely to develop gout and that taking additional vitamin C as a dietary supplement (500 to 1500mg/day) can reduce blood uric acid levels (UK Gout Society, 2024). It may be that vitamin C can help to remove uric acid from the body via the kidneys (UK Gout Society, 2024). Other studies have shown that vitamin C reduces the levels of urate in people without gout and breaks down uric crystals in the blood (Medscape, 2022). Those considering taking a supplement of vitamin C should always discuss this with their doctor as vitamin C can (rarely) interact with prescribed medications (UK Gout Society, 2024). High doses of vitamin C can also cause loose stools in some people and increase the risk of kidney stones (Cupisti et al, 2023).



Further information

More information about gout can be found on the UK Gout Society website: www.ukgoutsociety.org



Photograph: Yok_ortepicco/Shutterstock

“... flare-ups can be so intense that the joints can turn a cherry red and vibrate with intense, and sometimes seemingly intolerable pain.

A recent randomised, double-blind, placebo controlled factorial trial (male physicians with a mean age of 64) looked at the effect of taking vitamin C (500mg/d) and vitamin E (400 IU every other day) on gout (Jurascheck et al, 2022). The incidence rate of new gout diagnoses during follow-up was 8.0 per 1000 person-years among those assigned vitamin C compared with 9.1 per 1000 person-years among those assigned placebo. The vitamin C assignment reduced new gout diagnoses by 12%. Thus, vitamin C seemed to modestly reduce the risk of new gout diagnoses in middle-aged male physicians. In addition to lowering levels of uric acid in the body, it is thought that vitamin C may also minimise the inflammatory response that occurs in gout. Vitamin E had no effect.

Sour cherries or sour cherry juice has been used as a natural remedy for gout and there are some scientific, although observational, studies. A systemic review of six studies reported decreases in the incidence and severity of gout following the ingestion of

cherries (Chen et al, 2019). Gout patients regularly ingesting cherry extract/juice reported fewer gout flare-ups than those patients who did not supplement their diets with cherry products. Overall, there was a positive correlation between the consumption of tart cherry juice and a decrease in serum uric acid concentration. However, there was no effective meta-analysis done due to a lack of relevant studies and a high degree of variation in the methodologies and metrics used in previous studies. Further comprehensive trials or long-term follow-up studies will be required to evaluate the efficacy of cherry intake in treating patients with gout or hyperuricemia (Chen et al, 2019).

As for other popular supplements used for gout, randomised controlled trials testing dietary supplements, such as pomegranate extract or enriched skimmed milk powder, were of low quality and did not show any effect (Andrés et al, 2021).

DISEASES ASSOCIATED WITH GOUT

Elevated uric acid is seen in many other conditions, and people who have gout may also have raised cholesterol, raised triglycerides, high blood pressure and poor glucose tolerance (Arthritis Foundation, 2024b). This increases the risk of type 2 diabetes, metabolic syndrome and kidney disease. In addition,

approximately half of all gout sufferers are overweight (Arthritis Foundation, 2024a)

Data from the National Health and Nutrition Examination Survey (NHANES) III show a remarkably high prevalence of metabolic syndrome among individuals with gout. It seems that metabolic syndrome increased the level of uric acid in the blood (Shu et al, 2023). Further prospective studies found an increased risk of myocardial infarction (MI) and cardiovascular mortality in gout patients (Hak and Choi, 2008).

To shine light on the comorbidities with gout, a recent UK analysis showed that people with gout are 58% more likely to develop cardiovascular disease (CVD) and this increased risk was observed across 12 different cardiovascular conditions, including heart failure, arrhythmias, and valve diseases (Ferguson et al, 2024). The authors note that the findings suggest that the organ damage associated with gout is likely to be much broader than originally thought. The association was more pronounced in women than in men and gout amplified the risk for CVD in younger individuals to a greater extent — individuals younger than 45 years with gout were more than twice as likely to develop CVD compared with similarly aged individuals without gout. For comparison, individuals aged 45–54 years with gout were 84% more likely to develop CVD, and individuals aged 55–64 years were 57% more likely to develop CVD than matched controls (Ferguson et al, 2024).

The authors noted that known CVD risk factors only explain part of the CVD risks seen in patients with gout and other factors, such as inflammation and other disease activity elements, could be at play. They concluded that better strategies to identify and reduce CVD risk in patients with gout are needed, such as lifestyle changes and/or drug therapies. They also recommended proactive screening for heart disease in patients with gout, which could lead to early diagnosis and interventions to delay more severe outcomes (Ferguson et al, 2024)

Box 2 Summary of risk factors for gout

- Consuming alcoholic beverages such as beer
- Having a family history of gout
- Being male
- Having obesity
- Drinking beverages that have a high sugar content
- Consuming a diet that is high in purine-rich foods, such as:
 - Red meat
 - Organ meat
 - Sea food
- Taking diuretics or waterpills
- Living with one of the following health conditions:
 - High blood pressure
 - Diabetes
 - Metabolic syndrome
 - Poor kidney function, or chronic kidney disease
 - Congestive heart failure

(Medical News Today, 2023).

GUT MICROBIOME

Recent studies have focused on the mechanism of intestinal excretion, metabolism and absorption of uric acid by focusing on the relationship between intestinal microbiota and the risk of gout. When this gut microbiota has a healthy composition (containing a good balance of 'good' bacteria to pathogenic bacteria), it is associated with protection against disease occurrence, including a decrease in gout and general inflammation by reducing uric acid levels. Research is in its early stages and more needs to be studied (Feng et al, 2024).

CONCLUSION

Diet alone may not cure gout once it has become established, but it can help to prevent it and there is some observational evidence it can help treat (NICE, 2022; GP Evidence, 2023). Future research using randomised controlled trials is needed to look at dietary interventions, either standalone or adjuvant therapies, in gout treatment. Gout is a condition that does not usually occur alone but is intertwined with other conditions, such as type 2 diabetes which is influenced by diet. Therefore, clinicians need to talk to patients about dietary changes that are going to have positive benefits holistically. This is especially because by the time they meet gout patients, they often already have other health

conditions, such as high blood pressure, diabetes, and obesity.

The dietary modifications suggested above for gout will also have positive implications on overall patient health. The author suggests that all those treating patients with gout should have a conversation about diet and lifestyle, as they are often very open to hearing about what they can do. **GPN**

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Medscape (2022) *Could vitamin C help reduce the chances of developing gout?* Available online: www.medscape.com/s/viewarticle/981992?src=mb_l_msp_iphone

Key points

- Gout is considered a lifestyle disease and is the most common form of inflammatory arthritis.
- The global burden of gout has been increasing over the last three decades, yet its management remains suboptimal.
- Gout is caused by having too much uric acid in the bloodstream for prolonged periods.
- Addressing diet can help to prevent its development and possibly ease symptoms, especially when it comes to weight issues and avoidance of alcohol.

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Revalidation Alert

Having read this article, reflect on:

- Your knowledge of what causes gout
- The lifestyle and dietary advice you offer patients with gout
- Comorbidities often associated with gout
- Risk factors for developing gout.

Then, upload the article to the free GPN revalidation e-portfolio as evidence of your continued learning: www.gpnrnursing.com/revalidation

Improving asthma care by promoting patient involvement

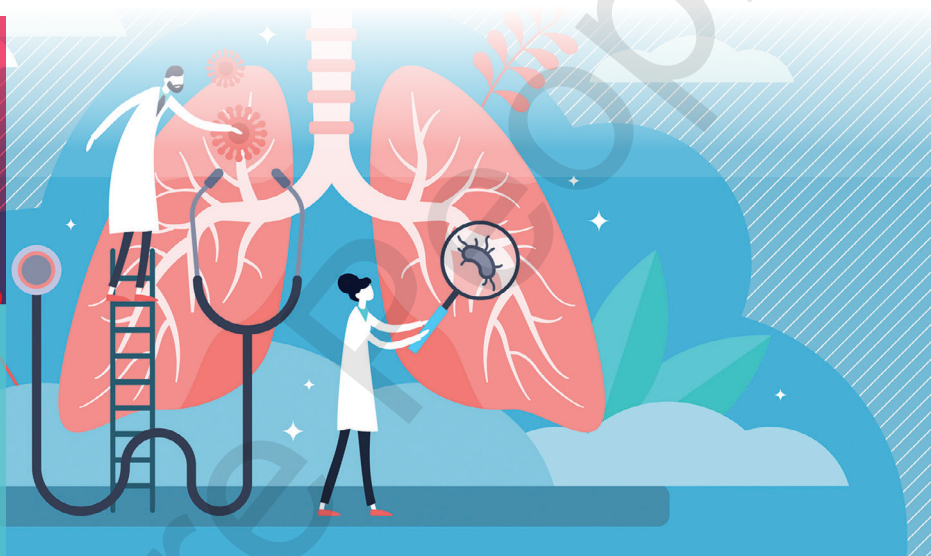
Asthma is one of the most prevalent lung conditions in the UK. Around eight in 100 people are diagnosed with it (Asthma + Lung UK, 2024). However, according to the British Thoracic Society (BTS, 2024), asthma affects around 12% of the UK population, with 160,000 people being newly diagnosed each year. This article focuses on the importance of finding the right inhaler to meet patient needs and lifestyle, while exploring the concepts of shared decision-making within respiratory reviews.

KEY WORDS:

- Asthma
- Reviews
- Shared decision-making
- PAAPS
- Inhaler medication

Cheryl Crawford

Practice sister, South Beach Medical Practice, Ardrossan



Photograph: VectorMine/Shutterstock

Allen (2021) indicated that more than half of prescribed medications are either not taken properly or not taken at all and that promoting concordance is a key element of prescribing practice. The National Institute for Health and Care Excellence (NICE, 2009) also indicated that between one-third and one-half of medications for long-term conditions are not taken as prescribed, having both personal and economic impacts. The Royal Pharmaceutical Society competency framework (RPS, 2021) highlights the importance of assessing adherence and effectiveness of treatments when reviewing patients. Indeed, one of the most common issues that the author comes across in general practice respiratory reviews, particularly in asthma, is that patients often miss their evening dose and subsequently have overall poor asthma control.

Baddar et al (2014) stated that asthma control will remain suboptimal if the reasons for poor

control are not 'assessed, identified and eliminated'. They conveyed that patients with better control of their asthma usually have both good inhaler technique and compliance to treatment. This indicates the importance of assessing technique and treatment adherence at all reviews (Global Initiative for Asthma [GINA], 2023). NICE guidelines (2009) also recommend the importance of discussing the patient's perspective regarding their medications to address and potentially overcome any barriers. This involves understanding both intentional and unintentional reasons for non-adherence.

Shared decision-making should be part of the consultation process, ensuring that patient beliefs and understanding of their health condition is considered as per RPS (2021) and GINA (2023) guidance. Rae (2021) discusses the importance of clinicians not simply asking 'why' the patient does not take treatment as

prescribed, but to build a therapeutic relationship and ensuring that the patient understands why they have been prescribed a medication — this often improves adherence.

NICE (2009) states that tailoring treatment where possible to individual needs/lifestyle can improve adherence and overall chronic disease management. The author often finds in practice that a large part of the review is not just assessing overall control of asthma, but unpicking the reasons for poor control and trying to work alongside the patient to improve this, with health education

Practice point

When reviewing patient inhaler technique, it is also important to ascertain how often they miss preventer inhalers? And, if this is a common occurrence, why? How can GPNs help rectify this?

surrounding asthma taking up a substantial amount of time.

Van Dijk et al (2020) concluded that the ACT (asthma control test) was an appropriate measure for overall asthma control, recommending its use in clinical settings. This supported previous research by Moamary et al (2012), which found that the ACT score is responsive to change when used as part of asthma reviews, thus, showing its value both for initial assessments and follow-up reviews to assess improvement/decline in asthma control. GINA (2023) recommends the use of a symptom control tool when conducting asthma reviews, such as ACT or the asthma control questionnaire (ACQ). The author uses the ACT scoring system as the basis for reviews and then moves onto inhaler technique and compliance, which flows well into decision-making and discussing inhaler options that may be easier for patients to use and/or adhere to.

INHALER THERAPY

In the author's experience, patients who have chronic poor control and/or heavy reliance on short-acting beta-agonists (SABAs) are increasingly opting for once-daily therapy or maintenance and reliever therapy (MART). The National Review of Asthma Deaths (NRAD, Royal College of Physicians, 2014) highlighted overuse of SABA as a red flag for poor asthma control and that using more than three SABA inhalers per year was an indicator of poor asthma control. According to Noorduyn et al (2022), auditing SABA use in patients can be a method of identifying those with poor asthma control. They also agreed that overuse of SABA is associated with increased risk of severe exacerbations. GINA (2023) also highlights these variables as indicators of poor asthma control.

SABA overuse should always be acted on when noted in practice, with patients who are over ordering to be triggered for early review (RCP, 2014). Safety protocols include not having salbutamol on repeat list, meaning that it must be authorised each time it is prescribed, or ensuring a limit of three SABA devices prescribed within the

year. If more are requested, the patient should be reviewed. In the author's practice, this protocol has been implemented with good effect. Murphy et al (2021) highlighted the increased risks of effects with chronic overuse of SABA without concurrent inhaled corticosteroids (ICS). According to Asthma + Lung UK (2024), the NRAD report (RCP, 2014) and GINA (2023), overreliance on SABAs is associated with increased morbidity and mortality in asthma patients.

Van Den Berge et al (2009) stated that adding in long-acting beta-agonists (LABAs) to ICS therapy has been shown to decrease exacerbations and improve overall asthma control. Recently, ICS/LABA therapy has been used more commonly in primary care (Murphy et al, 2021). GINA (2023) also supports the use of ICS/LABA as effective asthma therapy for mild/moderate asthma versus ICS monotherapy, especially in those with documented SABA overuse.

Murphy et al (2021) also support GINA (2023) guidance and agree with Van Den Berge et al (2009) that ICS/LABA therapy was superior to ICS monotherapy with SABA reliever, particularly in those with mild asthma/poor control, and that the use of ICS/LABA therapy reduced exacerbation risk in this group when compared to using ICS therapy alone. Van Den Berge et al (2009) also discussed that having ICS/LABA therapy in a combined device, rather than split across devices, simplified asthma treatment and improved compliance to maintenance therapy.

In the author's clinical experience, patients who were previously on high dose ICS monotherapy, particularly those who reported often missing night-time doses and who had overreliance on SABAs, respond well to being moved onto ICS/LABA combination at standard dose. When trialled with a once-daily dose of standard strength Relvar® Ellipta® (fluticasone furoate/vilanterol) they have often gained more effective asthma control and many return for follow-up having barely reached for their SABA, after previously needing it multiple times per day. Usmani et al (2021) identified clinical benefits

Practice point

The importance of education and communication with patients cannot be underestimated. Taking the time to explain how inhaled therapy works and how poor asthma control is connected to poor inhaler compliance is imperative when educating patients around inhaler use.

and reduced healthcare use when using simplified inhaler regimens for asthma management. Therefore, using the device which best fits the patient is good practice without increasing risk of poor asthma control — again in keeping with RPS (2021) guidelines.

Many options are available as ICS/LABA combination therapy in asthma according to British Thoracic Society/Scottish Intercollegiate Guidelines Network guidelines (BTS/SIGN, 2019). In the author's local formulary, ICS/LABA combination therapy includes the option of Relvar 92/22mcg (dry powdered inhaler [DPI]), or Relvar Ellipta 182/22 (DPI), which includes fluticasone furoate (ICS) and vilanterol (LABA) components. Alternatives include Fostair® 100/6, Fostair® 200/6 (or Luforbec® 100/6 and 200/6 as the non-branded alternative), these both come in meter-dosed inhaler (MDI) and DPI devices, and include beclometasone and formoterol as ICS/LABA components.

Langley et al (2019) found that in paediatric/adolescent populations, using Relvar one puff per day preparation led to reduced A&E presentations and oral steroid requirement, indicating improved asthma control in those with previously noted poor adherence to twice daily ICS or ICS/LABA formulations. Syed (2015) also supported the use of once-daily Relvar as an effective treatment option for uncontrolled asthma and found it to be a well-tolerated ICS/LABA.

Bateman et al (2004) indicated that asthma control could be achieved quickly and consistently

with lower/medium doses of ICS when combined with LABA therapy versus high dose ICS therapy alone. Following the GOAL study, D'Urzo (2006) also agreed that ICS/LABA was superior to ICS monotherapy.

Research undertaken in 2016 by Rodrigo and Plaza reported a significant reduction in severe exacerbations using a once-daily fluticasone furoate/vilanterol preparation. They identified the need for further studies to compare the once-daily dosing of fluticasone/vilanterol with a twice-daily fixed dosing regimen of ICS/LABA combinations to assess the benefits/drawbacks of using twice-daily preparations or MART regimens versus once-daily preparation. Bernstein et al (2018) found that there was no significant difference between the use of once-daily fluticasone/vilanterol and a twice-daily fixed dose of ICS/LABA in overall asthma control.

Therefore, if a once per day regimen will improve adherence, thus reducing overuse of SABA and potentially improve overall asthma control, is the once-daily option underused in practice? There is currently a great deal of focus on MART regimens and their ability to improve asthma control. However, the author often finds in practice that opting for a once-daily ICS/LABA combination, while keeping SABAs in place as needed, offers patients a simpler and more effective treatment approach and often reduces their use of SABAs without having to opt for MART regimens. This also allows the patient to still feel in control of their SABA inhaler. When discussing MART as an option, a great many patients are not keen as they are worried healthcare professionals are 'taking their blue inhaler away', when, of course, this is not the case. This highlights the importance of shared decision-making during respiratory reviews to identify barriers to good asthma control. Healthcare professionals and patients can then work collaboratively to rectify them in a way that feels comfortable and manageable for the patient, resulting in continued adherence to treatment between reviews.

SHARED DECISION-MAKING

Laight (2022) describes shared decision-making as a collaborative process to allow patients and healthcare providers to make informed decisions surrounding care, tests and treatment plans. He focuses on the strength of shared decision-making in that it can assist clinicians in understanding what patients wish to gain from their treatment, and help the healthcare provider to dispel any misconceptions while managing expectation and setting realistic goals for outcomes. Laight's exploration of shared decision-making concurs with information discussed by the Scottish Government (2019) and the RPS (2021) recommendations for promoting shared decision-making.

In 2019, the Scottish Government reported that 83% of patients had positive feedback for care received within GP practices, with 76% of patients reporting that having sufficient time and feeling listened to were imperative aspects of a good consultation. However, the Scottish Government (2019) reported that some of the main barriers to shared decision-making processes being implemented in general practice include:

- Time constraints
- Clinical setting
- Lack of applicability depending on patient characteristics/ understanding of the consultation process.

In 2021, NICE issued a guideline to support healthcare professionals when implementing shared decision-making into daily interactions with patients to ensure that treatment choices align with patient values, preferences and situations.

The author uses the NICE (2021) shared decision-making model during reviews for long-term conditions. It is important to ensure that the patient feels involved in the process of making treatment plans and managing their own conditions. Opening a dialogue and having good communication is crucial for optimising patient care, as not only do they feel heard and understood, but they also know that their feelings

and thoughts about their condition have been considered during the consultation.

Personal asthma action plan

Having an agreed follow-up plan is also essential in the shared decision-making process, which can be reviewed in a timely manner. Mayeux et al (2018) indicated that the use of a personal asthma action plan (PAAP) not only improved outcomes for patients, but also helped them to self-manage their long-term condition. However, it is reported by Mayeux et al (2018) that PAAPs are underused within clinical practice despite recommendations from the NRAD (RCP, 2014) and GINA (2023) emphasising their importance in achieving high standards of asthma care.

According to Henry (2021), when completed with patients, PAAPs are an essential component during asthma reviews undertaken by general practice nurses (GPNs). The author has often found that providing patients with a written PAAP (adults and children) is an effective method of bringing the consultation to a close and discussing final thoughts or questions the patient may have about their treatment plan. This should be completed with the patient during the consultation at the explanation and planning stage.

Inhaler choice

Finding the right inhaler to fit patient needs and expectations is another aspect of the review and shared decision-making which is important to consider. In the author's clinical opinion, this is arguably just as important as assessing inhaler technique. While choosing an inhaler which, in theory, will control symptoms well is crucial, if they miss half their doses, they will have poor asthma control. Good rapport and communication with patients builds up trust and allows the patient to be comfortable and honest when they are not taking their inhaler medication as prescribed. This, in turn, allows healthcare professionals to assess them more efficiently and adapt a suitable treatment plan to which they can successfully adhere.

CONCLUSION

With asthma being one of the most prevalent conditions in the UK, providing high quality care cannot be underestimated. Comprehensive patient assessment, including inhaler technique and exploring factors which may impact on adhering consistently to medication should be explored in a non-judgmental manner in order to reach a treatment plan with which the patient agrees and fits easily into their lifestyle. The many factors to consider during the review adds to its complexity (and often the length of time it takes). The author appreciates that intense time constraints in current practice can pose a challenge to exploring these areas with patients, but would always recommend considering barriers to inhaler adherence, especially with patients who present with chronic poor asthma control. **GPN**

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Further information

Signpost patients to Asthma + Lung UK and Right Breathe for further information and inhaler technique video.

Lower urinary tract infection in men: an overview

Urinary tract infection (UTI) is a term that describes an infection anywhere within the urinary system where the commonest cause is *Escherichia coli*, which accounts for 80% of infections and is usually found in the urinary tract (Vasudevan, 2014). Women are more susceptible to UTIs than men as their urethra is shorter, which means that infection can easily ascend the tract (Vasudevan, 2014; John et al, 2016). However, as men age, the risk becomes equal to women (Harrington and Hooton, 2000; Rowe et al, 2014) and accurate diagnosis and management of UTIs in men using guidelines is poor (Isberg et al, 2024). This article considers the risk factors for UTI in men, how they present, and how UTI can be managed in primary care.

KEY WORDS:

- Lower urinary tract infection
- Diagnosis
- Prostatitis
- Urobiome

Debbie Duncan

Senior lecturer of community nursing,
City St George's, University of London



Urinary tract infection (UTI) is a term that describes an infection anywhere within the urinary system, such as the urethra, bladder, ureters, or the kidneys. The commonest cause is *Escherichia coli*, which accounts for 80% of infections and is usually found in the urinary tract (Vasudevan, 2014). Other bacteria, fungi, and parasites may also cause UTIs (Komala and Kumar, 2013), e.g. *Klebsiella*, *Pseudomonas*, *Proteus* and *Enterococcus* species (Vasudevan, 2014). Women are more susceptible to UTIs than men — they are eight times more likely to occur (Singh et al, 2014) — as their urethra is shorter (approximately 1.5 to 2 inches) compared to men (8 inches), which means that infection can easily ascend the tract (Vasudevan, 2014; John et al, 2016). Indeed, UTI in men (with no indwelling catheters) is uncommon in those under the age of 60 (Rowe et al, 2014). However, as men age, the risk becomes equal to that of women (Harrington and

“Older men who develop UTIs generally have a functional or anatomic abnormality of the genitourinary tract, such as prostatic hypertrophy or bladder outflow obstruction.”

Hooton, 2000; Rowe et al, 2014). Despite this, accurate diagnosis and management of UTIs in men using guidelines is poor (Isberg et al, 2024). Thus, general practice nurses (GPNs) should keep up to date with local and national guidelines for the management of UTIs in men.

RISK FACTORS FOR UTI IN MEN.

Older men who develop UTIs generally have a functional or anatomic abnormality of the genitourinary tract, such as prostatic hypertrophy or bladder outflow

obstruction (Abarbanel et al, 2003; Niccodem, 2023). An enlarged prostate is a risk factor for recurrent UTIs (Niccodem, 2023). Other risk factors are patients with neurogenic bladder and associated issues, such as repeated catheterisation, increasing residual urine volume, previous urinary tract surgery, or immunosuppression (Storme et al, 2019; National Institute for Health and Care Excellence [NICE], 2024).

Mititelu et al's (2024) study looked at the incidence of UTIs and behavioural risk factors. They found that obesity, reduced consumption of fruit and vegetables, and a sedentary lifestyle all increase the risk of recurring UTIs, although this was in men and women.

SYMPTOMS

Although there is a pattern of symptoms, these can vary and differentiating UTI from other

conditions with a similar presentation, such as lower abdominal pain and discomfort and frequency of micturition, can be challenging (Shallcross et al, 2020; Gebretensaie et al, 2023). This can lead to a diagnosis of suspected UTI and treatment with antibiotics in emergency departments (Shallcross et al, 2020). Accurate diagnosis can be compounded by patients presenting with negative urine cultures, as they have had a previous course of antibiotics which reduces the likelihood of obtaining a microbial culture from urine or blood (Shallcross et al, 2020). Kranz et al (2024) suggest that clinical presentations of UTIs vary widely, from uncomplicated infections to severe conditions, such as pyelonephritis (kidney infection) and even urosepsis.

Clinicians should therefore suspect a lower UTI if the man presents with dysuria, frequency, urgency, nocturia, suprapubic pain, suprapubic tenderness, odorous or cloudy urine, and haematuria, and the risk of urosepsis should also be considered, particularly if the patient presents with pyrexia (NICE, 2024). It is also important to be aware that not everyone presents with this clinical picture. Diagnosis of a UTI should therefore be confirmed by obtaining a urine sample for culture and sensitivity before starting antibiotic treatment, as urine dipstick tests or microscopy cannot be relied upon to confirm the diagnosis (NICE, 2024). Kranz et al (2024) recommend that a thorough medical history and physical examination is vital in patients with urological infections.

CLASSIFICATION

UTIs result in several clinical complications, including:

- Acute and chronic pyelonephritis (infection of the kidney and renal pelvis)
 - Cystitis (infection of the bladder)
 - Urethritis (infection of the urethra)
 - Epididymitis (infection of the epididymis)
 - Prostatitis (infection of the prostate gland)
- (NICE, 2018; NICE, 2024).

A UTI is therefore defined by a combination of clinical features and presence of bacteria in the urine. UTIs are classified by the *European Association of Urology (EAU) Urological Infections Guidelines* (Kranz et al, 2024) as the following:

- Uncomplicated or complicated
- Primary or recurrent
- Uncomplicated and complicated UTI: this also includes the common form of the infection such as cystitis and pyelonephritis.

Management is dependent on classification of the UTI that the patient presents with (NICE, 2024).

There are also a variety of modifiable behavioural and lifestyle factors that influence bladder health and help prevent UTIs (Jones et al, 2019). These include smoking cessation and prevention of obesity that can alter a patient's immune response and risk of infection. Other preventative strategies can include supporting a high fluid intake and educating patients about regular urination, although there is a lack of evidence about their effectiveness (Tehrani et al, 2014; Yakout, 2022).

MANAGEMENT

If the patient is acutely unwell, they should be referred to the local hospital as there is a high risk of urosepsis and other complications (NICE, 2024). If they have milder symptoms, they can be started on antibiotics. This will need to be followed up with future microscopy to ensure that the bacteria have responded to treatment, and/or referral if this is a reoccurrence.

Antibiotics are the main treatment option for UTIs, dependent on microscopy results (NICE, 2018; 2024) — the type and duration depending on the severity and location of the infection. If there is evidence of resistance and the patient does not seem to be improving, the antibiotic should be changed to a narrow spectrum one (NICE, 2018). However, in most cases, antimicrobial choice is determined by the most implicated pathogen and local resistance patterns (Fernández-García et al, 2023).

Gharbi et al (2019) suggested that up to 50% of antibiotic prescriptions are inappropriate. These findings are similar in Shallcross et al (2020). Isberg et al (2024) found that diagnosis of UTI in men is low, with poor adherence to treatment guidelines in primary care. Thus, treatment should follow evidence-based guidelines with specific recommendations for antibiotic prescriptions, as well as local guidelines which are based on localised resistance rates. See *Box 1* for national treatment guidelines.

ANTIBIOTIC RESISTANCE

The rise in antibiotic resistance in UTIs is a global problem, which is probably due to overuse and inappropriate prescribing (Fernández-García et al, 2023; Gebretensaie et al, 2023).

Indeed, there has been a rise of β -lactamases which result in antibiotic resistance in Gram-negative bacteria. The extended-spectrum β -lactamases (ESBL) producing bacteria resist penicillins,

Box 1

National treatment guidelines

First-line antibiotic drug treatment should be trimethoprim or nitrofurantoin (if eGFR [estimated glomerular filtration rate] is 45 mL/min/1.73m² or more) and considering local antimicrobial resistance data.

- Trimethoprim 200mg twice daily for seven days.
- Nitrofurantoin 100mg modified release twice daily (or, if unavailable, 50mg four times daily) for seven days.

However, nitrofurantoin is not recommended for men with prostate involvement, as it is unlikely to reach therapeutic levels in the prostate. If acute prostatitis is suspected, quinolones are the first-choice antibiotic.

(Adapted from NICE, 2024)

cephalosporins and monobactams (Paterson and Bonomo, 2005; Halldórsdóttir et al, 2024).

The increase in resistance can lengthen duration of infections, increase the risk of spread, and result in more costs to the health service (Fernández-García et al, 2023). Indeed, inappropriate use of antibiotics increases the frequency of adverse reactions and effects and can increase mortality (Fernández-García et al, 2023). One of the key recommendations is to support antimicrobial stewardship to ultimately reduce the increase of microbial resistance (Kranz et al, 2024).

Antibiotic therapy alone is unable to control UTIs, as uro-pathogens have become multi-resistant. An alternative therapy focuses on the role of distinctive microbiotas, known as urobiome, and the use of probiotic interventions (Roth et al, 2022). As research in this area continues, probiotics may become an integral part of UTI management strategies.

CONCLUSION

Lower UTIs are less common in men than women although, with age, the incidence rises due to a variety of risk factors. It is important to diagnose the condition and confirm the classification of infection, as management depends on this (NICE, 2024). Early diagnosis and appropriate treatment are vital for preventing complications and promoting recovery from UTIs in men. With rising antibiotic resistance, new treatment options are evolving, such as probiotics to support a healthy urobiome as an alternative or adjunctive treatment for managing UTIs. **GPN**

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IN RECOGNITION OF OUR PLATINUM PARTNERS

A nurse's role in dealing with risk and incidents

Patient safety can be considered similarly to safeguarding, something which is everybody's responsibility. Indeed, the Nursing and Midwifery Council (NMC) 'Code of Conduct' states that risk and escalating concerns form a key part of the nurse's role to preserve safety (NMC, 2018). Nurses have the most regular contact with patients and therefore play an important role in the identification, recognition and reporting of risk and incidents, the response and escalation of potential harm, and the ongoing patient support throughout and post incident. This article discusses the importance of being familiar with the 'NHS Patient Safety Strategy' and how it incorporates risk, incidents and education. And essentially, how it relates to nursing and the need for all nursing interactions to be considered from a patient safety perspective. The topics covered include incident reporting, risk management, learning from harm, quality improvement, and information sharing. The piece also highlights the significance of record-keeping.

KEY WORDS:

- Patient safety
- Documentation
- Risk assessment
- Communication
- Safety netting

Samantha Thomas
National safety and learning lead for general practice, NHS Resolution

The *NHS Patient Safety Strategy* was published in 2019 and recognised that in order for organisations to work better together towards the aims of the *NHS Long Term Plan* (NHS England 2019a), there needed to be a safer culture, with safer system to be safer for patients (NHS England, 2019b).

The three strategic aims of insight, involvement and improvement are identified in the *NHS Patient Safety Strategy* as core pillars to support a safety culture and safety system for all:

- **Insight:** using data from a variety of sources such as complaints, clinical negligence claims, incidents, staff surveys, audits and friends and families tests to better understand patient safety
- **Involvement:** upskilling staff, patients and system partners with the knowledge and expertise

PATIENT
SAFETY

“**High demand for services and time pressures can increase the opportunity for error to take place (NHS Resolution, 2022). This is known as a systemic factor in patient safety...**

to identify and resolve safety issues with confidence

- **Improvement:** providing support and programmes to implement sustainable and successful change which targets the most urgent areas of risk and concern.

General practice and primary care form the backbone of the NHS with over one million patient contact episodes taking place each day

(Avery et al, 2020). High demand for services and time pressures can increase the opportunity for error to take place (NHS Resolution, 2022). This is known as a systemic factor in patient safety which can influence and impact on individual and team behaviour and performance (Institute of Medicine [IOM], 2000).

Patient safety in primary care has been less researched than in secondary care (Agency for Health Research and Quality [AHRQ], 2023), but recent literature shows that there are clear themes which are particularly evident in primary care. Avery et al (2020) found that an estimated 16,800–32,500 avoidable harm incidents take place in primary care each year. The themes observed were:

- Diagnostic errors (61%)
- Medication errors (26%)
- Referral issues (11%).

Errors can occur at any stage of the patient pathway and can be a result of a failure to carry out an intended action, such as follow-up post antibiotics, to escalate concerns or refer to secondary care. Error could also be a result of formulating a care plan which is not correct for the patient. James Reason refers to these as failures resulting from an error in execution or error in planning (Reason, 1990). Errors, while not deliberate, can result in additional costs of care and operational inefficiencies through the need for repeat testing, repeat appointments, delayed treatment, increased morbidity, increased patient dissatisfaction and increased length of stay (IOM, 2000).

Delayed diagnosis is recognised to be one of the most frequently occurring contributory factors involved in patient safety incidents and avoidable harm (Car et al, 2016; Avery et al, 2020). Its impact can vary from minimal to catastrophic, particularly in time-critical illness and injuries such as sepsis, cauda equina and myocardial infarction (NHS Resolution, 2022).

Care provision in the community involves greater reliance on communication, transport and logistics meaning that the correct assessment or diagnosis can have a chain reaction for correct and timely treatment, multidisciplinary team (MDT) involvement, escalation and review. Conversely, the absence of a correct diagnosis or assessment of needs can negatively affect all that follows leading to delays, unnecessary pain and inadequate follow up, resulting in patient dissatisfaction, patient harm or even death.

INSIGHT

Incident reporting

The National Reporting and Learning System (NRLS) has historically been where data on patient safety incidents are collated. This system was decommissioned and, in June 2024, was fully replaced with the Learning from Patient Safety Events (LFPSE) system. Over two million incidents were recorded each year

Practice point

Unsafe care is one of the prices we pay for not having organized systems of care with clear lines of accountability (IOM, 2000).

Often the response to patient safety incidents is to improve individual resilience through reflections, courses and newsletters to raise awareness. Unfortunately, these are not robust or effective for long-term solutions which can be seen in the continued occurrence of similar incidents. Individual solutions can be a useful layer of improvement; however, this should be alongside organisational and system change through quality improvement. Improvements focused only on the individual nurse should not form the bulk of a patient safety response. The 'Patient safety incident response framework' (PSIRF) provides tools and resources to support organisations and staff to systematically review investigation approaches and engage with staff and patients with compassion to develop a culture of safety (NHS England, 2022a).

under NRLS, but only 1% of them from primary care (NHS England, 2019b), which highlights the importance of data collection and incident reporting in primary care.

Obtaining an accurate picture about what risk and safety look like in primary care helps to plan proactive and targeted solutions to reduce harm and improve care and share this information with the wider regional and national health system by way of safety alerts.

LFPSE

LFPSE is a centralised system to record information and facilitate analysis of data. It aims to make it easy for healthcare professionals and patients to record near-misses and harm to patients, risks where harm may occur, poor outcomes where it is unclear if there has been an incident, and good care which could generate learning to be replicated (NHS England, no date). Practices and trusts with local risk management systems (LRMS) will be able to report incidents as normal where their LRMS is aligned and configured to support LFPSE.

For practices without LRMS, healthcare staff will be able to register for an online LFPSE account which will enable them to report incidents through a web-based service. This is an improvement to NRLS which focused on secondary care.

Complaints

Complaints are another important source of patient safety intelligence,

where often incidents can be identified within them. The last available statistics from NHS Digital showed that there were 229,458 written complaints received in the NHS across hospital, community and primary care settings between 1 April 2022 and 31 March 2023 (NHS England, 2023). More than half of the complaints related to general practice, with the top three categories of complaint relating to:

- Clinical treatment (13.8%)
- Communication (12.8%)
- Staff attitude and behaviour (12.6%)

(NHS England, 2023).

By way of comparison, the top three categories of complaint in hospitals were:

- Communication (16.6%)
- Patient care, including hydration/nutrition (12.4%)
- Staff values and behaviour (10.4%).

Research conducted by NHS Resolution found that patients who felt that their concerns were dismissed and not handled with openness, empathy and compassion were more likely to progress a complaint into a legal claim (NHS Resolution, 2018).

Clinical negligence

The global indirect costs attributable to patient safety incidents are estimated to equal trillions of US dollars each year (Auraaen et al, 2018), with approximately 50% of patient harm believed to be preventable (Panagioti et al, 2019).

Clinical negligence claims provide another source of intelligence about the cost of harm and specialty areas receiving the most claims in a given year. NHS Resolution provides indemnity for all trusts and general practice in England and reported that 13,784 new clinical negligence claims were notified in 2024 annual reporting accounts, at an estimated valuation of £5.1bn (NHS Resolution, 2024). Damages of £2.8bn were paid out for successful claims in the same period (NHS Resolution, 2024). This is a cost which is born by both taxpayers and NHS providers to settle claims. This is not sustainable for the NHS system and conscious efforts to reduce harm before it happens and reduce any delay in responding to harm are national patient safety objectives which aim to tackle this issue across the integrated care pathway.

Record-keeping

Accurate data about incidents in healthcare is reliant on fit-for-purpose data entry and record keeping. The need to keep clear and accurate records is a requirement of the NMC *Code of Conduct* (NMC, 2018). Pressures in delivering healthcare may introduce the temptation to use shorthand and minimal notes to capture healthcare interventions, particularly when patient contact is recurrent and the actions are repetitious. However, careful record keeping is not just a regulatory requirement, but one which will benefit and support nurses to recall details of care should a review of the patient care be necessary, whether this is for an inquest, complaint, incident or

Red Flags

- Lack of response to treatment
- No tests to confirm or exclude initial diagnosis
- Increased pain, declining mobility and sudden inability to work
- Increased use of out of hours, ambulance and A&E services
- The patient/relative/carer remains concerned.

legal claim. It is recommended that documentation takes place as close to the time that care was delivered as possible (NMC, 2018) and captures any assessment completed, persons present, discussions held, advice and plan of care for that visit and for any follow up.

Accurate record-keeping can also support patient advice and meaningful clinical audits to improve care and review processes.

“ It is important to recognise that adverse incidents are rarely the result of malicious or reckless actions.

INVOLVEMENT

Nurse assessment

Nurses have a key role in addressing the needs of patients and communities (Pazzaglia et al, 2023) through assessment and planning patient care (Ajibade, 2021). Nursing assessment involves building a rapport with the patient to collect the data necessary to analyse their immediate and ongoing needs (Ajibade, 2021). This process of history-taking has been identified as a crucial component in designing safe plans of care and treatment, and provision of follow up and safety netting advice (Payne et al, 2024).

The care plan aims to meet these needs through clear strategies with the patient and carer’s agreement. Prioritisation of care needs and considering onward communication are key to consolidate the assessment and deliver quality care that is effective and transferable across care settings.

Impact on patients

Patient safety is a core concern for patients. Many policy interventions have recognised the vital role that patients play in keeping themselves safe and navigating the healthcare system safely. Examples include

the ‘simple steps to keep you safe during your hospital stay’ leaflet (NHS England, 2022b). Public health messages urge them to book an appointment with the GP should they recognise signs of cancer or call NHS 111 to ensure that they are seen by the correct service at the right time. Messaging towards healthcare staff has focused on personalised care, shared decision-making, and the importance of accessible information. Patients can lose trust in the healthcare system when they are not listened to, have their concerns minimised or dismissed, or if they have a poor response to raising a concern. Indeed, research shows that patients suffer harm when sufficient time and attention is not given to understanding the patient history and how it relates to their presenting condition, risk factors and likely diagnosis (Payne et al, 2024). Patient stories, such as Brian’s story (Health Services Safety Investigations Body [HSSIB], 2023b), are powerful ways to use safety incidents to raise awareness of risk and for patients to share their experience for learning and improvement.

Involving patients in safety through responding to complaints and incidents with transparency, empathy and working with them to repair the harm and contribute to the investigation and solution can help mend trust in the healthcare system, diffuse tension, and ensure that the patient perspective is considered in service and quality improvements (NHS England, 2019b), which is in line with the NMC :

2. *Listen to people and respond to their preferences and concerns* (NMC, 2018).

Patient safety partners (PSPs) are a role which enables patient participation at an organisational level to ensure that their perspectives are considered in patient safety and quality work (NHS England, 2019b). Patient participation groups (PPGs) are well established in primary care and may be a useful way to increase collaboration and co-design with improvement work.

Impact on staff

Patient safety negatively impacts

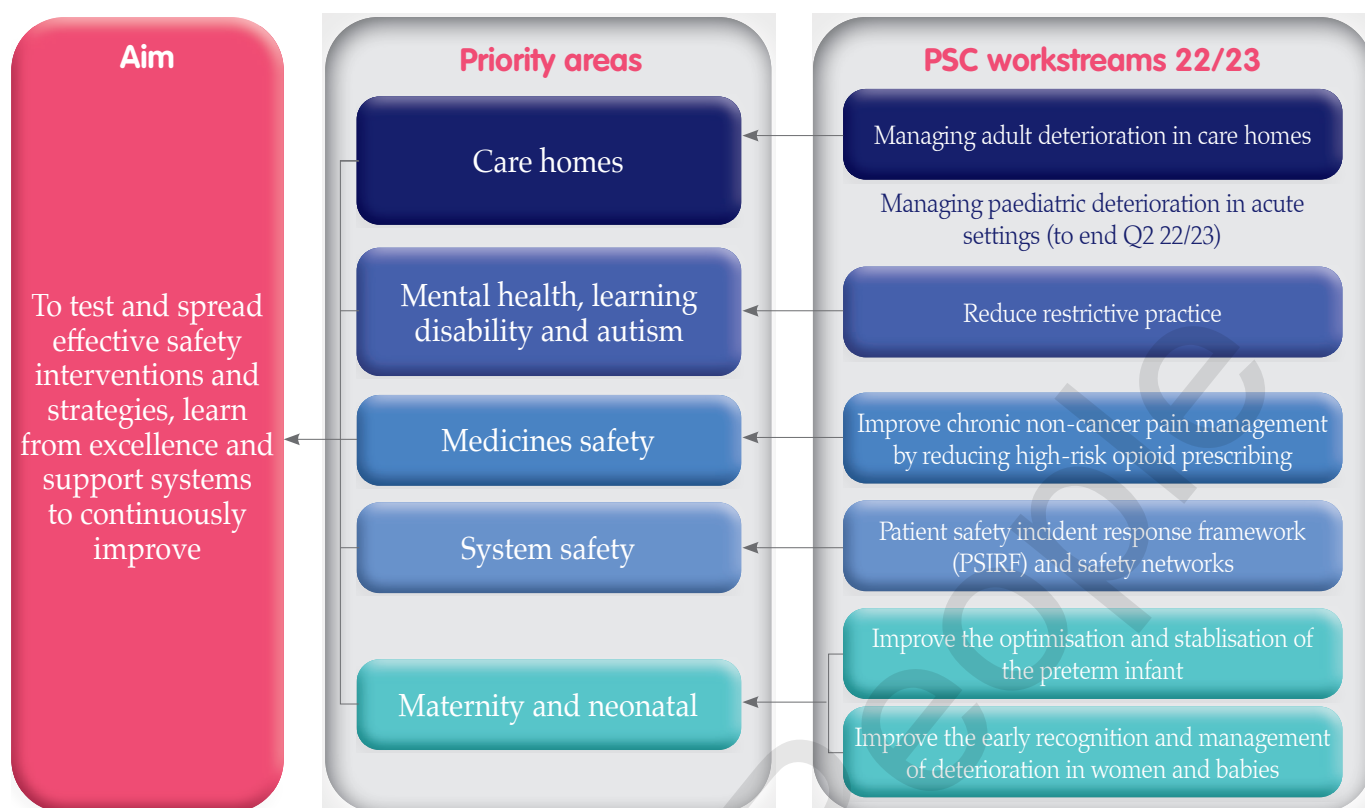


FIGURE 1. NHS national patient safety improvement programmes (adapted from Health Innovation East).

on staff morale and confidence in their skills. It is important to recognise that adverse incidents are rarely the result of malicious or reckless actions. Healthcare staff who are named or involved in a patient safety incident will require support throughout the process, while simultaneously supporting any harmed patient or family. The new patient safety strategy goes to great lengths to refute two particularly harmful myths in relation to patient safety:

- **Perfection myth** — if we practice perfectly, we will never make a mistake
- **Punishment myth** — if we punish staff when something goes wrong, they will not make the mistake again (NHS England, 2019b).

Both myths assign blame and the burden of responsibility on the individual staff member, which can cause staff to feel unsafe discussing mistakes and lead to a focus on blame.

Staff training and education

Staff training and education is a vital part of improving patient safety practice (IOM, 2000). Patient

“ Healthcare staff who are named or involved in a patient safety incident will require support throughout the process, while simultaneously supporting any harmed patient or family.

safety training supports healthcare professionals to recognise risk, conduct systematic investigation of incidents, compassionately engage families, and assess the solutions required for sustainable improvement (NHS England, 2019b). In addition to training, review of patient safety intelligence from complaints, incidents and claims can be audited to identify themes and trends requiring attention and improvement. Regional variation may mean that there is subtle variance in how workforce, patient safety and population health intersect. All NHS staff can access free level 1 and level 2 patient safety syllabus training via E-learning for Health (E-LFH, 2024).

Nurses who are more involved in clinical governance or are patient safety champions can also access free training in investigation skills and compassionate engagement with families through the HSSIB, which has statutory powers to investigate healthcare incidents and near misses across the integrated system (HSSIB, 2023a).

IMPROVEMENT

The national patient safety improvement programme is an important part of the national patient safety strategy and aims to adopt the principles of continuous quality improvement which supports the system to deliver safer care (NHS England, 2019b). The national priority areas seen in *Figure 1* include those which are key in primary and community care, such as care homes, vulnerable patient groups with mental health, learning disability and autism and medicines safety (Health Innovation East, no date).

There are 15 patient safety collaboratives in England which are hosted by health innovation networks (HINs), which develop innovative solutions to pilot,

evaluate and spread for successful adoption of improvements across the system. Previously, much improvement was focused on secondary care, but increasingly policy and schemes such as the GP improvement programme, Fuller Stocktake and GP access plan recognise that support and resources are needed to drive improvement in primary care, where 90% of patient contact begins. The newly published primary care patient strategy aims to redress this with a focus on national and local commitments to improve patient safety in primary care by building on the 2019 patient safety strategy and including case studies and real-life examples (NHS England, 2024).

Outputs which have already been produced from the improvement programmes include the roll out of the National Early Warning Score (NEWS) 2 tool to improve recognition and response to deterioration in adult patients. Care homes required adapted tools to recognise the subtle signs of deterioration in the non-verbal and frail patient, which saw the widespread adoption of the RESTORE2 tool, a physical deterioration and escalation tool for residents in care and nursing home settings (RESTORE2 stands for recognise early soft-signs, take observations, respond and escalate). These tools were designed because data from incidents found that there was no standardised reaction and management of deteriorating patients and where patients or residents had died, review of their care preceding their death identified that signs and opportunities to intervene had been missed by healthcare professionals.

These tools and programmes are a vital part in triangulating the data from incidents, audits and complaints with patient outcomes and developing resources which improve the system and support staff on the front line to deliver care safely.

The sharing of best practice and evidence also supports the development of a safety culture

Brian had a history of breast cancer and had been discharged from the breast cancer service. Two years later, he began to have back pain. Initially the pain was so severe that he visited his accident and emergency department (A&E). He was discharged with pain relief and advised to contact his GP practice.

Brian's story: delayed diagnosis

A month later, Brian telephoned his GP practice and saw his named GP. The GP referred Brian to the in-practice physiotherapist and requested a blood test. Brian accepted the referral, saw the physiotherapist and received exercise suggestions to help relieve the back pain. The exercises did not relieve Brian's pain and over the subsequent eight months, he saw two out-of-hours GPs, six practice GPs, a nurse and a physiotherapist at the GP practice.

Brian also had consultations with healthcare professionals during this time for other conditions not relating to his back pain. When Brian saw a GP at the end of the eight-month period, the GP found a lump on his spine and advised Brian to go to A&E where he attended and had a computerised tomography (CT) scan. A lump was found on his spine and later diagnosed as metastatic recurrence of breast cancer.

Source: HSSIB, 2023b

where learning is shared not only within teams and organisations, but also regionally and nationally. Celebrating that most healthcare is safely delivered in 97% of interactions (Avery et al, 2020) highlights the need to understand what works well and amplify it as being as important as understanding why things did not go as planned.

CONCLUSION

Recognising risk and patient safety in the community is vital to support staff to practice safely, as well as to maximise opportunities for good care planning, assessment and information-sharing through involving the patient and family in all decisions made about their care. These interactions should be documented as part of best practice record-keeping. Improving staff awareness and understanding of how patient safety insights, involvement and improvement is crucial for fostering a safety culture that empowers both clinicians and patients can benefit everyone. In turn, this creates a system that prioritises safety, reduces inefficiency, and promotes learning

from incidents — all of which can lead to greater patient satisfaction and improved health outcomes.

It can feel uncomfortable to manage the dissatisfaction of patients and their families in complaints, incidents and claims, but compassionate and transparent involvement and response to concerns is vital to maintain trust and good governance in line with the Care Quality Commission's (CQC's) safe and responsive domains.

Education is a crucial factor in developing staff skills and expertise in patient safety and contributes to the delivery of the national patient safety strategy and continuous professional development to preserve safety. Improving how the health system works relies on the willing and motivated involvement of staff and patients to improve data and share information for better systems design. **GPN**

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Key points

- Patient safety can be considered similarly to safeguarding, something which is everybody's responsibility.
- Nurses have the most regular contact with patients and therefore play an important role in the identification, recognition and reporting of risk and incidents, the response and escalation of potential harm, and the ongoing patient support throughout and post incident.
- The three strategic aims of insight, involvement and improvement are identified in the *NHS Patient Safety Strategy* as core pillars to support a safety culture and safety system.
- Education is a crucial factor in developing staff skills and expertise in patient safety.
- It is important to recognise that adverse incidents are rarely the result of malicious or reckless actions.
- Improving how the health system works relies on the willing and motivated involvement of staff and patients to improve data and share information for better systems design.

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Bullous pemphigoid: identification and treatment

Bullous pemphigoid (BP) is a rare, chronic, inflammatory, subepidermal, blistering disease that primarily affects older people (Chan, 2020). The blisters are usually filled with clear fluid and the surrounding skin is often red and inflamed. These blisters can appear anywhere on the body but are typically found on the lower abdomen, groin, upper thighs and arms. The prevalence of BP has doubled in 20 years, due to population ageing and other factors (Persson et al, 2021a). This article provides details of the latest guidelines, explains what can trigger BP, and how it is diagnosed and treated.

KEY WORDS:

- Bullous pemphigoid
- Subepidermal blistering
- Care
- Treatment

Linda Nazarko

Independent consultant nurse

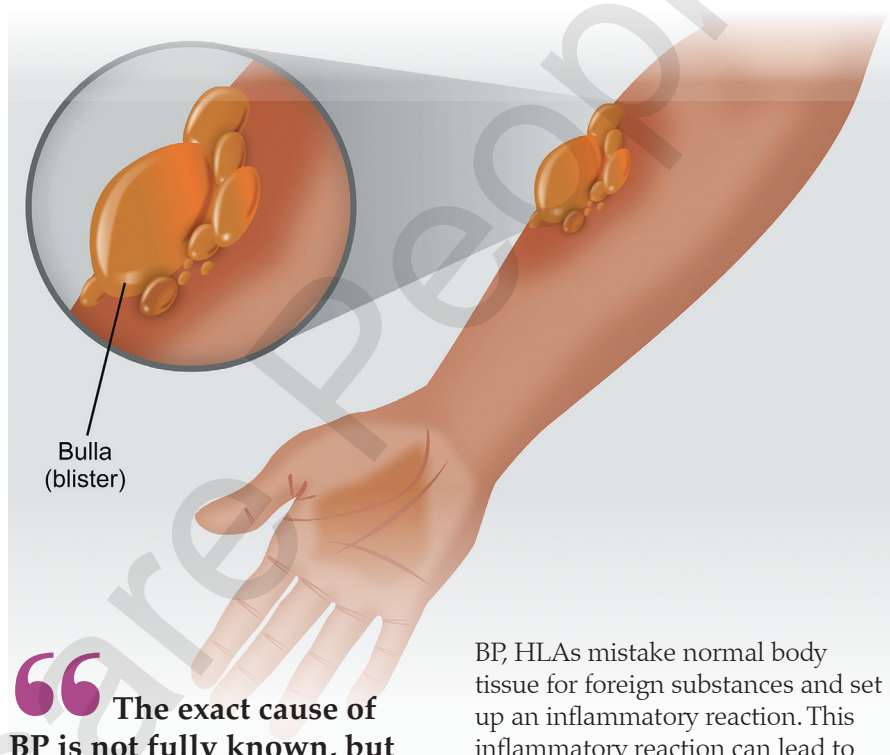
Bullous pemphigoid (BP) is the most common form of autoimmune subepidermal blistering disease (Oakley, 2023).

In England, around 3,500 people are diagnosed with BP annually. Researchers checked a database covering 75% of English GP practices and 10 million records. They found that the annual prevalence of BP doubled in 20 years. The prevalence of BP rises with age (Persson et al, 2021a; *Figure 1*).

BP is considered a rare disease (Chan et al, 2020). However, it is only rare in people under the age of 60 (Bax and Werth, 2021; Persson et al 2021a). The average person diagnosed with BP is 80 years old (Borradori et al, 2022).

WHO IS AT RISK OF BP?

The exact cause of BP is not fully known, but it is thought to develop because of a combination of increased risk factors and one or more triggers (Moro et al, 2020). As said, BP is rare in young adults but becomes more common after the age of 50 — most often occurring



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“The exact cause of BP is not fully known, but it is thought to develop because of a combination of increased risk factors and one or more triggers.

in people over 80 years of age and affects men and women equally (Persson et al, 2021a).

It is thought that some people are at greater risk genetically of autoimmune diseases, such as BP (Moro et al, 2020). Human leukocyte antigens (HLAs) are proteins commonly found in white blood cells. These antigens enable the immune system to differentiate between normal body tissue and foreign substances that may cause infection. In autoimmune diseases, including

BP, HLAs mistake normal body tissue for foreign substances and set up an inflammatory reaction. This inflammatory reaction can lead to the development of BP (Olbrich et al, 2019; Hesari et al, 2023).

Older people with neurological disorders, especially those who have had a stroke, have dementia or Parkinson’s disease, are at greater risk of BP (Brick et al, 2014; Moro et al, 2020). People with psoriasis are also at greater risk of developing BP (Oakley, 2023). *Figure 2* illustrates risk factors for BP.

There are essentially four different types of trigger factors, namely:

➤

Practice point

Bullous pemphigoid can be a chronic condition but with appropriate treatment patients can achieve remission.

- Traumatic
 - Medication
 - Medical conditions
 - Infection
- (Moro et al, 2020; Biondo et al, 2021).

Traumatic triggers include surgery, burns, radiotherapy and ultraviolet (UV) radiation (Moro et al, 2020). People with psoriasis who are having UV light phototherapy may develop BP (Oakley, 2023).

There is little research on how medication can trigger BP. A systematic review and meta-analysis with 285,884 participants found that there was a significant association of the development of BP with aldosterone antagonists, dipeptidyl peptidase 4 (DPP-4) inhibitors, anticholinergics, and dopaminergic medications used to treat Parkinson's disease (Liu et al, 2020). The three major aldosterone antagonists are spironolactone, eplerenone, and canrenone, which are used to treat heart failure and hypertension (Mantero and Lucarelli, 2000).

DPP-4 inhibitors (alogliptin, linagliptin, saxagliptin, sitagliptin, vildagliptin), also known as gliptins, are used to treat diabetes. They double the risk of BP, and men are at significantly higher risk than women (Benzaquen et al, 2018; Hung et al, 2020). Men of Asian ethnicity are also at particular risk, and in England have the highest rates of BP and type 2 diabetes (Persson et al, 2021a).

In the author's experience, DPP-4 inhibitors are used less widely than in the past, as there is an increased risk of heart failure in all gliptins other than linagliptin. Only linagliptin can be used safely in renal failure at a normal dose (Guo et al, 2020; National Institute for Health and Care Excellence [NICE], 2023; Nazarko, 2023).

Liu et al (2020) recommended that medications known to increase the risk of BP should be 'judiciously prescribed' in people known to be at high risk of BP.

Medical conditions that may trigger BP include psoriasis, lichen planus, diabetes, rheumatoid arthritis,

ulcerative colitis and multiple sclerosis (Oakley, 2023).

Infection can also trigger BP (Moro et al, 2020; Biondo et al, 2021). *Figure 3* shows how risk factors and triggers can combine to cause BP.

CLINICAL FEATURES

BP can be difficult to diagnose because the first sign, intense itching, may occur months before any other symptoms. The person then develops a rash, this can resemble eczema or urticaria. Large, fluid-filled blisters, bullae, develop, and mostly occur on the arms and legs. They can appear in skin flexures. The blisters are normally filled with clear fluid but can be filled with haemoserous fluid. The amount of blistering can vary and sometimes affects one area, such as the lower leg. In severe cases, the whole body may be affected (Primary Care Dermatology Society [PCDS], 2022).

There are six distinct clinical presentations in adults:

- Generalised
- Vesicular
- Urticarial
- Vegetative
- Generalised erythroderma
- Nodular

(Chan, 2020).

The generalised bullous form

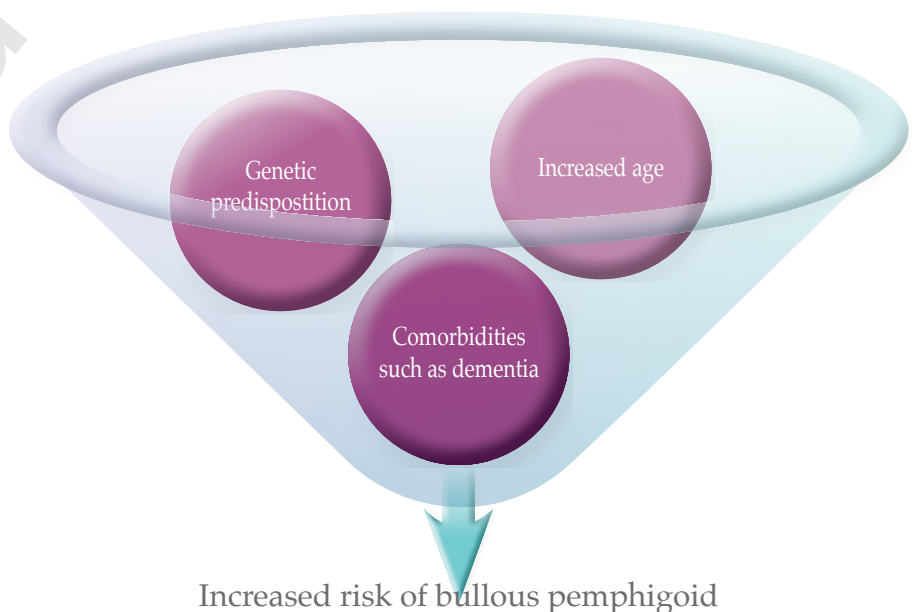


Figure 2.

Risk factors for BP (author's own work based on Moro et al, 2020).

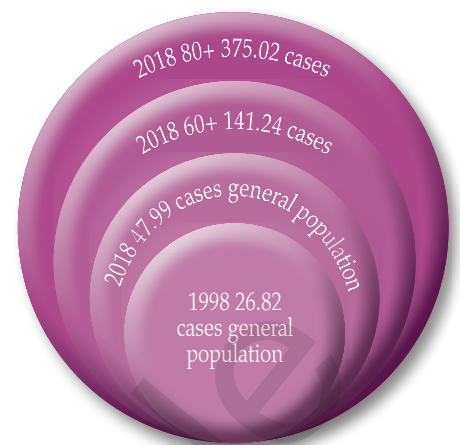


Figure 1.

Prevalence of bullous pemphigoid per 100,000 people by age (author's own work based on Persson et al, 2021a).

is the most common and large bullae are present on the skin. The vesicular form is less common and there are small tense blisters on the skin, which is often red (Baigrie and Nookala, 2023). The vesicular form can look like shingles when it first emerges. The urticarial form initially looks like urticaria and then bullae appear. In some cases, bullae do not appear (Baigrie and Nookala, 2023). The other three forms vegetative, generalised erythroderma and nodular are rare and are normally diagnosed by dermatologists.

DIAGNOSIS

Diagnosis is normally made on the basis of risk factors, possible triggers

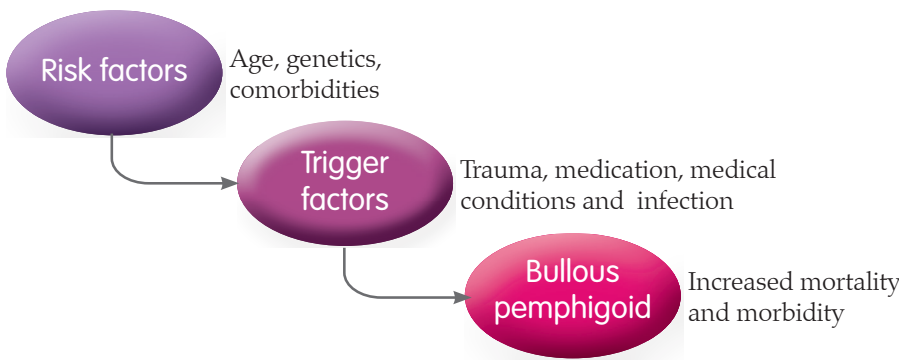


Figure 3. How risk factors and triggers can combine to cause BP (author’s own work).

and clinical features. It is usually confirmed by a skin biopsy of an early blister. If there are no blisters, a biopsy of inflamed skin can be taken. Bullous pemphigoid develops because of an attack on the basement membrane of the epidermis by IgG +/- IgE immunoglobulins (antibodies) and activated T lymphocytes (white blood cells). The antibodies and lymphocytes attack the BP180 protein and affect skin integrity. Blood tests can check for circulating pemphigoid BP180 antibodies, which confirms diagnosis (Oakley, 2023).

TREATMENT AND MANAGEMENT

If the person has severe BP, they may initially require hospital admission and treatment. An individual diagnosed with BP is around three times more likely to die in the first two years after diagnosis than those who do not have BP (Persson et al, 2021a).

The leading cause of death in people with BP is infection. Researchers found that within two years of BP diagnosis, 40.7% of people developed serious infections requiring hospital admission (Chang et al, 2023). BP doubles the risk of infection. The greatest risk factor was taking systemic corticosteroids, as they increase infection risks by suppressing the immune system, including diminishing the body’s ability to mount an effective inflammatory response against infections. Other risk factors were advanced age, female sex, low income, and certain comorbidities. Identified comorbidities included diabetes mellitus (DM), heart failure, cerebrovascular disease (CVD), chronic obstructive pulmonary

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disease (COPD), chronic liver disease (CLD), chronic kidney disease (CKD), nephrotic syndrome, connective tissue disease (CTD), psoriasis, dementia, Parkinson’s disease, depression, and malignancies. The researchers concluded that active

interventions to address risk factors were essential to reduce morbidity and mortality (Chang et al, 2023).

The aims of treatment are to identify and remove any triggers whenever possible, provide medication to control the disease, and promote wound healing (Chan, 2020).

Bullous pemphigoid is a chronic disease and people can require treatment for six to 60 months, although identifying and removing triggers can speed up the resolution of BP (Chan, 2020), as illustrated in the patient story.

MEDICATION

Medication may be initiated in primary or secondary care. Traditionally, the main treatment for BP has been high doses of oral corticosteroids, doses of 30–50mg daily (Venning et al, 2012; Persson et al, 2021b). Recent research indicates that a high proportion of people with BP continue to be treated with high doses of oral prednisolone, a corticosteroid, in UK primary care (Persson et al, 2021b). High doses of corticosteroids are associated with adverse outcomes in older people

Mr Surinder Khan is a 76-year-old gentleman of South Asian ethnicity. He weighs 82kg and has a body mass index (BMI) of 31. Mr Khan has type 2 diabetes and is being treated with metformin and linagliptin, a DPP-4 inhibitor. He also has hypertension and is taking three medicines to control his blood pressure, including spironolactone, an aldosterone antagonist. Mr Khan has developed bullous pemphigoid (BP). His risk of developing BP was increased because of his age, being over 60, and having type 2 diabetes. He is taking two medications known to trigger BP. Mr Khan is particularly at risk of developing BP because he is male, of South Asian heritage and is taking linagliptin, a DPP-4 inhibitor, which is especially risky in South Asian males.



Mr Khan’s medication was reviewed. Linagliptin was discontinued and another medication prescribed to manage diabetes. He was given advice on diet to help him lose weight. Spironolactone, given to control blood pressure, was also discontinued and the dose of one of the other medications he had been prescribed for hypertension was optimised.

Bullous pemphigoid was treated with a potent topical corticosteroid. Mr Khan’s skin healed quickly and the removal of trigger medications led to a rapid resolution of the BP.

with BP (Rzany et al, 2002). Indeed, although effective, prednisolone exposes an already vulnerable group to an increased risk of conditions, such as osteoporosis and diabetes (Chovatiya and Silverberg, 2020; Johal et al, 2023)

There is increasing awareness of the importance of using steroid sparing treatments that aim to minimise or eliminate the use of oral corticosteroids and provide prophylactic treatment when oral corticosteroids are indicated and to monitor the person for side-effects (Persson et al, 2021b). *Figure 4* outlines a step-wise approach to treatment (PCDS, 2022; Oakley, 2023).

Steroid creams

Ultra-potent topical steroids, such as clobetasol propionate, may be prescribed. These reduce the risks of steroid side-effects (British Association of Dermatologists [BAD], 2023). Much of the literature suggests that topical steroids are used in mild-to-moderate disease and oral corticosteroids in more severe disease (PCDS, 2022; Oakley, 2023).

The latest Cochrane review found that:

Clobetasol propionate cream applied over the whole body is probably similarly effective as, and may cause less mortality than oral prednisone for treating bullous pemphigoid.

(Singh et al, 2023)

Tetracyclines have anti-inflammatory properties. Doxycycline is used in mild-to-moderate cases of BP. Researchers have found that although doxycycline is less effective at controlling blisters in the short term, it is safer to use in the longer term (Williams et al, 2017). A Cochrane review found a paucity of research on doxycycline but stated that, although doxycycline was less effective, using it rather than an oral corticosteroid reduced mortality (Singh et al, 2023).

A combination of oral tetracycline, an antibiotic, and nicotinamide, a form of vitamin B3, can be used as an alternative to

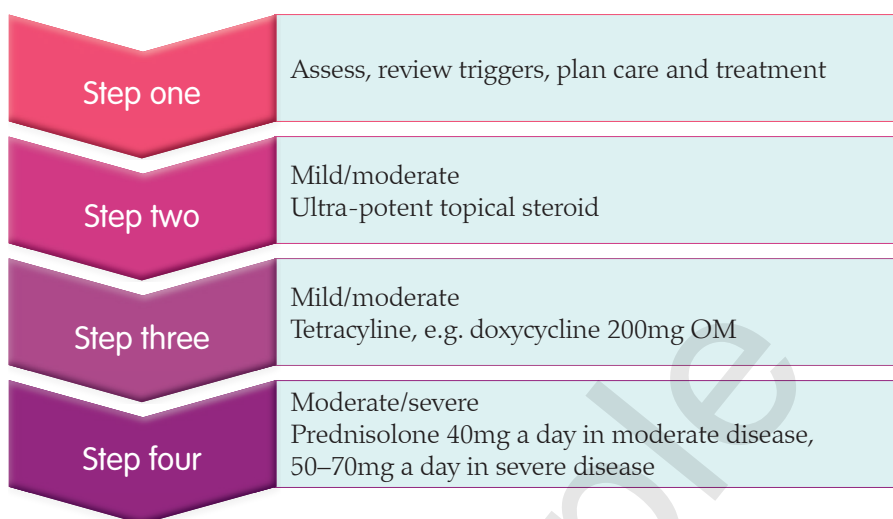


Figure 4.

A step-wise approach to treatment for BP (author's own work based on PCDS, 2022; Oakley, 2023).

“There is increasing awareness of the importance of using steroid sparing treatments that aim to minimise or eliminate the use of oral corticosteroids... .

systemic steroids. Both tetracycline and nicotinamide have anti-inflammatory properties (Oakley, 2018).

Oral corticosteroids

Oral corticosteroids normally act quickly and effectively to control blistering and symptoms. Initial dosage varies from 20mg a day in localised mild disease to 50–70mg a day in severe disease. Dosage should be reduced within a few weeks to 15–20mg daily (PCDS, 2022). Risks of high dose steroid therapy include gastric ulceration, type 2 diabetes and osteoporosis. Guidance recommends monitoring glucose levels, prescribing medication such as a proton pump inhibitor to reduce the risks of gastric ulceration, and medication to reduce the risk of osteoporosis (PCDS, 2022; Oakley, 2023).

Specialist treatments

Some people do not respond to high dose steroid treatment, or it may be contraindicated in other patients. Research indicates that 20–30%

of people with BP have diabetes — predominately type 2 (Chai et al, 2020). People with diabetes tend to be less responsive to oral corticosteroids and require higher doses of steroids, which tend to further destabilise diabetes.

People who do not respond to standard treatment are managed by dermatologists. A range of treatments can be used including immunosuppressive drugs, such as methotrexate and mycophenolate mofetil (Alexandre et al, 2023).

Dapsone is a sulphonamide antibiotic that is used in the treatment of leprosy. It is used to treat a number of skin conditions including BP. It can be used as an initial treatment or in cases of relapse. It is useful when there are contraindications to the use of corticosteroids. Close monitoring is required as major side-effects, such as anaemia and allergy, are fairly common. Less common side-effects include kidney disease, muscle weakness and psychosis (Oakley, 1997).

Intravenous (IV) immunoglobulin, a blood product derived from the pooled plasma of about 10,000 to 20,000 individuals, may be given by IV infusion. However, this is a relatively new therapy and, as such, there is little evidence to support its use (Tan, 2023).

Monoclonal antibodies, such

as rituximab, can be used to treat autoimmune conditions including BP (Mohta and Patel, 2023). They are given by IV infusion. All anti-lymphocyte monoclonal antibodies should be given under the supervision of an experienced specialist, and in an environment where full resuscitation facilities are immediately available (British National Formulary [BNF], 2024).

WOUND CARE

As said, BP causes blisters, which can be large and uncomfortable. There is little guidance on how to manage these blisters (Etesami et al, 2022). BAD (2023) recommends that the blister is burst and a dressing applied. General advice from NHS Inform advises against bursting blisters, stating that fluid will be re-absorbed (NHS Inform, 2023). If a blister is to be treated, there is little guidance on whether it is best to aspirate the fluid from the blister using a syringe and needle or to 'de-roof' the blister by cutting the top off. In the author's clinical experience, those who prefer to aspirate state that this prevents the blister from bursting, retains skin, prevents infection and leads to faster wound healing. A research study compared healing of blisters caused by burns using both methods and found that neither was superior, and that healing times and infection rates were similar (Ro et al, 2018).

Wounds should be cleaned and an appropriate dressing applied. Healthcare professionals should choose a dressing on the basis of comprehensive, holistic wound assessment. In the author's clinical experience, hydrocolloid dressings can be an appropriate choice if the blister has burst, as they conform to the skin, are waterproof, promote moist wound healing and can, depending on the volume of exudate, be left in place for up to a week. The author particularly recommends transparent ones, as the wound will be visible without being disturbed.

CONCLUSION

Bullous pemphigoid is an unpleasant skin condition which can have a significant effect on an individual's

wellbeing. They may feel dirty or disfigured, itching may be intense, and they may be in pain. These symptoms can negatively affect sleep, mood and quality of life (Kouris et al, 2016; Padniewski et al, 2022)

It is important that clinicians focus on the person, not the disease. They may require medication to treat symptoms, such as pain and itching, and support, such as advice on how to get a good night's sleep.

The person may be lonely and isolated and may benefit from a support group or a befriending service (see *resources*). Simple measures can make a huge difference to the individual and improve quality of life. **GPN**

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Resources

- Pemphigoid and pemphigus support group (Pemfriends): www.pemfriendsuk.co.uk/
- Age UK befriending service: www.ageuk.org.uk/services/befriending-services/

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Key points

- The prevalence of BP has doubled in 20 years.
- BP occurs due to an interaction between increased susceptibility and trigger factors.
- A diagnosis of BP triples the risk of death in the first two years after diagnosis.
- Prescribers should take care to avoid prescribing trigger drugs to those susceptible to BP.
- It is important to use steroid sparing therapies when possible.
- BP can have a major impact on a person's quality of life, holistic care can make a huge difference.
- It is important that clinicians focus on the person, not the disease. They may require medication to treat symptoms, such as pain and itching, and support, such as advice on how to get a good night's sleep.

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Revalidation Alert

Having read this article, reflect on:

- Your knowledge of risk factors and triggers for BP
- The different treatment options available
- Why it is difficult to diagnose
- The impact that BP can have on patient quality of life.

Then, upload the article to the free GPN revalidation e-portfolio as evidence of your continued learning: www.gpnrnursing.com/revalidation

Understanding clinical decision-making at an advanced level

This article critically analyses the process of clinical decision-making (CDM) and associated theories that contribute to safe clinical judgement, allowing trainee advanced clinical practitioners (tACPs) to expand their knowledge, skills and attitude to CDM at an advanced level. The case included is from the author's own clinical practice and is a reflective piece involving CDM which embraces the four pillars of advanced practice. The relevant professional, legal and ethical issues that assist tACPs to follow the 'Code of Conduct' (Nursing and Midwifery Council [NMC], 2018) are also discussed in relation to this complex CDM case.

KEY WORDS:

- Clinical decision-making
- Trainee advanced clinical practitioner (tACP)
- Advanced clinical practitioner (ACP)
- Deep vein thrombosis (DVT)
- Cellulitis

Wenjun Nie (know as Sabrina)

Community matron,
Merseycare Foundation Trust



Photograph: roeb_monster/Shutterstock

Clinical decision-making (CDM) is one of the fundamental competencies for advanced clinical practice in the *Multi-professional framework for advanced clinical practice in England* (Health Education England [HEE], 2017). A trainee advanced clinical practitioner (tACP) must demonstrate autonomous CDM knowledge and skills at an advanced level to ensure a seamless transition from tACP to advanced clinical practitioner (ACP) by the end of their training. While accurate CDM occurs in healthcare environments with limited resources, suboptimal CDM continues to contribute to poor patient outcomes in primary care, including walk-in centres (Tsigas et al, 2013). In the author's opinion, a better understanding of CDM is essential to achieve safe and more effective patient care, particularly in today's healthcare society, due to the increasing gap between demand and capacity.

WHAT IS CDM?

CDM involves a dynamic process where clinicians gather, sift through and synthesise data to arrive at decisions which are evidence-based (Tiffen et al, 2014; Walston et al, 2022). Many studies use CDM synonymously with clinical judgement, clinical reasoning, as well as diagnostic reasoning (Lovell et al, 2020). CDM is seen as a fundamental concept in nursing practice that incorporates critical thinking, systematic analysis, and clinical judgement to meet patients' health needs (Lovell et al, 2020; Diamond-Fox and Bone, 2021). CDM and clinical judgement are closely linked but distinct processes in healthcare. While CDM focuses on choosing between different alternatives to arrive at the best course of action, clinical judgement assesses and evaluates different alternatives, using both scientific evidence and clinician intuition and experience (Standing,

2020). By combining both processes, healthcare providers ensure that decisions are not only evidence-based, but also personalised and appropriate for each patient. Indeed, Standing (2020) suggests that CDM uses clinical judgement to deliver high-quality patient care for which clinicians are accountable.

CASE STUDY

Background

For patient confidentiality, the pseudonym 'Vicky' will be used throughout (Nursing and Midwifery Council [NMC], 2018). Vicky was an 81-year-old lady who presented at the urgent treatment centre with suspected deep vein thrombosis (DVT) to her left lower leg following referral from the National Health Service (NHS) 111 telephone triage service (see *Vicky's history*).

DVT is a condition in which a blood clot within the deep vein system

causes partial or complete blood flow obstruction (Kim et al, 2021; National Institute for Health and Care Excellence [NICE], 2022). Every year, approximately one in 1000 of the United Kingdom (UK) population develop DVT (Tidy and Knott, 2020). The most serious complication of DVT is pulmonary embolism (PE), which is one or more clots obstructing the pulmonary arterial system, resulting in severe respiratory dysfunction and even death (NICE, 2022). With knowledge of these medical conditions and complications related to DVT, intuition led the author, who was the tACP at the urgent treatment centre, to assess Vicky quickly.

Intuition

Intuition is normally referred to as a 'gut feeling' (Miller and Hill, 2018; Walston et al, 2022). For clinicians, it plays a central role in CDM (Tiffen et al, 2014). Adinolfi and Loia (2022) describe intuition as an appreciation that lacks rationale. It has been heavily criticised for its association with concepts such as having a 'sixth sense' or a 'hunch' (Pearson, 2013).

Furthermore, Elbanna and Fadol (2016) highlight that intuition is prone to being context-specific, as it is influenced by analysis of limited available information. Yet, experienced decision-makers tend to adopt intuition to inform their CDM (Ozdemir, 2019). Rather than dwelling on irrelevant interventions, intuition enables experienced clinicians to engage in clinical situations with better understanding (Price et al, 2017). Therefore, intuition is more than merely a 'gut feeling' (Melin-Johansson et al, 2017), as it facilitates a more efficient and effective pathway to rapidly assess patient data in the context of emergency situations, and subsequently enhances patient outcomes (Miller and Hill, 2018).

Moreover, intuition is based on knowledge, experience, and expertise (Walston et al, 2022). As opposed to novices, experts' intuition analytically evaluates a patient's condition, considering all the variables, to support CDM (Price et al, 2017). Interestingly, Miller and Hill (2018) also find clinicians'

Vicky was an 81-year-old lady who presented herself with suspected DVT, following referral of the 111 service. Her D.O.B. was confirmed alongside her demographic checkup. She was able to mobilise and had recently stopped taking an anticoagulant.

Vicky's history

History of presenting complaint

The symptoms had started about 10 days ago, with swelling from the ankle. No healthcare professional had checked her as yet. She did not have any severe pain or haemoptysis and was not short of breath (SOB), with no cough or pain in the chest.

Past medical history

Vicky did have angina, for which she was on glyceryl trinitrate (GTN), but did not take this often.

Drug history:

- Atorvastatin 40mg OD nocte
- Amlodipine 10mg OD
- Clopidogrel 75mg OD
- Bisoprolol 2.5mg OD
- Isosorbide mononitrate 90mg OD
- GTN PRN and the patient had just stopped taking Apixaban 5mg BD 3/7 ago.

She had no known drug allergies.

Family/social history

Vicky was retired and unable to recall any significant family history. She lived with her husband and had two grown up children. She neither smoked nor drank alcohol.

System review:

- Cardiovascular: no chest pain, no palpitation, both legs were oedematous, lower left calf circumference was 7cm larger than the right lower leg. No shortness of breath, no peripheral/central cyanosis
- Respiratory: no concerns, no cough, no haemoptysis, no shortness of breath/difficulty in breathing
- Gastrointestinal: no abdominal pain/dysphagia/haematemesis, denied diarrhoea and vomiting. Eating and drinking well
- Genitourinary: no urgency/frequency/dysuria, no discharge
- Neurological: No history of LOC (altered level of consciousness), no numbness, weakness, tingling or visual changes
- Psychiatric: no history of depression/anxiety
- Vital signs:
 - Temperature: 35.5
 - Pulse: 60/min regular
 - Blood pressure: 132/72mmHg
 - Respiratory rate: 18/min
 - Sats: 99% in the room air
 - NEWS score: 1.

intuition increases as they gain more experience. Expert clinicians may practise intuitive decision-making even without consciously realising it. Hence, in some journals, intuitive decision-making is described as

naturalistic decision-making (Klein, 2015). However, intuition is not only used by experts, novices also use it to prompt recall of past experiences, even if limited, to inform their CDM process (Nibbelink and Brewer, 2018).



Practice point

PR is the process whereby clinicians compare the presenting signs and symptoms of patients and identify any cues that they have encountered previously (Higgs and Jones, 2019).

Indeed, novices are encouraged to use intuition provided that they are familiar with its complications (Price et al, 2017). Melin-Johansson et al (2017) found that older novice nurses with greater life experience used intuition more often. In fact, this study advocates that intuition should be used to support CDM at all levels of clinical practice. However, for inexperienced clinicians, intuition should only be used to assess situations further, and not be the major factor for CDM (Miller and Hill, 2018).

In this case, the tACP's extensive knowledge and experience in urgent care and emergency medicine helped to identify signs of medical emergency. When Vicky initially contacted the 111 service, she described her left lower leg as warm to the touch, and reported pain, tenderness and swelling. These symptoms had begun ten days earlier, shortly after she completed her course of anticoagulant medication, apixaban, which had been prescribed for her pulmonary embolism (PE) diagnosed six months ago. Vicky denied experiencing chest pain, shortness of breath or cough. Following her report of symptoms to the 111 service, Vicky was advised to visit a walk-in centre promptly to rule out any risk of DVT or PE. When she got there, assessment tools, i.e. the National Early Warning Score (NEWS) 2 (Royal College of Physicians [RCP], 2017) and the Airway, Breathing, Circulation, Disability and Exposure (ABCDE) approach (Resuscitation Council UK, 2015) were used to exclude any critical medical crisis. Subsequently, pattern recognition (PR) was employed by the tACP to aid CDM.

As the first step in diagnosing DVT, Vicky's left calf circumference was

measured, revealing it was 7cm larger than her right. Combining intuition and clinical knowledge, the tACP proposed the clinical diagnosis of DVT based on PR, Vicky's brief clinical history and initial examination.

Pattern recognition (PR)

PR allows experts to seek for similarity through comparisons within given clinical situations (Higgs and Jones, 2019). It is a holistic method of consideration that is generated when clinicians attend to various stimuli (Standing, 2020), enabling them to identify common features and make informed decisions based on their accumulated knowledge and experience which, in turn, boosts clinician confidence (Perona, et al, 2019). However, Nibbelink and Brewer (2018) argue that confidence is not a consistently positive factor for CDM, as it may lead to complacency. They assert that experience should be the greatest influence on CDM. Antithetically, Cappelletti et al (2014) in their systematic review of 15 studies, highlight that effective CDM is not linked to years of experience in clinics. Indeed, experience might hinder situation awareness (SA) (Pantazopoulos et al, 2012; Stubbings et al, 2012), and thus fail to achieve the best CDM.

When PR does not match clinicians' previous experience, it motivates them to assess patients further to improve CDM (Nibbelink and Brewer, 2018). Moreover, Jadhav et al (2021) concur that PR is in proportion to the degree of knowledge of experts. Indeed, refined PR processed by experts is commensurate with their professional competence (Schuwirth et al, 2019). As such, experts are adept at making intuitive decisions through refined PR which is associated with the saliency of the patient situation. While decision-makers predominantly rely on their experience to guide CDM (Watkins, 2020), human perception is unavoidably involved which is susceptible to error (Standing, 2020), stemming from cognitive biases (Buetow, 2019).

Furthermore, according to Pearson (2013), PR is formulated through

one hypothesis. Unsound PR may pose a risk to CDM due to inaccurate cues being recognised by decision-makers (Higgs and Jones, 2019). When clinicians rely too heavily on initial information (the anchor) and actively look for any plausible evidence to support their original diagnosis, they can ignore evidence that contradicts their original belief and suggests an alternative diagnosis or treatment plan that could be more beneficial for the patient, and thus fail to make any changes to CDM (Mamede et al, 2010). Patterson et al (2016) emphasise that even novices should evaluate multiple hypotheses when making decisions, despite potential circumstances that may hinder their reflection on these decisions. This suggests that while novices are encouraged to consider various possibilities/hypotheses, the pressure and immediacy of clinical settings may limit their ability to do so effectively.

Situation awareness (SA)

Schulz et al (2013) define SA as:

- Perception — detecting and identifying critical cues
- Comprehension — understanding the significance of these cues and how they relate to the overall situation
- Prediction — anticipating future events/outcomes based on the current understanding of the situation.

SA is dependent on an individual's environment, including physical, social and informational factors, and system capacity where an individual collects and interprets information (Mathesen and Krogstie, 2012). It is rooted in real-life background, underpinning decision-making within clinical settings (Tower et al, 2019).

Poor SA is considered to be one of the major causal elements in diagnostic errors (Schulz et al, 2018). In contrast, accurate SA will establish correct decision-making and ultimately lead to a positive patient experience (Green et al, 2017). Moulton et al (2007) emphasise that clinicians with superior SA perform better in acute, indeterminate zones of practice where clinical

circumstances are complex and rapidly evolving. This implies that correct SA will help clinicians make effective clinical decisions to avert disaster (Stubbings et al, 2012). However, people's responses to stimuli depend on their perception of the stimuli and how it relates to their goals (O'Sullivan and Schofield, 2018). This calls for ACPs to engage in life-long learning (NMC, 2018) so that they can be vigilant when they perceive, comprehend and predict any changes of clinical presentations in terms of CDM, and respond to it competently in a timely manner to ensure safe, effective, high-quality patient care.

Cognitive biases

Cognitive biases, also called 'heuristics', are mental shortcuts or patterns of thinking that impact decision-making (O'Sullivan and Schofield, 2018). Croskerry (2014) stresses cognitive errors and biases often emerge in situations characterised by high-level of stress, fatigue, deprivation of sleep and cognitive overload. As a result, cognitive biases can negatively affect CDM but, more significantly, clinicians may be oblivious to their influence (Croskerry, 2013). Ironically, people tend to recognise cognitive biases in others but not themselves, hindering their ability to self-reflect and recognise the adverse effects that cognitive biases may precipitate (O'Sullivan and Schofield, 2018).

Indeed, such biases may result in unreliable clinical management plans where key factors are overlooked, resulting in poor outcome (Saposnik et al, 2016). Wynn (2022) suggests that to mitigate adverse effects on patient care, decision-makers should improve their understanding of how decisions are made and the associated possibility of errors. This is supported by the NMC (2018), which stipulates the requirement to minimise any risk of harm to patients and those close to them as a result of human factors or system failure.

Bennett (2015) acknowledges that cognitive biases are inevitably developed through individuals' learning experiences. During experiential learning, novices often

prioritise the perceptions and advice from experienced colleagues over evidence-based practice (Nibbelink and Brewer, 2018), which can lead to biased CDM. This tendency is particularly notable when there are time constraints or when referencing protocols that are difficult to access (Tsiga et al, 2013). That said, information from senior colleagues may be applicable (Seright, 2011), as it is often more convenient and patient-specific (Nibbelink and Brewer, 2018).

Surprisingly, Peña (2010) counters these findings by suggesting that novices are more likely to adhere to guidelines. Due to their limited knowledge, they are not adept at making decisions that are contextualised. This means that experienced clinicians should adopt effective leadership and management to provide supportive networks and role modelling. Subsequently, any deviation from evidence-based practice within CDM is alleviated, and the quality of patient care is improved (HEE, 2017).

There was an awareness that the initial clinical diagnosis of DVT for Vicky could be the result of cognitive bias from the lack of information and brief clinical assessment carried out by the tACP. Some other diagnoses may also present with similar signs or co-exist with DVT, e.g. cellulitis and muscle sprain (Tidy and Knott, 2020; NICE, 2022). All these elements should be considered before a formal diagnosis of DVT is made. An analytical approach was therefore needed for the next stage.

Dual-process theory

CDM is complex and sometimes it needs more than one approach to reach an accurate decision (Tay et al, 2016). Tiffen et al (2014) recommend that clinicians should use both intuitive and analytical approaches for clinical reasoning. This is based on dual-process theory which consists of system 1 and 2 — intuitive and analytical thinking (Walston et al, 2022). While intuition guides the tACP to make a rapid impression of DVT using PR through past experience, the analytical approach allows the tACP to take the time to piece together

all the pertinent information carefully, leading to a better decision (Croskerry, 2009). An analytical approach is particularly valuable in navigating situations characterised by uncertainty, complexity, or where the outcome has little room for error (Tay et al, 2016).

However, unlike intuitive thinking, where decision-making is restricted by lack of time, an analytical approach is slow and more laborious, requiring significant cognitive effort (Norman et al, 2017). Used alone, it can slow down CDM, leading to poorer performance (Tay et al, 2016). Thus, adopting both intuitive and analytical thinking can promote more effective CDM (Croskerry and Nimmo, 2011). In this case, the tACP employed the dual-process theory to thoroughly assess the patient and arrive at effective CDM.

Bolboacă (2019) advocates that using diagnostic tests can prevent any active failure to recognise alternative diagnoses, thus circumventing any serious consequences. Considering PR suggested that Vicky's presenting medical symptoms tended towards a diagnosis of DVT, and so the DVT pathway was to be completed according to trust policy. This pathway contains a 2-level Wells score, a D-dimer test, alongside a treatment plan for suspected or confirmed DVT, which can vary from one trust to another. Embracing a comprehensive assessment approach for CDM not only helps minimise the risk of errors, but also upholds the ethical principle of non-maleficence (Beauchamp and Childress, 2013).

The result of the DVT pathway showed that Vicky's Wells score was 3 and her D-dimer level was 0.76 (normal parameter is less than 0.5), indicating that Vicky was at high risk of DVT. Meanwhile, Vicky's presenting symptoms aligned with the diagnostic framework of cellulitis — a common bacterial infection characterised by redness, tenderness, warmth and swelling (Edwards et al, 2020; NICE, 2023). Based on clinical experience, the tACP considered the evidence base for cellulitis and DVT, and acknowledged the potential risk of

DVT secondary to cellulitis. Although there is low prevalence of concurrent DVT and cellulitis (Maze et al, 2013), delayed treatment can be fatal (NICE, 2022; 2023). Recognising that neither the Wells score nor the D-dimer test can definitively confirm DVT, a proximal leg vein ultrasound scan was arranged within 24 hours, and interim therapeutic anticoagulation was initiated to prevent clot progression, such as PE (NICE, 2022). Initial treatment included first-line antibiotics for suspected cellulitis and oral anticoagulant (NHS Pan Mersey, 2023).

As a result of effective communication and collaboration delivered by the tACP, Vicky was involved throughout the process of diagnosis and formulating a treatment plan, demonstrating shared patient-centred decision-making (HEE, 2017). Vicky was also given the chance to raise her concerns and was educated to her level of understanding as to 'red flags' associated with her symptoms (Lowth, 2016) and safety netting. Supplementary reading materials for DVT and PE were provided to empower Vicky for self-management (HEE, 2017).

CONCLUSION

This article has explored the fundamental theories that underpin CDM within healthcare, highlighting the benefits and drawbacks of both intuitive and analytical decision-making approaches in practical terms. In reality, CDM is far from a linear process, as it shifts between intuitive and analytical forms (Croskerry and Nimmo, 2011). Understanding these attributes, the tACP critically employed the dual-process theory in the case explored here, promoting greater efficiency in CDM to ensure patient safety and improve overall patient experience.

Regardless of a clinician's level of experience, clinical decisions are inherently susceptible to errors (Wynn, 2022). To mitigate these risks and prevent potential harm, the tACP's professional body mandates that every registrant adhere to stringent professional, ethical and legal requirements (NMC, 2018).

When prescribing oral medication for Vicky, the tACP conscientiously considered the legal and ethical concerns, ensuring that her actions fell within the bounds of her professional scope. These professional, ethical, and legal duties undoubtedly amplify the controversy surrounding an already intricate CDM, which challenges healthcare professionals to navigate complex decision-making processes with heightened scrutiny and accountability. This complexity is corroborated by advanced practice frameworks, which clearly emphasise the pivotal role of CDM at the advanced level of practice (HEE, 2017; Royal College of Nursing [RCN], 2021). **GPN**

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Here, Michelle Phillips, talks about her day-to-day work in clinical governance

HOW DID YOU GET INTO GENERAL PRACTICE NURSING?

In 2002, I started as a receptionist in a GP surgery and later transitioned into general practice nursing. I was intrigued by the various roles within the practice and quickly picked up new skills such as issuing prescriptions, booking appointments, and managing referrals. When the GP contract changed in 2003 to include the role of healthcare assistant, I had the opportunity to train and take on clinical responsibilities, including taking blood samples, checking blood pressure, and assisting with minor surgery. I enjoyed interacting with patients and providing continuous care, which motivated me to pursue formal nurse training. With the support of my employer, I started part-time nursing studies while continuing to work in general practice, eventually becoming a general practice nurse (GPN).

WHAT IS A TYPICAL DAY FOR YOU IN CLINICAL GOVERNANCE?

As head of quality and governance, my typical day involves overseeing the standardisation of practices across multiple sites. I ensure that all operational procedures align with governance strategies and regulatory standards. I collaborate with external stakeholders to maintain high levels of compliance and drive positive cultural change. I may chair or attend critical meetings, such as quality committees, to discuss performance,



Michelle Phillips, head of quality and governance, Willows Health

risk management, and strategic developments throughout the day. Additionally, I provide leadership and support to various teams, guiding them in maintaining infection control standards, improving care delivery, and addressing challenges to enhance patient outcomes.

WHAT'S THE MOST SATISFYING PART OF YOUR JOB?

The most rewarding aspect is witnessing the tangible improvements in patient care and staff development resulting from the strategies I implement. Whether it's standardising practices across multiple sites, leading cultural change, or mentoring staff, knowing that my efforts directly contribute to better patient outcomes and more efficient healthcare delivery is incredibly fulfilling.

ARE THERE ANY INITIATIVES THAT HAVE MADE A DIFFERENCE?

The wound care initiatives I led have significantly improved practice and patient care by implementing a standardised, cost-saving formulary across York and Leicester. This alignment of practices streamlined workflows and improved resource allocation, resulting in reduced expenditure. Through close collaboration with stakeholders, I ensured that all healthcare providers followed best practices, leading to more consistent and effective wound care management. This initiative has led to better patient outcomes, quicker healing times and fewer complications. The improved efficiency also means that patients receive more timely interventions, increasing overall satisfaction and trust in their care.

WHAT ONE THING WOULD YOU LIKE TO CHANGE?

Standardising terms and conditions in general practice is crucial for retaining healthcare professionals (HCPs) who are increasingly leaving for Agenda for Change (AFC) roles due to more competitive pay and benefit packages. By implementing structured pay progression and standardising employment terms, general practice can provide HCPs with clearer career pathways, financial

stability, and equitable working conditions. This would enhance job satisfaction and prevent the talent drain to other sectors where packages are superior. Standardised terms would also contribute to a more cohesive workforce, fostering long-term retention and maintaining the quality of patient care across practices.

HOW DO YOU SEE PRIMARY CARE DEVELOPING IN THE FUTURE?

Primary care will undergo significant transformation, driven by technological advancements, integrated care models, and a stronger focus on preventive health. Digital solutions like telemedicine and AI-powered diagnostics will be fully embedded into everyday practice, improving patient management and enabling early interventions. Primary care teams will collaborate more closely with social and secondary care through integrated care systems (ICS), fostering a more comprehensive approach to patient health. Addressing workforce challenges will remain critical, focusing on standardising terms, supporting career progression, and improving staff wellbeing to retain skilled professionals. Equally important is promoting patient-centred care, with services designed for convenience, inclusivity, and accessibility. By integrating technology and fostering collaboration, primary care will become more responsive, sustainable, and capable of delivering holistic, compassionate care to all.

WHAT ADVICE WOULD YOU GIVE SOMEONE STARTING THEIR CAREER?

Take time to learn and absorb as much as possible from your colleagues and experiences you encounter. Primary care is constantly evolving, and your ability to adapt and grow will be crucial. Don't be afraid to ask questions; everyone starts where you are, and your curiosity will make you a better nurse. Focus on building strong relationships with your patients — they will trust you to be a vital part of their healthcare journey. Most importantly, take pride in your role and remember that your contribution is essential to the health and wellbeing of your community. **GPN**



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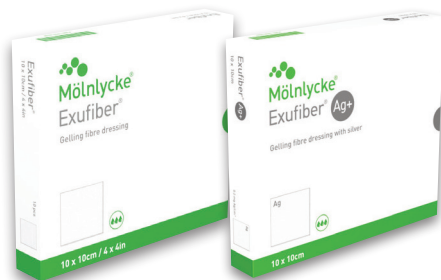
See one-piece removal.
Patients feel relieved.



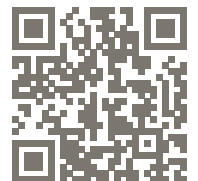
See wound progression.
Patients feel reassured.

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