

Making every contact count to promote health in the community

Working in the area of CaUTIs

Why social care needs stabilising today

Holistic, home-based service for those at the end of life

Continence management with appropriate devices/products

Optimising nutritional care and combatting malnutrition

Managing malnutrition associated with dysphagia

Integrating adjunctive therapy into practice: recognising
'hard-to-heal' wounds

Lymphovenous disease: changing the way we look at venous
leg ulcer assessment

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Making every patient contact count



Working within the community, we are ideally positioned to offer our patients, and everyone we meet, personalised advice in relation to their health and self-management. We can observe them in their home environment and really understand how our patients live on a day-to-day basis. This supports us to empower them to adopt health promotion strategies and make small lifestyles changes. We can empathise with the difficulties they may encounter and support them to adapt their regular

routines to really make a difference. This issue's 'Community matters' piece explores making every contact count (MECC) in more detail (pp. 8–12).

We are all aware of how recent lockdowns have led to an increase in reports of domestic violence. As nurses who visit patients in their own homes, we are in a unique position to make that contact count by asking questions to help victims disclose their situation. Do read how Leeds Community Healthcare (LCH) has equipped its staff not only to address issues of domestic abuse and violence with patients, but also to support employees who themselves are in an abusive relationship (pp. 69–71).

Identifying patients who may be malnourished is again something we all need to be on the look out for during routine clinical care, especially as the majority of those affected by malnutrition are living in the community. In this issue, Anne Holdoway and Hilary Franklin (pp. 30–37) take a detailed look at the development of the 'Managing Malnutrition in the Community' resources, which can help you to provide the best nutritional care for your patients. We also discuss dysphagia (pp. 38–42), a very real risk factor for malnutrition, with guidance on how to assess and identify those with a swallowing issue so that you can feel confident to help patients have a safe swallow.

As Christmas approaches, and we head towards 2022, we need to congratulate ourselves on all our hard work and achievements during another difficult year. For whatever reasons, this year has seemed more testing than the previous one, so we should be extremely proud of the difference we have made to our patients and the support we have given colleagues. I hope everyone takes some time to reflect and refresh and prepare for the challenges ahead, and please remember, there is a great deal of support available if you need it.

And finally, here at JCN, we would like to wish all our readers a very happy and relaxing Christmas and New Year.

Annette Bades, editor-in-chief, JCN

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I am a consultant nurse, championing bladder and bowel health across Cornwall and the Isles of Scilly for children, young people and adults. Being in a position to help people with these problems is a privilege. We strive to provide a service embedded with quality and evidence-based treatment opportunities. Building and leading a countywide service can be challenging, yet inspiring and motivating when managing the demands across the health and social care systems. It is an honour to be invited and contribute to the JCN editorial board.
Sharon Eustice

I am a district nurse, nurse teacher and Queen's Nurse with a passion for excellent community nursing education and practice. I am also an advocate for care being close to people's homes and for supporting people to self-care and regain independence where possible. I also have an interest in nurse prescribing, dementia, frailty, loneliness and social isolation. I am delighted to be a part of the JCN Editorial Board, a journal for all community nurses to access for the very latest and best evidence to inform their practice.
Sue Boran



I am a freelance tissue viability nurse (TVN) and health visitor. My true passions are in pressure area care and moisture-associated skin damage. I sit as a registrant panel member on the NMC Fitness to Practice Hearings, and work with the Institute of Health Visiting (IHV), where I have recently supported the development of a training package on domestic violence and abuse (DVA). I am delighted to be part of the JCN editorial board, where current best practice can be discussed.
Melanie Lumbers

From my experience as a specialist nurse for an adult/child bladder and bowel service, I have seen the impact that issues with continence can have on an individual's ability to function. It crosses all ages, gender and boundaries, and can result in devastating physical, psychological and social effects. I am delighted to be on the editorial board of the JCN, and to be given the opportunity to share ideas and experience and highlight the essentials of continence care.
Sharon Holroyd



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■ ■ ■ In each issue of the *Journal of Community Nursing*, we investigate a topic affecting our readers. Here, Teresa Burdett, principal academic in mental health nursing, Bournemouth University, and Anneyce Knight (recently passed away), senior lecturer in adult nursing, Bournemouth University, look at...

Making every contact count to promote health in the community

As we are all acutely aware, primary care is rapidly changing as a result of many factors, including the impact of the Covid-19 pandemic on staffing/primary care areas, service-users'/patients' expectations, the personalisation agenda, the move towards integrated care and, not least, the need to address health inequalities, which has been highlighted by the pandemic. This makes it all the more vital to reflect on the important role that you, as community nurses, have in promoting health within your everyday practice.

THE CHANGING FACE OF PRIMARY CARE

The face of primary care is changing in response to multiple factors, including resource issues such as staffing (Health Foundation et al, 2018), an ageing workforce as 56% of nurses registered with the Nursing and Midwifery Council (NMC) are over 41 (NMC, 2018a), and the changing demographics of the population that primary care is serving. It is a widely accepted fact that we have an ageing population (Office of National Statistics [ONS], 2020). There are 12 million people in the UK who are over the age of 65 and the fastest growing group is the over 85 group; in 2017 there were 1.35 million people who were over 85 years of age in England (ONS, 2020). By 2023, this figure is predicted to reach 1.54 million (a 14% increase), and, by 2031 (when 'the so-called baby boomers' born after the Second World War move into this age category), it could potentially reach 2.01 million (Public Health England [PHE], 2018).

This is relevant as this group, although living longer, may well not be in good health. Indeed, 80% of over 85-year olds have at least one long-



Making every contact count is incredibly important and never more so than now, but it requires time to do this meaningfully and time is a precious commodity in community nursing teams at present. The workforce is at a tipping point and in the past 12 years we have seen a decrease in district nurses from 7,000 to 4,000 — and at a time when the population and workload is increasing. When community nurses are going out every day with 15 visits or more, ensuring time to make every contact count must be challenging.

It takes time to build a meaningful, therapeutic relationship with individuals, their families and carers, and we need a workforce that has the skills and attributes to have these meaningful conversations and to keep going with them even when they are less well received. Patients do not want to see a different nurse each time, they need continuity and consistency, so that making every contact count really does that.

Helping people to consider what matters to them and how community nurses can support that with a personalised approach to care is ideal, but supporting people with self-management might need a shift in expectations for some and will take time.

Nurses are not the experts, people are, and so we need to listen to the patients. We also need to seize the opportunities that integrated care systems offer for what the population needs and for people to be consistent with their interaction with patients, their families and carers, so that making every contact count becomes 'business as usual' in time.

Sue Boran

Director of nursing programmes, Queen's Nursing Institute

term condition (Age UK, 2019), and an estimated two million people in the UK have Long Covid because of the global pandemic (Gov.UK, 2021). This has all happened when in real terms social care budgets are reducing (Gershlick, 2019), hence putting more pressure on existing healthcare services in primary care.

Other factors embrace the drive for integration, including the formation of integrated care systems (ICSs). These are now in place throughout England and were a key directive in

the *NHS Long Term Plan*, which set out the future of the NHS (NHS England, 2019). The joint aims of such a radical shift included improving population health and reducing health inequalities which, as said above, have been further highlighted by Covid-19 (Burdett and Knight, 2021).

The *NHS Long Term Plan* also focuses on enhancing integration between health and social care, although there has been some controversy around these new developments (Charles,



Professor Sir Henry Marmot's report, 'Health Equity in England: 10 Years On', published in February 2020, identified a growing health gap between deprived and wealthier areas around the country. Everyone should be afforded the necessary knowledge and their skills and confidence should be fostered and engendered so that they feel empowered to live their best life.

There are many important issues and imperatives discussed in this article. The MECC Behavioural Principles are four key essentials to steer healthcare professionals towards better ways of interacting with service users/patients, so that they are able to improve their health and live well. It is not just the sharing of information which will lead to improved health, but also ensuring that there is an understanding of the information shared. It is vital, then, to take into consideration the challenges for people with low health literacy. We also need to take stock of the modes and models of consultation and interaction we undertake. What works

well and what are the limitations? How can we successfully gather a rounded account, a narrative, of what life is like for the person with whom we are consulting? Developing narrative competence will enable us to draw out a patient's story through active listening using a holistic approach that incorporates their social as well as clinical history. This will facilitate an arena where effective and meaningful shared decision-making really can take place.

As the article points out, the development of primary care networks (PCNs) and the move towards integrated care systems (ICSs) is creating an infrastructure which is enabling improved multidisciplinary team (MDT) working. It is crucial, therefore, to know which teams and what resources are available to assist with health and lifestyle improvement, in order to be able to signpost effectively. There is growing evidence of the value of social prescribing, for example. It would be useful to find out what services/resources are available in your own locality.

The Self Care Forum is a national charity which aims to further the reach of self-care and embed it into every day life. They have a wide range of self-care resources, all evidence-based and peer-reviewed, freely available to download from their website: www.selfcareforum.org

More recently, they have published a fact sheet on the POWER of self-care, a useful motivational resource to foster service user/patient empowerment, which can be accessed at: www.selfcareforum.org/wp-content/uploads/2021/11/2021-Power-SelfCare.pdf

Rhian Last

Self Care Forum board member; sponsor for Leeds Primary Care BAME Network; RCGP Yorkshire faculty board member; and course tutor at Rotherham Respiratory

2021). There is also a strong push that primary care has a robust voice in ICSs (Hacker, 2021). Baird and Beech (2020) have suggested that the formation of primary care networks (PCNs) will improve care and retain staff. However, they are also forcing changes to working patterns and existing partnerships.

Expectations of the workforce and patients and carers themselves are evolving, often demanding higher levels of care and increased resources. There is also the personalisation agenda, which has impacted upon care in the primary care arena (NHS England, 2019).

HEALTH PROMOTION: THE ROLE OF COMMUNITY NURSES

Health promotion is embedded within nursing curricula, as it is identified in platform 2 of the NMC document (2018b) *Future nurse: Standards of proficiency for registered nurses*, entitled 'Promoting health and preventing ill

health'. Similarly, it is also identified within the NMC (2018c) *Standards of proficiency for nursing associates*, again in platform 2. Thus, health promotion is an important part of everyday nursing practice.

Indeed, *The Code: professional standards of practice and behaviour for nurses, midwives, and nursing associates* (NMC, 2018d) explains that as a registered professional wherever you practice, you must:

- 2.2. recognise and respect the contribution that people can make to their own health and wellbeing
- 2.3. encourage and empower people to share decisions about their treatment and care
- 3.1. pay special attention to promoting wellbeing, preventing ill health and meeting the changing health and care needs of people during all life stages
- 3.3. act in partnership with those receiving care, helping them to access relevant health and social

care, information and support when they need it.

Furthermore, the *NHS Long Term Plan* recognises the need to help people to stay healthier for longer (NHS England, 2019), which is particularly pertinent when considering the Covid-19 pandemic. This 'Plan' has the specific aim of people gaining an extra five years of healthy life expectancy by 2035 (NHS England, 2019). There is a strong emphasis on 'upstream prevention' and empowerment of service-users/patients. This means self-management by service users/patients of their disease, especially those with long-term health conditions, such as Long Covid.

It is perceived that self-management reduces symptoms and hospital admissions (NHS England, 2019: 33), as well as potentially reducing the financial demand on the NHS. These aims will be challenging (Burdett and Fenge, 2020) and all

members of the primary care team have a role to play, as implementation will not be without its own challenges (Evans et al, 2019; Scott, 2019).

MAKING EVERY CONTACT COUNT (MECC)

Health promotion needs to be actively embedded within everyday practice, not only as a professional requirement, but also to meet the intended outcomes of the *NHS Long Term Plan* and address health inequalities (Burdett and Knight, 2021).

An easy-to-use tool to empower service-users/patients is the healthy conversation intervention, Making Every Contact Count (MECC). This is an evidence-based model currently being rolled out in England and Wales (Knight, 2020). As it is a person-centred approach, it can be used by anyone who has undertaken the accredited training to facilitate a discussion with people about their own perceived health needs. MECC 'supports the opportunistic delivery of consistent and concise healthy lifestyle information and enables individuals to engage in conversations about their health at scale across organisations and populations' (PHE et al, 2016: 6).

It is based on the four behavioural principles:

- ▶ 'People are responsible for their own choices
- ▶ Being given information alone does not make people change
- ▶ People come to us with solutions
- ▶ It is not possible to persuade people to change their habits' (Health Education England [HEE] 2017: 10).

The key to a successful MECC 'consultation' is not only the ability to facilitate effective communication, but also to make sure that the healthy conversation is based on the service-user's/patient's personally identified health need(s) and goal(s) (Knight, 2020). This requires a change of mindset away from the nurse as the expert about the service-user's/patient's health to providing the opportunity for the individual to decide what is important to them (Knight, 2021). This is facilitated by using a range of healthy conversation skills (HEE, 2017).

MECC is designed to be a brief intervention using a few minutes, which means it can be utilised in busy community settings by all members of the community team, including nursing associates and healthcare assistants, even when time is limited. PHE et al (2016: 6) explain that it is:

... an approach to behaviour change that uses the millions of day-to-day interactions that organisations and people have with other people to support them in making positive changes to their physical and mental health and wellbeing. MECC enables the opportunistic delivery of consistent and concise healthy lifestyle information and enables individuals to engage in conversations about their health at scale across organisations and populations.

The key to any successful health promotion intervention, such as this, is effective communication which is person-centred where you facilitate a discussion with service-users/patients. Using Open discovery Questions [how and what] and a range of other healthy conversation communication skills, including reflection and empathy (HEE, 2017), the service-user/patient themselves identify the health and wellbeing issue(s) that is/are important to them and create a SMARTER goal. SMARTER means specific, measurable, achievable, relevant, time-bound, evaluation and reviewed (HEE, 2017).

Using MECC healthy conversation skills aims to be empowering by supporting and enhancing an individual's, or group's, self-esteem and enabling them to develop their self-efficacy with the ultimate aim of choosing to change their health behaviours to improve health. An important point to note is that, even if people choose not to change their behaviour as a result of the healthy conversation, they are still empowered through increased knowledge and remain in control of their health, and they may decide to change their health behaviour in the future.

In summary, to have a MECC healthy conversation you need to:

1. 'Use Open Discovery Questions to help someone explore an issue.
2. Reflect on your practice

and conversations.

3. Spend more time listening than giving information or making suggestions.
4. Use Open Discovery Questions to support someone to make a SMARTER plan' (HEE, 2017: 5).

Finally, whatever the skill-mix in the community team, all members can undertake a recognised Royal Society of Public Health accredited course to use this health promotion tool effectively.

CONCLUSION

Against the background of huge changes in primary care, the use of MECC is one tool that provides a brief health promotion intervention that is an effective strategy to improve health and address health inequalities. The advantage of MECC is that it is a short intervention which involves facilitating a person-centred, healthy conversation with service-users/patients. This makes it an extremely useful tool that can be used within any busy community setting and with all service-users/patients, not only by community nurses, but also other members of the community/primary healthcare team, including nursing associates and healthcare assistants. **JCN**

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The past 20 months have been a learning curve needing belays, crampons, and ice hacks to keep with the daily (and occasionally hourly changes in guidance and demands).

In March 2020, our hospitals emptied in readiness for the expected (and delivered) influx of seriously ill people with Covid-19. General wards became high dependency and intensive care units, with staff drafted from far and wide in secondary care (and education).

So, what happened to those patients almost rudely turfed from their hospital bed to home/residential/nursing care/hospice care? Did we see the media reports of our community services stretched so thin as to be transparent in the media? No, not at all!

However, boy did our primary care services and care sector work like Trojans against Greeks in the war in Turkey? We took on those challenges, with no personal protective equipment (PPE) for months, no bowing to fear, entering homes and delivering care like Covid-19 was a myth. We continued with our day-to-day caseloads to support our 'regular' patients — those with oedema, ulcers, poor mobility, diabetes, chronic obstructive pulmonary disease (COPD), congestive cardiac failure (CCF), ischaemic heart disease (IHD)... all the patients that need our care and compassion to live with debilitating and life changing medical conditions, while also coping with acutely ill or newly discharged patients.

In all this melee, we continue to work hard to empower our patients, to advocate for them, to support and educate and make them leaders in their own care.

In lymphoedema and chronic oedema care, there is only patient-led care. The patient must internalise and practice the skills which allow them to manage this lifelong condition through physical activity, skin care, lymphatic drainage and compression.

Each contact we have with our patients/clients/residents is an opportunity to promote self-care and self-management. From instructing on skin care, deep breathing to that first insulin injection, primary care colleagues — YOU HAVE GOT THIS!

Rachel Drago

Advanced nurse practitioner in primary care, Mount Surgery, Pontypool Medical Centre; Queen's Nurse

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(Naik et al, 2019).



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HUNTLEIGH

A MEMBER OF THE ARJO FAMILY



Serena Wyman, fundraising manager,
The Urology Foundation

It's not news to JCN readers, but when we talk to people about the fact that urinary tract infections (UTIs) are the second most common kind of infection after chest infections, they are amazed.

Of course, one of the reasons for that is that a UTI is not a condition that people tend to talk about.

At The Urology Foundation (TUF), a UK charity working to improve and transform the nation's urology care, we are well aware that for many people there is a stigma about discussing any kind of urological issue. We promote the message that although it may be uncomfortable to discuss when and how you urinate, urinary infections must be addressed and can be treated swiftly. It is important to deal with a UTI before it potentially spreads to the kidneys.

However with an estimated 90,000 long-term catheter users in the UK (Gafe et al, 2017), the issue of catheter-acquired urinary tract infections (CaUTIs) is something that community nurses will come across regularly. Indeed, infections caused by catheters are one of the most common types of healthcare-associated infections. Long-term catheter use is associated with a wide range of urological complications, including blockages, which increase the risk of infection, stone disease and acute kidney injury (AKI). These complications and high morbidity of long-term catheters cause a considerable demand on the health system and emergency departments (Smith et al, 2019).

Working in the area of CaUTIs



At TUF, we like to champion the excellent nurses working in urology who go above and beyond to improve their patients' treatment and care. Nurses like Julia Taylor, who led a quality improvement project to reduce CaUTIs in Salford.

Julia recognised this problem and led a multidisciplinary team to gather the data and evidence to reduce the number of patients with catheters in the hospital and community, lessen the length of times catheters remained *in situ*, and cut the number of CaUTIs for hospital inpatients. In fact, Julia's work led to a 22% reduction in catheter use in the hospital, a 20% overall reduction in catheterised patients in the community, and a 55% reduction in catheter-related infections.

By reducing or eliminating unnecessary catheter use and related infections, Julia has transformed practice for the better and improved patient outcomes and patient care, and most likely helped to improve survival and quality of life too. She also saved her hospital an estimated average of £532 per patient in direct hospital costs, allowing those funds to be spent on other aspects of care.

For this, she was awarded The Urology Foundation's inaugural Urology Nurse of the Year Award, and in recognition of her many contributions to urological nursing, she was recognised in the Queen's 2020 honours' list.

The British Association of Urological Surgeons (BAUS) and British Association of Urological Nurses (BAUN) have recently published a consensus document on the management and complications of long-term indwelling catheters (Reid et

al, 2021). The main aim of the paper is to share best practice to minimise the frequency, severity and impact of these problems. This comprehensive report contains a list of recommendations and a trouble shooting table to help further with the management of issues and complications that can arise from long-term catheter use.

With an increasing ageing population — the Office of National Statistics (ONS) estimated in 2016 that the proportion of the population aged 85 and over would double in the next 25 years (ONS, 2019) — the ongoing management of long-term catheter users will be an ongoing, not to say increasing issue, for those responsible for their health care. **JCN**

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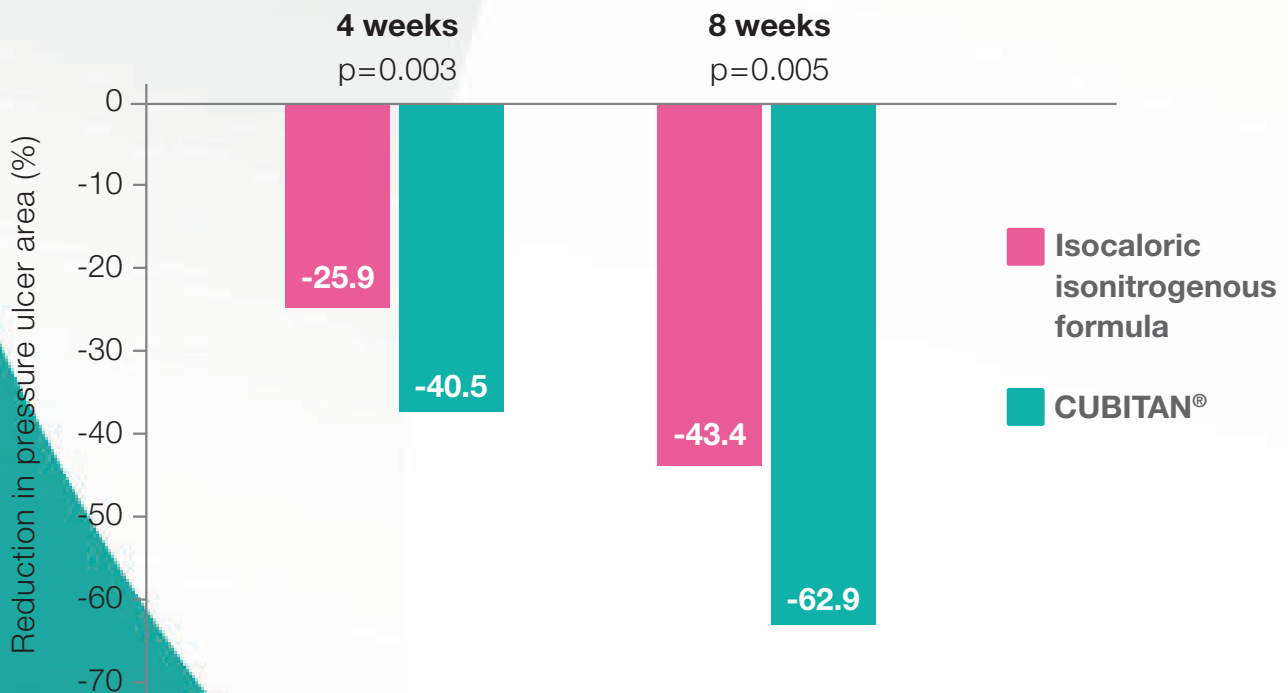
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NEW
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CUBITAN – THE ORAL NUTRITIONAL SUPPLEMENT FOR CHRONIC WOUND MANAGEMENT

Cubitan demonstrates a **significant reduction in pressure ulcer (PU) area – at 4 and 8 weeks¹**

A randomised, controlled study conducted on 157 malnourished elderly patients, average age of 81, with PU grades II, III and IV; institutionalised or home care based



For more information and to order free samples* direct to your patient, please go to <https://www.nutricia.co.uk/hcp/products>

Reference: 1. Cereda E, et al. Disease-specific nutritional support in malnourished pressure ulcer patients: a randomised, controlled trial. *Ann Intern Med*, 2015; 162: 167-174.

*Product can be provided to patients upon the request of a healthcare professional. They are intended for the purpose of professional evaluation only.

This information is intended for healthcare professionals only.

Cubitan is a Food for Special Medical Purposes for the dietary management of malnourished patients with chronic wounds and must be used under medical supervision.

Accurate at time of publication: August 2021.



NUTRICIA
Cubitan



Kari Gerstheimer, CEO,
Access Social Care

Why social care needs stabilising today

The new health and social care levy will bring in an extra £36bn over the next three years. But, with the NHS fighting backlogs made almost insurmountable by the pandemic, the government is allocating only £5.3bn for social care. £2.5bn of that figure will be used to pay for the new lifetime cap on care costs (Albert, 2021), effectively replacing self-funders' contributions taken out of the system — and leaving less than £1bn per year of new money for the care sector.

At the Spending Review, the Chancellor announced an extra £4.8bn (deliverable over three years) for local authorities, which he said was intended to help fund social care. However, the money is not ringfenced, and councils have a range of other services in desperate need of resources, such as support for the homeless. Even with the full £4.8bn, in the author's opinion, social care would still only have in total just over half of what it needs to stabilise services, defined by the Health Foundation as being able to meet future demand and improve access to care (Idriss and Rocks, 2021).

The Spending Review's cash injection may prevent social care from completely collapsing. But it will not do much else. Many councils will still struggle to make ends meet, and thousands of older and working-age disabled people will go on without basic care. The health secretary, Sajid Javid, asserts that families must step in to meet care needs of their relatives (Atkinson, 2021) — but, what if you don't have family, or your family/carers can no longer cope?

My charity, Access Social Care (www.accesscharity.org.uk/), provides free legal advice for older and disabled people with social care needs. Every day, we see the harrowing impact of the systematic denial of basic human right to care caused by extreme social care funding shortages, from 90-year

olds with dementia going hungry and living in squalor because they cannot remember to feed or clean themselves, to younger people with learning disabilities being denied support to keep them safe from sexual or financial predators.

The cases are so upsetting that we invest in counselling support for our legal caseworkers to help them manage secondary trauma.

Day on day, the situation is declining rapidly and chronic staff shortages in the social care sector become acute. Cost of living rises have prompted many care staff to seek higher paid work elsewhere, compounding the issues employers have been facing with accessing European labour markets. The government's decision to implement a policy of compulsory vaccinations for care staff could push things into the red. There are already 120,000 vacancies in social care (Merrick, 2021). Some analysts estimate that the care sector could lose over 50,000 workers. If they're right, the system will be in serious danger of collapse this winter.

Despite current efforts, social care is not being fixed, and needs more than ever significant investment to achieve genuine improvements. **JCN**

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When the Prime Minister announced his plan to fix social care once and for all in September, the sector hoped that a major second part of this would be revealed at the Spending Review in October. Unfortunately, we were left disappointed.

The September paper had underlined concerns about the quality of care, lack of choice, and the burden of care costs to the person in need of care and support. But, there was a fundamental resourcing issue which received no attention: sufficiency of funding to ensure that local authorities can meet their basic statutory obligations.

The Care Act 2014 requires local authorities to assess and provide care and support to meet the minimum level of 'eligible' social care needs. Eligible needs are the fundamental constituents of a basic quality of life. They include managing nutrition, personal hygiene, including toilet needs, and maintaining personal relationships.

As it stands, 75% of adult social care local authority leaders are not confident, or only partially confident, that they can fulfil their statutory duties to meet their constituents' needs. Despite demographic changes meaning that more people are needing care, the numbers actually receiving state-funded social care fell by 7% between 2015/16 and 2018/19 (www.adass.org.uk/adass-spring-survey-21). This is austerity in action.

Supporting
health and care staff
through COVID-19

CHSA

 **The
Queen's
Nursing
Institute**

Financial Help for community nurses



Community nursing charity, The Queen's Nursing Institute (QNI), offers financial help to registered nurses working in the community.

Financial help

The QNI offers financial help to nurses who are going through periods of physical or mental illness, trying to escape domestic abuse, or experiencing other life crises such as flooding, Covid-19, marriage breakdown or bereavement.

CHSA Covid-19 Grants

In 2021, thanks to an extremely generous donation from the CHSA (Covid-19 Healthcare Support Appeal) the QNI is able to support more community nurses in financial need, who have been affected by the pandemic, for example through loss of income due to sickness, changing work patterns or family issues. We would encourage all nurses in the community, primary care and social care to think of the QNI if they are in any financial difficulty.

To find out more, or to apply, go to www.qni.org.uk/financial-help

Educational grants

We provide grants for nurses in the community to enhance their clinical knowledge and skills.

To find out more, or to apply, go to www.qni.org.uk/educational-grants



www.qni.org.uk

Charity number: 213128
Founded 1887
Patron: HM The Queen

TalkToUs The QNI Listening Service

We also provide a listening service, TalktoUs, to offer emotional support by phone.

TalkToUs is intended as a friendly ear for nurses working in the community who would like to talk to someone in complete confidence about any aspect of their work or home life during the current pandemic. The service is operated by trained listeners and is free.

To find out more, or to arrange your call, go to www.qni.org.uk/talktous





Angela Duckworth, clinical educator,
Paul Sartori Foundation

Holistic, home-based service for those at the end of life

The Paul Sartori Foundation is a charity based across Pembrokeshire in South West Wales, providing care free of charge to patients in the later stages of life limiting illness in their own homes. Its mission is to 'provide excellent end-of-life care to the people of Pembrokeshire'. I facilitate and co-ordinate the clinical training for staff and some relevant others. This includes statutory training, as well as topics identified as being relevant to the care provided, for example, delirium, how we can support carers, and dementia.

I am lucky to live in Pembrokeshire (Sir Benfro in the Welsh language) and have appreciated this even more during the 'lockdowns'. It is a beautiful part of the UK. It is mainly a rural area with an impressive coastline. It does have some pockets of deprivation and has a significantly older population. The population is about 125,000, with some 31,500 over 65 years old. Many people come to the area to retire and, unfortunately, many younger adults leave to pursue employment opportunities elsewhere in the UK. The demands on health and social services are relatively high, with many older people having multiple comorbidities.

I qualified as a nurse in 1986 and came into this role with previous clinical experience as a nurse and educator. My experience has

included time as a district nurse and Macmillan clinical nurse specialist, as well as experience as a senior lecturer for Swansea University. I knew of this amazing organisation both from its reputation locally, and from my time as a district nurse in Pembrokeshire. Coincidentally, I used to make referrals to the Paul Sartori Foundation for patients on my district nurse caseload who were at end of life and needed support during the 1980s and 1990s. It is, in effect, a 'hospice at home' service.

The Foundation is named after Father Paul Sartori, a local priest who dedicated his life to helping others and saw the need for a hospice service in Pembrokeshire. Sadly, he died in 1980 at the age of 39. A group of his friends came together and raised funds and grants and then in 1982 they registered the foundation as a charity. The service is holistic and has grown significantly over the years and employs over 40 nurses and healthcare support workers.

It is a privilege to contribute something to end-of-life care in this way. Deaths are nearly as unique as the lives that come before them. The foundation provides a person-centred service and the members of the team who are involved will depend on individual patient's needs and wishes. Requests can be quickly responded to, often preventing hospital admissions, or helping to facilitate early discharge from secondary care. The foundation, in addition to nurses and healthcare support workers offering hands-on and emotional care, also employs two physiotherapists who can maximise safe mobility and function for as long as possible. The physiotherapists also teach symptom management techniques for breathlessness, pain, and anxiety, etc and can assess for equipment needs.

In addition, the foundation has qualified counsellors for patients, their families and carers, who also work with bereaved adults and children. And, there is a team of complementary therapists who tailor care to the individual to ease things such as pain, anxiety, insomnia, constipation, muscle tension, nausea, and breathlessness. This may include aromatherapy, massage, reflexology, Indian head massage, reiki, and relaxation techniques, for example.

An innovative part of the service is advance and future care planning. A small team of experienced nurses assist patients to write advance care plans — documents that can be used if the person becomes unable to make decisions for themselves. The Advance Decision to Refuse Treatment (ADRT), a legally binding document, enables refusal of treatments not desired in specific circumstances. Even the act of the discussion without proceeding to a plan improves communication and understanding for the person and family and is empowering for the patient and family members.

Caring for those at end of life, particularly in a pandemic with all the implications that involves, can be stressful for staff too. Thus, systems, such as reflection, one-to-one supportive discussion, as well as access to counsellors to help ensure staff wellbeing are in place. Many of the staff have worked for the organisation for a long time and I think this low staff attrition reflects the supportive ethos.

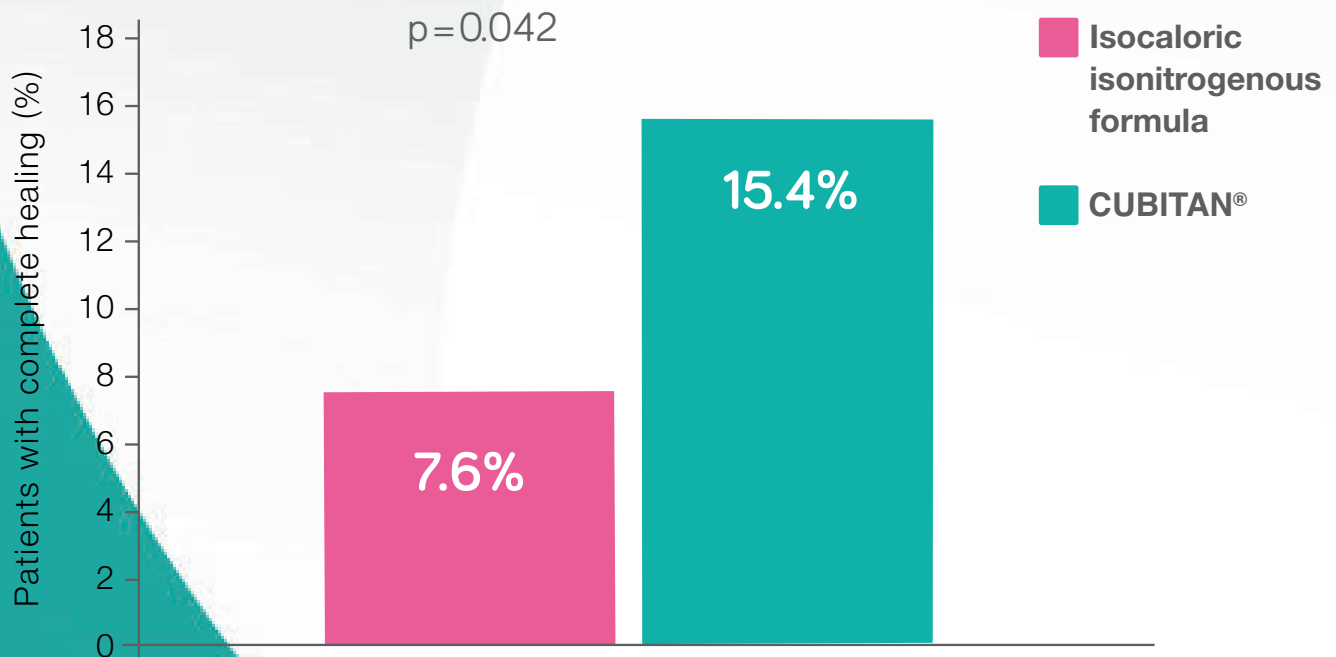
I am proud to work for such an organisation and when my time comes, I hope the Paul Sartori Foundation will be around to ensure I die at my home with dignity, as they have done for thousands of people in Pembrokeshire over the decades. **JCN**

NEW
PRODUCT

CUBITAN — THE ORAL NUTRITIONAL SUPPLEMENT FOR CHRONIC WOUND MANAGEMENT

Cubitan: twice as many patients with pressure ulcers (PU) have complete healing by 8 weeks¹

A randomised, controlled study conducted on 157 malnourished elderly patients, average age of 81, with PU grades II, III and IV; institutionalised or home care based



For more information and to order free samples* direct to your patient, please go to <https://www.nutricia.co.uk/hcp/products>

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This information is intended for healthcare professionals only.

Cubitan is a Food for Special Medical Purposes for the dietary management of malnourished patients with chronic wounds and must be used under medical supervision.

Accurate at time of publication: August 2021.



NUTRICIA
Cubitan

This JCN clinical skills series looks at different aspects of continence care in the community, with useful tips on patient care and improving practice.

Part 4: Management with appropriate devices/products

The fourth and final part of the JCN continence clinical skills series identifies how continence problems, which may not have responded to conservative treatment/interventions, can be managed by the appropriate use of equipment/devices and products. The range available is vast and variable and some are more suitable to specific conditions than others. Healthcare professionals need to understand how they work to offer the best solution for individuals and their lifestyle. Products include, for example, commodes, urinals, sheaths, catheters, anal irrigation and pad products. This article specifically looks at equipment/devices and products for urinary retention, e.g. catheters; urinary incontinence, e.g. sheaths, pubic pressure devices; and faecal incontinence, e.g. anal plugs, transanal irrigation (TAI) and pad products.

While the goal of every individual and healthcare professional is to cure/improve the symptoms of bladder and/or bowel incontinence, not all incontinence problems can be completely or permanently cured (Fader et al, 2020). The challenge for both healthcare professionals and patients is to deal with incontinence to minimise the impact on health and quality of life (QoL) (Fader et al, 2020). This usually means managing the incontinence with some sort of equipment/device or product. Successful management of incontinence is often referred to as 'contained incontinence' (Fader et al, 2020), which, even if not a cure, can significantly improve QoL. There is a vast range of equipment/devices and products catering for different clinical/continence needs, as outlined in Figures 1 and 2. How to assess individuals for the most appropriate individual containment products has been highlighted by the International Continence Society (ICS, 2017) (Table 1).

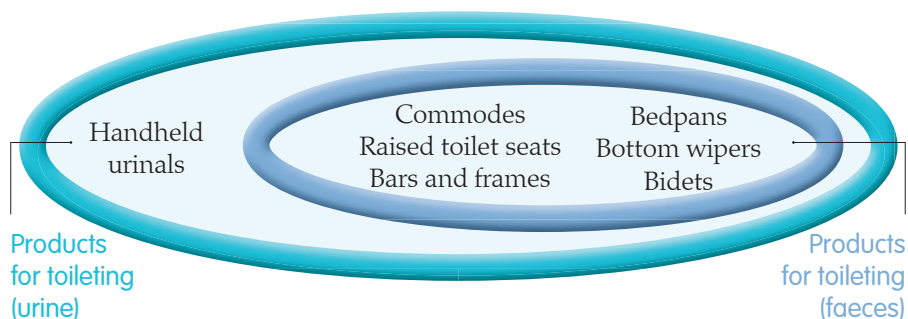


Figure 1. Products for toileting (adapted from ICS, 2017).

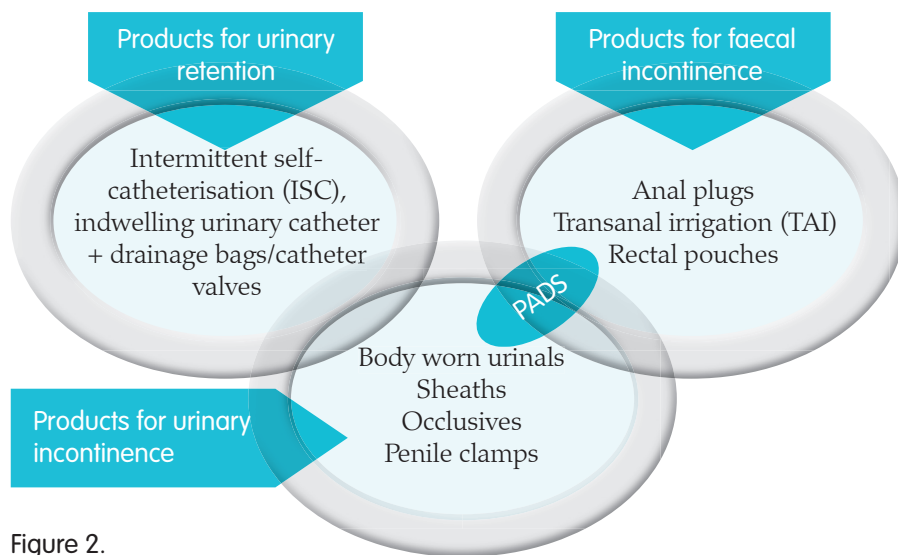


Figure 2. Products for managing incontinence and/or urinary retention (adapted from ICS, 2017).

Ann Yates, director of continence services, Cardiff and Vale University Health Board

This article discusses types of equipment for urinary retention, e.g. catheters; urinary incontinence, e.g. urinals, sheaths; and devices, and products/devices used for faecal incontinence, as well as pad containment products. All of the products discussed are available either via prescription or NHS unless stated.

EQUIPMENT/DEVICES FOR URINARY RETENTION

Urinary retention is one of the identified clinical conditions that is usually treated by the insertion of a urinary catheter (Yates, 2019a; Royal College of Nursing [RCN], 2021). Urinary catheters come in two forms, namely indwelling or clean intermittent catheterisation (CIC)/ intermittent self-catheterisation (ISC). Indwelling catheters have an integral balloon to keep the catheter in place (Figure 3), while intermittent ones are inserted, urine drained and then immediately removed.

Intermittent catheters have less complications than indwelling and are the preferred choice if possible for both patients and clinicians, as there is less risk of infection compared to indwelling catheters, improved quality of life and symptom management (RCN, 2021). However, unfortunately, not everyone can successfully undertake CIC. Yates (2017) identified that for CIC to be successful, patients must:

- ▶ Be able to store urine in their bladder
- ▶ Be able to understand the technique for CIC
- ▶ Have reasonable dexterity and enough strength to be able to correctly hold and insert the catheter
- ▶ Be able to position themselves



Figure 3. Indwelling catheter with integral balloon.



Figure 4. Sterile closed leg drainage bag.

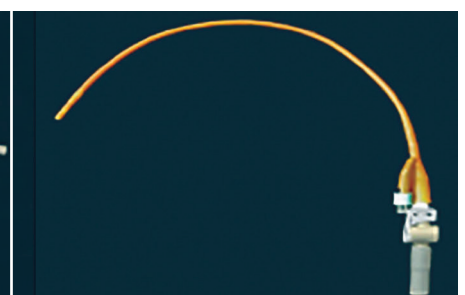


Figure 5. Sterile closed drainage catheter valve.

Table 1: Key elements of assessing a patient and their environment for correct management products (ICS, 2017)

Element	Rationale
Nature of continence problem	▶ Frequency, volume and flow of incontinence influences product suitability. Smaller, discreet products should be tried initially. If catheterisation is necessary, intermittent self-catheterisation (ISC) is less problematic than indwelling
Gender	▶ Males may prefer sheaths as a better option to pads ▶ Females may be more attracted to products with a more feminine design
Physical characteristics	▶ Height, waist, thigh, penile circumference (men) will influence the comfort and effectiveness of a product
Mental acuity	▶ Mental impairment can affect a person's ability to manage products. Some products resembling usual underwear may be easier to manage ▶ Some products, e.g. indwelling catheters, catheter valves should be avoided if mental impairment present
Mobility	▶ Impaired mobility may make some products choices impractical or require toilet/ clothing modification to allow use of product
Dexterity	▶ Lack of hand or finger movement can make some products difficult to use (e.g. taps on leg bags, sheath application)
Eyesight	▶ Limits effective application and management of some products
Leg abduction problems	▶ Can make some products impractical/ineffective
Lifestyle and environment	▶ These can influence choice of products and a mixture of products may provide optimum management, i.e. different products for daytime compared to night, or holidays compared to home/work ▶ Proximity to toilets is also a factor
Independence/ assistance	▶ Carers should be involved in selection of device/product, consider willingness and ability to apply
Laundry facilities	▶ It is important to check availability of laundry facilities, who undertakes laundry, and capacity to cope
Storage facilities	▶ Some products, e.g. pad products, can be bulky, so there needs to be adequate space to store supplies between deliveries
Personal preferences	▶ Different people like different products and where possible individuals should be given a choice of product to experiment with to determine most satisfactory
Personal priorities	▶ Everyone's aim is to avoid leakage, but other factors such as discreetness may be more or less important to the individual

- ▶ into a suitable position to undertake the procedure
- ▶ Be motivated to commit to the procedure, which could be a lifelong commitment.

A wide range of intermittent catheters are available on drug tariff, including:

- ▶ Hydrophilic-coated (single use) — these require water to activate and hydrate the coating
- ▶ Pre-gelled (single use) — these have gel in the pack
- ▶ Reusable Nelaton catheters (single patient use) — these can be used with water-soluble lubricating/ anaesthetic gel. This type of

Table 2: Urinary catheter continuing care principles (adapted from Loveday et al, 2014; Yates, 2016; Yates, 2019a)

Hand hygiene and decontamination should be done immediately before and after each episode of contact with the catheter or drainage system
Routine personal hygiene is all that is required to maintain meatal hygiene
Urine samples must be taken from a sample port using aseptic technique
Catheters should be connected to a sterile closed drainage system or valve (Figures 4 and 5)
A link system should be used overnight to keep original system intact
Connection should not be broken other than for a good clinical reason, i.e. bag changes recommended every five to seven days
Bags should be positioned below the bladder, well secured (Figures 6 and 7), and supported with fixation devices (Figure 8) if mobile, or bags secured to a stand and not allowed to touch the floor if immobile/bed bound or overnight
Bags should be emptied frequently enough to maintain flow and prevent reflux, usually approximately ¾ full. A separate clean container should be used for each patient, avoiding contact between the tap and container
Do not add any antiseptic or antimicrobial solutions to drainage bag
Bladder instillations should not be used to prevent catheter infections
Healthcare professionals should be competent in catheter insertion/care/removal
Patients and relatives should be educated with regards to their role in preventing catheter-associated urinary tract infections (CAUTIs)
Review the need for the catheter daily and remove as soon as possible

catheter can be reused at home, as it can be cleaned according to the manufacturer's instructions (Yates, 2017).

Indwelling catheters can be used to treat retention. However, they are associated with more complications than CIC, including urinary tract infections (UTIs) (Loveday et al, 2014; Centers for Disease Control and Prevention, 2016), bypassing, encrustation, luminal problems, loss of bladder tone, to name but a few (Yates, 2019a; RCN, 2021). To prevent or minimise the risks of these issues occurring, there are a number of precautions that healthcare professionals can advise (Table 2).

While the indwelling catheter device is mainly chosen by the healthcare professional inserting it, the drainage device that an individual is set up with will depend on a variety of reasons (Yates, 2016; Yates, 2019a) and should be discussed with the patient. Reasons for selection may include (Yates, 2016; Yates, 2019a):

- ▶ Patient preference
- ▶ Care of the system
- ▶ Required bag capacity/length of tubing/tap design (if drainage bag used)
- ▶ Placement and ease of use for individual, based on dexterity/

- mobility/cognitive ability
- ▶ Bladder capacity for use of catheter valves, ability to open tap/valve.

Drainage bags (Figure 4) are sterile and should be maintained as a closed system and changed within manufacturer's recommendation, i.e. every five to seven days. They come in different lengths of direct, short or long tube. Within community settings, the most common capacities are 350mls, 500mls, 750mls and 2 litre. It is imperative that whichever bag is attached, the catheter remains *in situ* and is not disconnected to reduce risk of infection (Yates, 2019a), unless for a clinical reason, i.e. routine change of bag every five to seven days (Loveday, 2014). If a larger drainage bag is required overnight, a non-drainable 2 litre bag can be connected to the outlet of the day bag. These should be disconnected, drained and disposed of each morning (Yates, 2016; Yates, 2019a)

Catheter valves (Figure 5) have gained in popularity, as they allow the bladder to fill and empty over a period of time, mimicking the micturition cycle, which may contribute to a more successful trial without catheter (TWOC) (Carr, 2019). They offer patients comfort, independence and

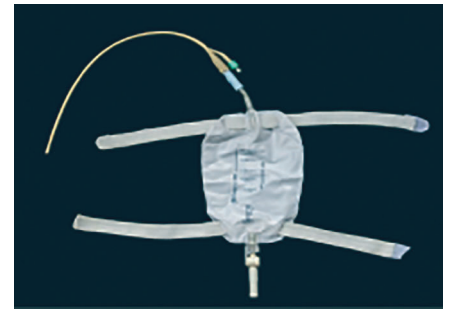


Figure 6.
Catheter securing leg straps.

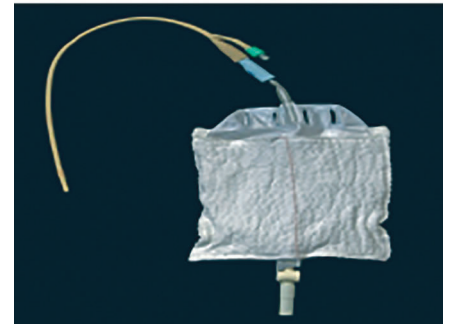


Figure 7.
Catheter securing sleeve.

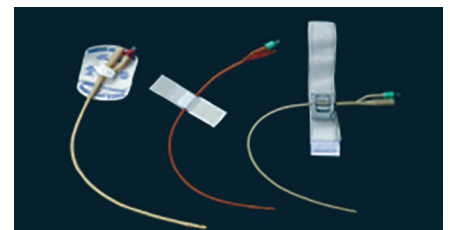


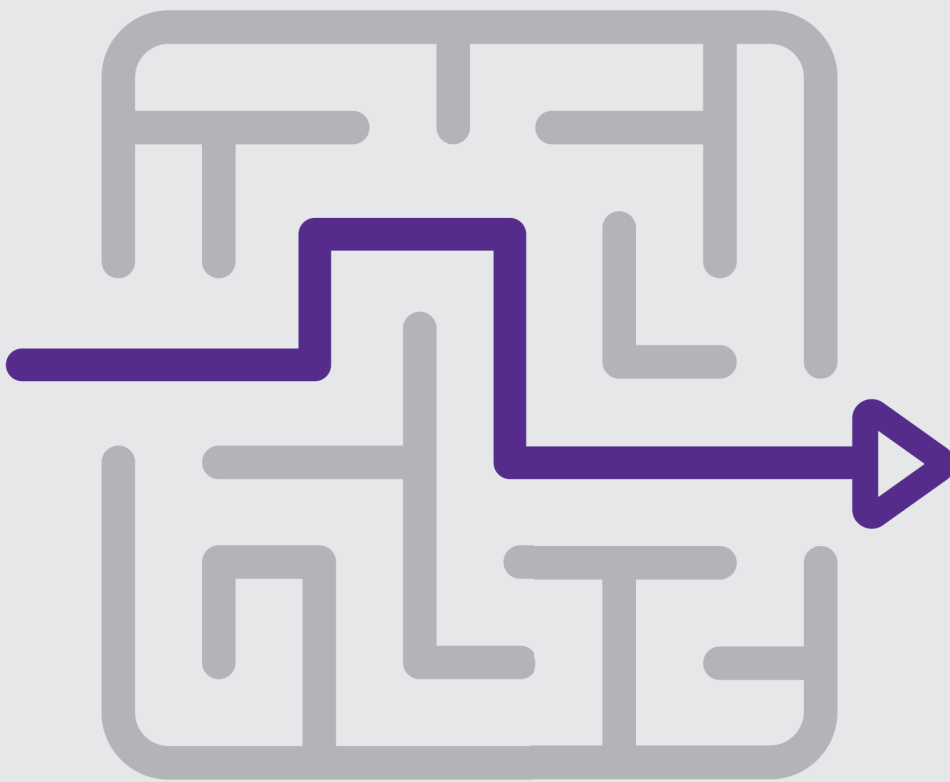
Figure 8.
Types of fixation devices.

a convenient way to manage their catheter (Fader et al, 1997; Yates, 2019a). However, they are not for everyone, especially individuals with poor dexterity or confusion/dementia/cognitive problems, who may forget to open regularly (Simpson, 2017; Yates, 2019a).

There is now growing best practice that catheters and drainage devices should be well supported and secured in a comfortable position to prevent complications (Yates, 2019a; RCN, 2021) (Figures 6 and 7). These complications can include (Yates, 2018):

- ▶ Catheter migration, which can lead to accidental removal of the catheter, urethral trauma, including cleaving
- ▶ Infection due to friction, and patient discomfort
- ▶ If the catheter drainage bag is not well supported, it can get too heavy and potentially damage the

GUIDANCE CHOICE STRUCTURE



The decision guide is a five-step approach, developed by experts, to guide you through your decision making when initiating rectal irrigation. It includes:

- ✓ Assessment for appropriate selection
- ✓ Choosing the optimal equipment
- ✓ Valuable training for safe and effective use

“The guide helps to see where the patient has needs and is quick to identify, allowing good practice and the correct referral has been made” - Nurse

It can support the novice when initiating rectal irrigation and protect the practice of the experienced healthcare professional.

Emmanuel A, Collins B, Henderson M, Lewis L, Stackhouse K (2019) Development of a Decision Guide for transanal irrigation in bowel disorders. *Gastrointestinal Nursing*, 17(7): 24-30

To find out how the decision guide could help you and your team get in touch with us on **0800 612 9090** or email us at **info@macgregorhealthcare.com**

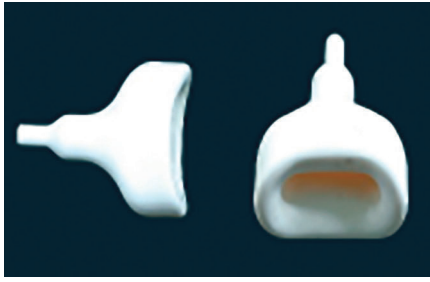


Figure 9.
Sample of female urinal devices.

urethra and bladder neck

- ▶ Inflammation, which can lead to infection, tissue necrosis, blockage, bladder irritability, spasms and bypassing, and may lead to frequent unnecessary changes of the catheter.

Securing devices include Velcro straps (Figure 6) or sleeve devices (Figure 7), both of which have their own advantages and disadvantages. It is important that healthcare professionals discuss and agree with the patient the best option for them.

As well as securing devices, a fixation device should be used. They provide stabilisation for the catheter and prevent tension and pulling on the device. These devices come in a variety of forms from strap fixation to adhesive devices. Individuals should again be assessed for the most appropriate device (Yates, 2018) (Figure 8).

EQUIPMENT/DEVICES FOR URINARY INCONTINENCE

While some urinals exist for female urinary incontinence (Figure 9), most of the devices and equipment are more male orientated and include sheaths, urinary direction aids, pubic pressure devices, penile pouches and penile clamps.

Male urinals come in a variety of shapes and sizes (Figure 10), some with an integral tap (Figure 11). However, prior to their successful use, individuals should be able to have a degree of mobility, some manual dexterity and the design concept should be agreeable to them (ICS, 2017). Their use should be discouraged if the patient cannot empty the urinal, has poor balance, impaired forward arm reach and wrist



Figure 10.
Pocket urinal.

function, or impaired cognition (ICS, 2017).

Urine directional aids can be used on their own via the toilet, or some can be attached to a drainage bag (Figure 12) and used, e.g. at night when mobility to the toilet may be an issue.

Urinary sheaths

Sheaths, also known as male external catheters (MEC), look in appearance similar to a contraceptive condom (Figure 13). These devices are soft, flexible sleeves designed to fit over the penis and can be attached to a urinary drainage bag or valve. It is vitally important that healthcare professionals are competent in assessing the need for a sheath and have the skill and expertise in applying correctly and passing this knowledge on to individuals (Yates, 2019b).

They are available in different materials, sizes, adhesive and non-adhesive, with or without applicators, and have different features such as anti-kinking, anti-blow off to assist drainage (Smart, 2014; Macauley et al, 2015). To use a sheath, individuals should have good dexterity, some degree of penile length, and usually moderate-to-severe urinary incontinence. They may be unsuitable for individuals with confusion, retracted penis, urinary retention or large glans, and narrow penile shaft due to ill fitting (Smart, 2014; ICS, 2017). The main disadvantage of sheaths is that they sometimes fail to stay in place, which is usually due to incorrect sizing or fitting.

Pubic pressure device

If a sheath is not suitable due to penile retraction, a form of body worn device such as a pubic pressure device may be used (Figure 14). These devices are usually made from latex

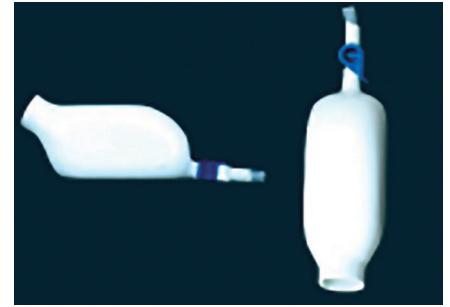


Figure 11.
Urinal with integral tap.



Figure 12.
Urine directional aid.

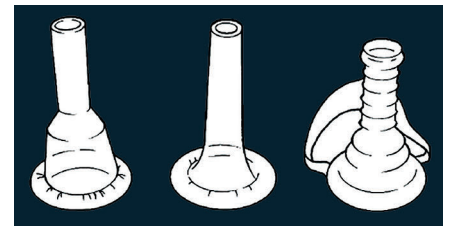


Figure 13.
Types of urinary sheaths.



Figure 14.
Sample of a pubic pressure device.

and require initial assessment and fitting by a specialist.

They are suitable for men (Yates, 2019b):

- ▶ With a retracted penis
- ▶ With moderate-to-heavy urinary loss
- ▶ With urinary urgency/frequency
- ▶ Who prefer a body worn device rather than pad products
- ▶ With the ability to be mobile/sit in a chair, as they do not work well in a lying position.

Penile compression clamps

Although these can be used for urinary incontinence, they are not usually available on prescription so less commonly seen by community staff. They are designed to prevent leakage by compressing the penile urethra (Yates, 2019b) and are used mainly for individuals with stress urinary incontinence, rather than urgency, and only for short periods of time (approximately 60 minutes), i.e. for exercise, swimming, going to the theatre etc to prevent reduced penile blood flow and skin damage (Lemmens et al, 2019).

EQUIPMENT/DEVICES FOR FAECAL INCONTINENCE

Containing urinary incontinence can be challenging, but faecal incontinence can be extremely difficult to manage and contain. There are certain devices that may assist patients, however, they need to be adequately assessed before use. These include rectal pouches, anal plugs and transanal irrigation (TAI).

Rectal pouches

These are usually adhesive pouches that may be put on to cover the anal canal and collect liquid faeces into the device (Figure 15). They are not suitable for individuals who produce solid faeces or who are mobile. Best results are achieved for immobile bed-bound patients with liquid stool production. There is a risk of skin problems due to adhesive, and especially if the liquid faeces is allowed to be in contact with the skin for some time (ICS, 2017)

Anal plugs

Available in two sizes and on prescription, anal plugs are small devices that can be inserted into the rectum to prevent faecal leakage/seeping. They tend to work better for patients with some degree of lack of rectal sensation, i.e. spina bifida, anorectal malformation, rectal sphincter damage (ICS, 2017), as when inserted and come into contact with bowel mucosa they become like a mushroom (Figure 16), and in patients with complete sensation can trigger the feelings of bowel fullness and frequent expulsion occurs. They can be used on a periodic basis, i.e.

special occasions, swimming and when taking exercise.

Transanal irrigation (TAI)

A developing treatment for faecal incontinence, TAI is designed to empty the rectum and up to the descending colon (according to which device is used). By regularly emptying the bowel in this way, TAI is intended to help re-establish controlled bowel function and enable the user to choose the time, frequency and place of evacuation (Emmanuel et al, 2013; National Institute for Health and Care Excellence [NICE], 2018). In patients who have faecal incontinence, efficient emptying of the distal colon and rectum means that new faeces do not reach the rectum for an average of two days, preventing leakage between irrigations (Henderson et al, 2018; Yates, 2019c).

Before starting TAI, full assessment of the individual should be carried out. TAI has benefits, e.g. its simple, reversible and minimally invasive, consistent regimen with regular bowel motions, can reduce faecal leakage and individuals can choose time/place of evacuation. However, there are also complications, including worsening of faecal incontinence in some individuals due to the possibility of leakage via irrigation fluid or increased bowel motility (Henderson, 2018; Yates 2019c). Other side-effects or consequences that have been noted are sweating, chills and general discomfort (Henderson et al, 2018; Yates, 2019c).

The device used will vary with what is required by the individual and can range from low volume (Figure 17) to high volume water devices (Figure 18; see *Practice point box*).

PAD CONTAINMENT PRODUCTS

Pad containment products have specifically been left until last to discuss, as they are for all previously discussed forms of incontinence apart from urinary retention. Pad containment products vary between two ranges, namely reusable washables and single-use absorbent disposable pads (Fader et al, 2020).



Figure 15.
Anal pouch system.



Figure 16.
Anal plugs.



Figure 17.
Low volume TAI device.



Figure 18.
High volume TAI device.

Washables come in the forms of reusable pants/knickers and bed/chair protectors. These usually have a lower absorbency range and are not suitable for faecal incontinence. These products are not ideal for individuals with moderate-to-severe incontinence, as they must be able to launder these products between uses.

Single-use absorbent disposable pads have been defined as 'those that have been specifically developed to help manage leakage or soiling' (Fader et al, 2020). These products come in a range of brands, sizes, shapes and absorbencies and are generally considered to be unisex. The manufacturer's instructions should be followed with regards to measuring of products, fitting, storage and use of barrier products (Soliman et al, 2016).

They are usually available via the NHS only after a complete continence assessment has been undertaken by a competent healthcare professional in continence care. The use of a two-piece system (pad and net pants) must be promoted where possible. These designs are considered to have more defining features (Fader et al, 2020, ACA 2021), such as being unisex, having leg cuffs which improve fit, adhesive back strip or wings to help secure in place, and wetness indicators. They are also thought to be more dignified than using an all in one product if not clinically required. For individuals where this is not appropriate, the use of alternative styles may be necessary. Belted, wrap-around, or pull-on products should be limited for patients who are able or capable of being toileted/using a toilet, or for men with heavy incontinence, particularly at night or where two-piece designs are not easily useable (e.g. for some people with dementia) (Association for Continence Advice [ACA], 2021). For individual areas of the UK, NHS

services will have their own specific criteria for issuing pad products, so please see local criteria.

CONCLUSION

As continence is a variable and complex condition, so must the range of equipment, devices and products available to contain it be varied. Healthcare professionals tend to opt for what they know best, which is usually pad products. However, there is a whole range of other equipment and devices which may be more appropriate and suitable for some individuals and improve not only their quality of life, but also their independence and self-care. Clinicians have a duty to know what is available and advise patients accordingly. They need to understand when a device/product is suitable, where to obtain regular supplies, and if it is available via prescription. **JCN**

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Practice point

Low volume devices usually do not hold more than 250mls of water and are used mainly for individuals who present with passive faecal soiling, post defaecation soiling and low anterior resection syndrome. High volume devices use more than 250mls of water and are used in individuals with obstructive defaecation syndrome, constipation, dominant irritable bowel syndrome, idiopathic constipation, neurogenic bowel and faecal incontinence. (Henderson et al, 2018; Yates 2019c).



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Silicone	17.5 × 17.5 cm / 11.5 × 11.5 cm	413930	4137063	EJA256	10
Border	15 × 25 cm / 9 × 19 cm	413940	4137048	EJA257	10
	20 × 25 cm / 14 × 19 cm	413950	4136030	EJA258	10

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Optimising nutritional care and combatting malnutrition

Anne Holdoway, Hilary Franklin

In 2006, the National Institute for Health and Care Excellence (NICE) released the landmark guidance on nutrition, 'Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition' (NICE, 2006). At the heart of NICE guidance and quality standards is the aim to integrate research into practice and reduce gaps between recommended and actual practice. However, successful implementation is dependent on national and local action. To facilitate the implementation of the NICE clinical guidance (CG32), a national multidisciplinary expert panel was convened to explore and develop strategies that would overcome barriers to implementation of the NICE guidance, facilitate access to practical tools, and enhance knowledge to improve the management of disease-related malnutrition in the community. The collaborative work undertaken by the panel, in conjunction with major stakeholders, led to the development of the 'Managing Adult Malnutrition in the Community' materials. This article reviews the work of both the initial panel in 2012 and subsequent expert panels, that have delivered and continue to develop resources for nurses and the wider multidisciplinary team to assist in tackling malnutrition, which affects up to three million people in the UK at any time (Elia and Russell, 2009), especially that which arises as a consequence of illness and long-term medical conditions having an impact on appetite and the ability to eat and drink.

KEYWORDS:

- Disease-related malnutrition ■ Pathway ■ Malnutrition
- Nutrition ■ Community

With most of those affected by malnutrition living in the community, it is essential that strategies to prevent and tackle it are pursued in primary care. In response to National Institute for Health and Care Excellence (NICE) clinical guidance (CG32) (NICE, 2006), the Care Quality Commission (CQC), NHS contract requirements, and care providers have sought to integrate nutrition screening across care settings.

In many acute and primary care settings in the UK, the validated Malnutrition Universal Screening tool ('MUST') is used to identify the risk or presence of malnutrition (Elia, 2003). Screening, however, represents the first initial step in managing malnutrition, but to treat and prevent repeated cycles, knowledge and understanding of the causes and resources to act on the findings of screening are essential.

A survey carried out in 2011 among general practitioners (GPs) across all four nations in the UK established that to implement NICE CG32, easily accessible, succinct, evidence-based advice on the subject of malnutrition was needed (Ashman et al, 2011). A

subsequent qualitative review of 84 guides on managing malnutrition in the community, obtained via the internet, and available across the UK, identified that many of the existing guides were excessively long, used limited evidence to underpin recommendations, were inconsistent in content, and rarely included goal setting or outcome measures to evaluate the effectiveness of interventions (Holdoway, 2012). The findings prompted the creation of an expert multidisciplinary panel, including representation from the nursing profession. The panel was brought together for the purpose of exploring strategies that would facilitate access to practical guidance and improve knowledge to enhance the identification and management of disease-related malnutrition in the community.

THE MULTIDISCIPLINARY PANEL

The initial panel formed in 2012 aimed to bring experienced professionals representing the multidisciplinary team (MDT) together for a round-table discussion. Participants with a track record in managing patients with, or at risk of malnutrition, or involvement in strategies to tackle malnutrition, were identified through stakeholder organisations.

The work undertaken by the panel, in tandem with engagement with multiple stakeholders, resulted in the creation and launch of the 'Managing Adult Malnutrition in the Community' guidance in 2012.

From an initial workshop, a framework was drafted and content developed based on published, peer-reviewed evidence. Following repeated cycles circulating the evolving copy among panel members,

Dr Anne Holdoway, consultant dietitian and chair of the 'Managing Adult Malnutrition in the Community' expert panel; Hilary Franklin, healthcare communications consultant and 'Managing Adult Malnutrition in the Community' co-ordinator

the content was iteratively refined and a succinct guide to managing disease-related malnutrition in adults in the community created. Where evidence was limited, clinical experience of the multidisciplinary professionals involved was utilised, engaging with professional organisations and patients and carers where it was felt necessary.

Now in its third iteration (a second edition was published in 2017 and the third, recently launched in October 2021), the guidance has consistently aimed to support nurses and other community healthcare professionals, who are not necessarily experts in nutrition, to identify and treat malnutrition — specifically that which is disease-related — in a timely manner. A key component of the ‘Managing Adult Malnutrition in the Community’ guidance has been the inclusion of a pathway of care, which is intended to facilitate decision-making, including the use of dietary advice alone, or in combination with oral nutritional supplements (ONS), and escalation management including referral to dietitians and nutrition specialists.

The panel has evolved with each update and sought to involve new members based on the topics under review, to ensure that the content remains relevant to current practice and incorporates new and emerging research. Equally, listening and responding to requests and enquiries from users has helped guide iterations and the panel of experts welcomes this dialogue.

Figure 1 gives a general overview of the process undertaken for the recent 2021 update of the ‘Managing Adult Malnutrition in the Community’ document and patient materials.

2021 UPDATE

New to the 2021 update of the ‘Managing Adult Malnutrition in the Community’ document is the four-step approach. The steps reflect the principles of the processes commonly adopted by healthcare professionals, including dietetics

(Writing Group of the Nutrition Care Process/Standardized Language Committee, 2008) and nursing. The four steps are:

- ▶ **Step 1:** Screening — identification of malnutrition via nutrition screening
- ▶ **Step 2:** Assessment — identifying the underlying causes of malnutrition, e.g. symptoms which are interfering with a patient’s ability to eat and drink. Addressing those that can be reversed or modified, needs to be an integral part of the patient’s treatment plan
- ▶ **Step 3:** Intervention — determining treatment goals and optimising nutritional intake
- ▶ **Step 4:** Monitoring — monitoring outcomes and making necessary adjustments.

The updated guidance (www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf), including a new section on assessment, aims to assist community healthcare professionals in identifying factors which cause malnutrition that can be managed or alleviated, thus breaking the repeated cycles of malnutrition, particularly

among individuals with long-term conditions (Table 1). In addition, the updated guidance emphasises the need to consider a person’s ability to act on advice given and mitigate for any barriers — clinical, practical, or social — that may affect adherence to dietary advice and the choice and type of oral nutritional supplements when prescribed.

Ultimately, the guidance intends to empower nurses to take action as early as possible, thereby preventing unnecessary deterioration in nutritional status, while identifying patients who would benefit from support and advice from a registered dietitian and other members of the healthcare team, such as speech and language therapists.

Patient materials

In addition to the main guidance, colour-coded patient leaflets — for those at low, medium, and high risk of malnutrition — are available to support nurses to give first-line dietary advice. Regularly tested among patient representatives via our expert panel, the patient resources have similarly evolved over the three editions of the guidance.

Table 1: Groups at risk of disease-related malnutrition (adapted from Holdoway et al, 2021)

Those needing support because of:	
▶	Chronic diseases: e.g. chronic obstructive pulmonary disease (COPD), cancer, gastrointestinal disease, renal or liver disease, rheumatoid arthritis, inflammatory bowel disease (IBD) (Stratton et al, 2003; Elia and Russell, 2009; Pulley et al, 2019). Consider acute episodes and exacerbations
▶	Progressive neurological disease (Elia and Russell, 2009), e.g. dementia, Parkinson’s disease, stroke, motor neurone disease (MND)
▶	An acute illness (Elia and Russell, 2009), where adequate food is not consumed for more than five days
▶	Frailty (Stratton et al, 2003), e.g. immobility, old age, recent discharge from hospital and sarcopenia (including sarcopenia in both frail and obese patients)
▶	Prehabilitation (West et al, 2017): to optimise nutritional status prior to surgery or treatment
▶	Rehabilitation: to provide ongoing support in the community after an acute episode of care, e.g. after surgery (Gillis et al, 2015), stroke (Elia and Russell, 2009), injury (Stratton et al, 2003), cancer treatment (Stratton et al, 2003), hospital admission (Malnutrition Action Group [MAG], 2019), an episode involving intensive care (Van Zanten et al, 2019)
▶	Neuro-disability: e.g. cerebral palsy (Tsai et al, 2011; Norte et al, 2019), learning disabilities (Wood, 1994; Humphries et al, 2009)
▶	End-of-life requirements/palliative care needs (Preedy, 2011; Shaw, 2011): tailor and adjust advice according to phase of illness — maintaining patient comfort and respecting choice particularly towards the end of life
▶	Impaired swallow (dysphagia) (Fávaro-Moreira, 2016)
NB: Patients with socio-economic issues and environmental issues, i.e. with little or no support, who are housebound, or who experience difficulty accessing or preparing food, are at increased risk of malnutrition (Elia and Russell, 2009). Malnutrition risk may be further compounded if patients with existing disease-related malnutrition also fall into this group	



Managing Adult Malnutrition in the Community

UPDATE PROCESS

Step 1: August - September 2020

- Internal review of existing Managing Adult Malnutrition in the Community pathway
- Assimilation of useage and feedback
- Scoping exercise on update
- Costing and seeking funding for the activity

Step 2: September - November 2020

- Identify and invite expert panel members
- Agree aims and objectives
- Meetings/email/telephone discussions regarding content
- Panel submit key papers/guidance/information for consideration in tandem

Step 3: October - November 2020

- First draft of updated document developed and emailed individually to panel members

Step 4: December 2020

- Written feedback obtained on an individual basis from expert panel members

Step 5: January 2021

- Expert panel amendments collated
- Discussions with expert panel of any conflicts or lack of concordance on copy – consensus arrived on content

Step 6: January - February 2021

- Updated versions sent to panel for review - written comments returned
- Iterative process repeated as required

Step 7: January - February 2021

- Panel feedback incorporated
- Design developed with design agency

Step 8: March 2021

- Designed document to panel for feedback
- Feedback on laid out copy and iteration of content by expert panel

Step 9: March - September 2021

- Final document sent to all 10 professional and patient associations and NICE for feedback
- Feedback from associations and liaison with panel members in regards to suggested amendments
- Liaison with all associations and NICE on content amendments

Step 10: September 2021

- Final amendments made to copy and sent to professional and patient associations and NICE for final sign off

Step 11: October 2021

- Document launched to healthcare professionals
- Events planned throughout the year to disseminate and raise awareness of availability of the resources including education on malnutrition

Figure 1.

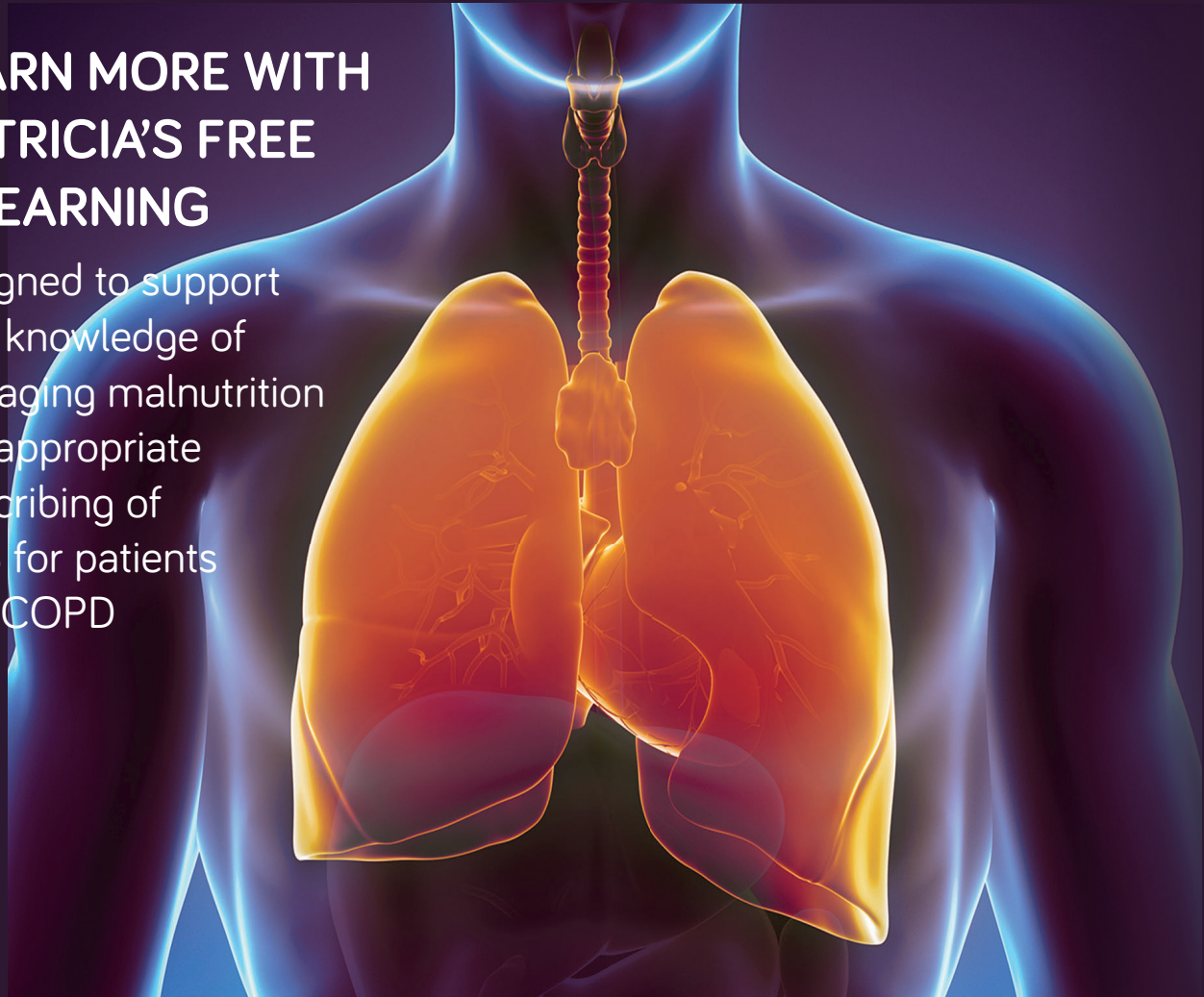
Managing malnutrition in the community — update process.

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Current panel

A total of nine professionals have been actively involved in the 2021 update. Recognising that nutritional care in the community is currently delivered by a range of professionals, the panel included two nurses (a lead nurse for nutrition and a professional lead for community and end-of-life care), three dietitians (with extensive clinical experience in managing malnutrition in practice), two pharmacists (a nutrition pharmacist and a practice pharmacist), and a GP with an interest in malnutrition. The document has also been reviewed by a clinical director for a primary care network (PCN).

Endorsement

To ensure the guidance is credible and reflects the views of key professional and patient organisations likely to be involved in delivering care, endorsement was sought from relevant stakeholders and professional bodies. This process is not to be underestimated. Liaison and consideration of suggested amendments that triggered new rounds of consultation took several months.

All ten of the professional and patient organisations approached, including the Royal College of Nursing (RCN) and National Nurses Nutrition Group (NNNG), have continued to endorse the 'Managing Adult Malnutrition in the Community' materials (Table 2). An endorsement statement has also been awarded by NICE, reflecting the high quality and robust content (Table 2). Links to the materials feature on the associations' websites and the main document is featured as a supportive resource in the implementation section for NICE Clinical Guideline 32 (www.nice.org.uk/guidance/cg32/resources) (NICE, 2006).

THE MALNUTRITION PATHWAY WEB-BASED MATERIALS

Further to the creation of the original 'Managing Adult Malnutrition in the Community' document in 2012, a dedicated website, the Malnutrition Pathway, was launched. Originally developed as a means of making the document and patient leaflets

freely available and easily accessible, the website has expanded to become a portal for information about disease-related malnutrition. The malnutrition pathway team has responded to requests from professionals to develop additional guidance and fact sheets, for professionals and patients, covering specific conditions where malnutrition prevails, and assist in providing more bespoke nutrition advice. Table 3 outlines some of the materials available. A specific page compiling the key resources to assist nurses in the detection, prevention, and management of malnutrition, signposts to relevant resources — www.malnutritionpathway.co.uk/nurses

IMPLEMENTATION STUDIES

Guidance can only be effective if it is adopted, embedded, and acted on. As an expert panel, it has been pleasing to hear about the adoption of the malnutrition pathway in practice. Here, two published studies that have evaluated the impact of implementing the 'Managing Adult Malnutrition in the Community' pathway have been included — one in older people and one in a patient group with chronic obstructive pulmonary disease (COPD).

The first study was carried out across five GP surgeries in Gloucestershire (Brown et al, 2020). A total of 163 older adults (aged 80 years ± 9 years) with a range of primary diagnoses, living in their own homes, were screened for malnutrition using 'MUST'. Patients were then managed according to their malnutrition risk:

- ▶ Those at low-risk were given no further management
- ▶ Those at medium risk were given dietary advice
- ▶ Those at high risk were given dietary advice plus two ready to drink, low volume, high-protein oral nutritional supplements.

Data regarding use of healthcare services six months before and six months after implementation of the pathway was collected from GP records and a cost analysis completed.

Table 2: Endorsements of the 'Managing Adult Malnutrition in the Community' materials

▶ British Association for Parenteral and Enteral Nutrition (BAPEN)
▶ British Dietetic Association (BDA)
▶ British Pharmaceutical Nutrition Group (BPNG)
▶ National Nurses Nutrition Group (NNNG)
▶ Patients Association
▶ Primary Care Society for Gastroenterology (PCSG)
▶ Primary Care Pharmacy Association (PCPA)
▶ Royal College of General Practitioners (RCGP)
▶ Royal College of Nursing (RCN)
▶ Royal Pharmaceutical Society (RPS)
▶ NICE Endorsement Statement for 'Managing Adult Malnutrition in the Community' document: <i>This booklet supports the implementation of recommendations in the NICE guideline on nutrition support for adults. It also supports statements 1, 2 and 5 in the NICE quality standard for nutrition support in adults.</i> National Institute for Health and Care Excellence Endorsed December 2017, Updated June 2021

The results showed that the costs of managing malnutrition (healthcare professional time and oral nutritional supplement prescriptions) after screening, were more than offset by the savings associated with reductions in healthcare use from identifying malnutrition early, with a:

- ▶ 49% reduction in the number of hospital admissions
- ▶ 48% reduction in hospital length of stay
- ▶ 30% reduction in the number of prescriptions
- ▶ 21% reduction in the number of GP visits.

The greatest potential savings were found in the high-risk group, where savings of up to £997.02 per patient were calculated. 97% of patients reported being satisfied with the dietary advice, 96% were satisfied with the oral nutritional supplements and 90% were found to adhere to their prescription.

The second study, carried out in Swindon, involved the implementation of the 'Managing Malnutrition in the COPD' guidelines (Cawood et al, 2017). A total of 19

Table 3: Useful malnutrition pathway materials

Materials	Use in practice
<i>Managing Adult Malnutrition in the Community</i> www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf Guidance originally produced in 2012 and updated in 2017 and 2021	Studies have repeatedly demonstrated that undetected and untreated malnutrition reduces muscle strength, contributes to frailty, increases falls risk, slows recovery from illness and surgery, impairs psychosocial function, immune response and wound healing, all of which are associated with poorer clinical outcomes (Stratton et al 2003; Morley et al, 2013; Brotherton et al, 2010; Gossier et al 2016; Meijers et al 2012). This guidance aims to raise awareness among community healthcare professionals of how the underlying causes of malnutrition may be alleviated to break the repeated cycles of malnutrition, particularly among those with long-term conditions
<i>Managing Malnutrition in COPD</i> www.malnutritionpathway.co.uk/copd Guidance was originally produced in 2014 and updated in 2020	Around one in three inpatients (Steer et al, 2010) and one in five outpatients (Collins et al, 2010) with COPD are malnourished or at risk of malnutrition. Patients with COPD are susceptible to loss of muscle mass (GOLD, 2019), so dietary advice is paramount and in many cases nutritional interventions may be necessary to ensure loss of weight and muscle mass are minimised, particularly when patients are undergoing acute exacerbations. This practical guide aims to assist in identifying and managing people with COPD who are at risk of disease-related malnutrition and includes a pathway for the appropriate use of oral nutritional supplements (ONS)
<i>Guide to the Nutritional Management of Patients during and after Covid-19</i> www.malnutritionpathway.co.uk/covid-19 Produced in 2020, the collaborative approach which underpinned the development of the COPD and community guidance was instrumental in facilitating the rapid development of nutritional advice for patients with Covid-19	Initial recent research has found a very high incidence of weight loss and risk of malnutrition among Covid-19 survivors, independent of hospitalisation (Di Filippo et al, 2020), and sarcopenia, loss of muscle mass and function, has been found to occur in survivors of Covid-19; with older adults and the most critically unwell patients being the most at risk (Welch et al, 2020). Low muscle mass negatively affects patient outcomes and increases healthcare utilisation, it is associated with higher rates of infections, poorer tolerance to chemotherapy, hospitalisation, fractures, reduced quality of life, and reduced survival (Prado et al, 2018). For those with pre-existing conditions (including poor cardiometabolic health), who have had severe Covid-19 and in some cases long Covid, a tailored nutritional approach is likely to be required. Several resources are available: <ul style="list-style-type: none"> ▶ A community healthcare professional guide which includes a care pathway which guides professionals to appropriate patient/carer leaflets according to the patient's nutritional status, dietary intake and symptoms related to the Covid-19 infection ▶ A guide for care homes advising assisting residents whose appetite and dietary intake have been affected during and after Covid-19 infection ▶ Three patient information leaflets and a resource finder tool which helps patients to find the right nutritional advice according to their symptoms
<i>Ten Top Tips for Nurses for Implementing the Malnutrition Pathway</i> www.malnutritionpathway.co.uk/tipsheets/tipsheet_nurses.pdf	This fact sheet advises nurses on how they might integrate nutritional screening and care into their current practice and how they might engage with other key stakeholders to implement the malnutrition pathway
<i>Managing Malnutrition with Oral Nutritional Supplements (ONS)</i> www.malnutritionpathway.co.uk/library/ons.pdf	Information for healthcare professionals on the types of oral nutritional supplements available, their suitability for certain groups of patients and considerations when prescribing
<i>Sarcopenia: loss of muscle mass — a healthcare professional fact sheet</i> www.malnutritionpathway.co.uk/library/factsheet_sarcopenia.pdf	This fact sheet outlines why it is important to identify sarcopenia in all patients whether they are underweight, normal weight, overweight or obese. It summarises the multiple factors that can contribute to sarcopenia and the potential consequences to health and provides practical advice on diagnosis and treatment according to the patient's current nutritional status
<i>Falls — integrating nutrition into falls pathways</i> www.malnutritionpathway.co.uk/falls.pdf	Nutritional status is an independent predictor of falls in older people in the community, with improvement in nutritional status having been found to reduce risk of falls (Neyens et al, 2013; Chien and Guo, 2014). This healthcare professional fact sheet outlines key actions for implementing nutritional screening and assessment into falls pathways
<i>Information to help meet protein needs</i> www.malnutritionpathway.co.uk/library/protein.pdf	This healthcare professional fact sheet summarises the evidence-based guidelines for protein requirements in ageing and disease, with a useful list of the protein content in everyday foods
<i>Dysphagia</i> www.malnutritionpathway.co.uk/dysphagia.pdf	Co-written by a speech and language therapist and a dietitian, this fact sheet details the clinical consequences, causes and prevalence of dysphagia alongside tips on managing patients with dysphagia, identifying those who are at risk of malnutrition and information on the International Dysphagia Diet Standardisation Initiative framework for texture modification
<i>Care homes — integrating good nutrition into daily practice</i> www.malnutritionpathway.co.uk/library/care_homes.pdf	This fact sheet outlines why the elderly are particularly vulnerable to malnutrition, and why it is important for homes to acknowledge the problem of malnutrition. It includes advice on considerations for good nutritional care
<i>Information for patients</i> www.malnutritionpathway.co.uk/leaflets-patients-and-carers	A dedicated 'patient and carer section' on the website contains materials and resources that patients and family members can access, including: <ul style="list-style-type: none"> ▶ Dietary advice for those at low, medium and high-risk of malnutrition ▶ Specific materials for patients with COPD who are at low, medium and high-risk of malnutrition ▶ Information on the importance of eating enough protein giving examples of how to incorporate protein-rich foods into the diet and the protein content of oral nutritional supplements
<i>Slide decks</i> www.malnutritionpathway.co.uk/slides	Slide presentations designed to assist in educating other professionals on malnutrition. These include referenced background information on the clinical and financial consequences of malnutrition, information on key national guidelines and reports focusing on the identification and treatment of malnutrition
<i>Multimedia</i> www.malnutritionpathway.co.uk/videos	Podcasts and videos which have involved a number of our expert panel and other experts across the field of malnutrition

patients with COPD were identified as at high risk of malnutrition and were initiated on the pathway, receiving dietary advice plus low-volume, high-protein oral nutritional supplements. Patient follow-up was carried out at six and 12 weeks.

The results showed that implementation of the pathway led to a significant reduction in malnutrition risk, better health ratings, and clinical improvement in COPD impact. Patient total healthcare use decreased, with a 50% reduction in hospital admissions and a 20% reduction in GP visits. Patient satisfaction and compliance to nutritional treatment rates were high, at 96% and 90% respectively.

In the authors' clinical opinion, these initial studies demonstrate how clinically appropriate management of malnutrition can significantly reduce healthcare service use, reduce costs, and improve outcomes for patients at high risk of malnutrition.

Equally, from enquiries received, a heat map of adoption of resources in the UK undertaken during Covid-19, and from patient stories, the authors have built up knowledge of how the malnutrition pathway has helped healthcare professionals, patients, and carers in practice. In addition, the materials have been adopted by many patient and professional websites, including the RCN, the Patients Association and British Lung Foundation (BLF), as well as being included in the resources section of NHS patient webinars.

CONCLUSION

The malnutrition pathway has become a worldwide resource with more than 46,000 professionals and patients visiting the website in the past year alone. Our aim continues to be to improve the knowledge and understanding among members of a multidisciplinary team of the impact of malnutrition, and what can be done to treat and prevent it. Having the nursing profession represented on the expert panel is invaluable, as it provides insight into the role of nurses in supporting patients at risk of malnutrition and what information can support them

to engage on the topic of nutrition and diet, particularly with those who have chronic diseases or are undergoing rehabilitation.

Community and practice-based nurses can play a pivotal role in ensuring that the best nutritional care is provided for vulnerable groups by working closely with other community healthcare professionals. Nutritional screening and care pathways need to be in place so that patients can be referred on for expert advice from other professionals, such as dietitians and speech and language therapists, when specialist advice to manage nutritional issues and further optimise diet is required. **JCN**

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Dedication, clinical expertise, a willingness to impart knowledge, and a commitment to improve patient care, have been crucial in developing the resources that follow evidence-based principles relevant to everyday clinical practice. Our sincere thanks and appreciation go to all our panel members, past and present, who have contributed time and expertise, and engaged with others through their networks to ensure the materials and website remain up to date. Thank you too to all who have contacted us with ideas, and all who have adopted the materials in practice, whether in full or in part. By collaborating and sharing our passion for raising the profile of the role of nutrition in health care, we can continue to collectively achieve lasting change to optimise nutritional care and achieve the best outcomes for patients.

Finally, we would like to recognise the unrestricted educational grant provided by Nutricia that has enabled UK-wide experts to produce such guidance, make the resources freely available, and allow equity of access. Without this financial support, it would not have been possible to develop this national resource that has since been adopted in other countries across the globe.

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KEY POINTS

- With most of those affected by malnutrition living in the community, it is essential that strategies to prevent and tackle it are pursued in primary care.
- A panel was brought together for the purpose of exploring strategies that would facilitate access to practical guidance and improve knowledge to enhance the identification and management of disease-related malnutrition in the community.
- The guidance intends to empower nurses to take action as early as possible, thereby preventing unnecessary deterioration in nutritional status, while identifying patients who would benefit from support and advice.
- The malnutrition pathway has become a worldwide resource with more than 46,000 professionals and patients visiting the website in the past year alone.
- Community and practice-based nurses can play a pivotal role in ensuring that the best nutritional care is provided for vulnerable groups by working closely with other community healthcare professionals.

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Revalidation Alert

Having read this article, reflect on:

- How you screen and assess patients for malnutrition
- The approach you take to determine treatment goals and improve nutritional intake
- How familiar you are with the 'Managing Adult Nutrition in the Community' materials and resources.

Then, upload the article to the free JCN revalidation e-portfolio as evidence of your continued learning: www.jcn.co.uk/revalidation

Managing malnutrition associated with dysphagia

Carolyn Taylor

There is evidence to suggest that the older adult is at risk of malnutrition. A number of factors are associated with this, including those living in care homes, and people with long-term or progressive neurological conditions. With the growing number of people surviving into older age, these risk factors need to be considered. An additional risk factor is those who have dysphagia. This may restrict the choice of foods available and reduce the pleasure of eating. Assessment and management of dysphagia can help patients enjoy their food intake safely and in a nutritious manner. This article discusses the complexity of managing an adequate nutritional intake for those with dysphagia

KEYWORDS:

- Dysphagia ■ Malnutrition ■ Texture modification
- Thickened fluids

Ensuring correct nutritional intake and maintaining an adequate nutritional status is important for everyone. However, some people struggle with this and in order to support them it is important to comprehend what could make their intake sub-optimal. It is well documented that those at risk of malnutrition include (British Association for Parenteral and Enteral Nutrition [BAPEN], 2018):

- ▶ Those over the age of 65 years, especially if in a care home or recently admitted to hospital
- ▶ People with long-term conditions
- ▶ People with progressive conditions
- ▶ Those who abuse drugs and alcohol
- ▶ Social factors, such as those living in poverty and isolation.

As stated, the elderly population are at increased risk of malnutrition. As there is a growing number of older people within the population, public health policy should consider their needs. It is also vital that those looking after the elderly are supported and educated about their nutritional requirements. This should include an understanding of factors that might negatively impact on maintaining an adequate nutritional status, such as dysphagia, and practical solutions which can be taken to address this. There are many physiological changes that happen as the body ages, such as sarcopenia and muscle wastage, loss of taste buds, sight and hearing, which can result in (Azzolino et al, 2019):

- ▶ Reduced appetite
- ▶ Changes in taste
- ▶ People becoming more isolated
- ▶ An increased need for social support
- ▶ Difficulty/discomfort in swallowing foods and fluids (dysphagia), which this paper will now focus on.

Tackling these nutritional problems has been documented elsewhere (Taylor, 2014). However,

there is evidence that dysphagia could occur in 13% of the elderly population, with this increasing to up to 75% of those in nursing homes (Holland et al, 2011). In view of these figures for the prevalence of dysphagia in the elderly, this article reviews factors that are putting patients at risk of malnutrition due to the effect of dysphagia on nutritional intake, and provides practical solutions that can be implemented by staff caring for this growing elderly population.

BACKGROUND TO THE RISK OF MALNUTRITION

It is estimated that one in 10 of the over 65 population are malnourished or at risk of malnutrition. This equates to over one million people in the UK (Malnutrition Task Force). As highlighted, the elderly are more likely to be living in care homes, have progressive conditions, have long-term conditions, and, if not living in a care home, may also be living in poverty and isolation. It is therefore not a surprise that they are at a higher risk of malnutrition than the younger population. An additional factor is associated with swallowing problems. Although this may be because of progressive conditions (see below), it is also considered by some (including patients themselves) simply to be part of the ageing process, and therefore people affected may not seek further help (Azzolino et al, 2019).

There are a number of medical conditions where dysphagia is a recognised complication. This includes a number of neurological conditions such as stroke, cerebral palsy, Parkinson's disease, motor neurone disease (MND), multiple sclerosis (MS), Huntington's disease and muscular dystrophy. It can also

be seen in those who have had a traumatic brain injury and in some cancers (Holdaway and Smith, 2020). Those diagnosed with these problems often have swallowing issues included in their medical monitoring. What is more concerning is when the dysphagia progresses slowly and people make subtle changes to their diet, as the ability to chew and/or swallow different consistencies of food deteriorates, as can be common in the ageing population.

More recently, loss of taste has been well publicised as a diagnostic criteria for Covid-19 (Di Filippo et al, 2021), which has highlighted how those who are unable to smell or taste food and therefore enjoy meals can reduce their nutritional intake (Meunier et al, 2021). On top of this, the effect on respiratory muscles and long-term ventilation for some of the more critical patients has led to Covid-19 causing long-term swallowing problems (Mohan and Mohapatra, 2020). There are also some anecdotal reports that even those who have not needed critical care support have still had their swallow affected during their Covid-19 infection.

SWALLOWING PROCESS

Swallowing happens in three stages (Brady, 2008). Dysphagia can occur at any one of these stages (Lancaster, 2015). The first stage, or oral phase, is when the tongue collects the food or liquid, making it ready for swallowing. The tongue and jaw move solid food around in the mouth so it can be chewed. Chewing makes solid food the right size and texture to swallow by mixing the food with saliva. Saliva softens and moistens the food to make swallowing easier. Weak tongue or cheek muscles may make it hard to move food around in the mouth for chewing. Additional factors for poor chewing are poor fitting or lack of dentures, as well as pain in the mouth, maybe caused by oral thrush from having to have antibiotics.

The second stage of swallowing, or the pharyngeal phase, begins when the tongue pushes the food or liquid to the back of the mouth. This

triggers a swallowing response that passes the food through the pharynx, or throat. The larynx (voice box) closes tightly and breathing stops to prevent food or liquid from entering the airway and lungs. Neurological conditions, such as stroke, motor neurone disease and dementia, may affect the trigger for the swallow response causing dysphagia.

‘Meeting the nutritional needs of those affected by dysphagia should be done in a safe and nutritionally adequate way. It is the author’s experience that often the gradual decline in swallowing is just accepted as an inevitable consequence of ageing.’

The third stage, the oesophageal phase, begins when food or liquid enters the oesophagus, the tube that carries food and liquid to the stomach. Any condition that weakens the throat muscles can slow or prevent food moving towards the stomach during this phase.

When there are subtle changes to any stage in the swallow, individuals often make gradual changes to dietary intake that may not be noticeable except over time when someone loses weight from struggling to meet their nutritional needs. This might not just be for macronutrients, such as protein, fat and carbohydrates, but also micronutrients, such as iron, vitamin C, and the B vitamins.

Practical issues seen with someone with dysphagia include:

- ▶ Difficulty placing food/drink in the mouth
- ▶ Inability to control food, drinks, medication or saliva in the mouth
- ▶ Difficulty in initiating the swallow itself
- ▶ Feeling of food sticking in the mouth or throat
- ▶ Frequent chest infections
- ▶ Unexplained weight loss, which

can occur over a short or longer period of time

- ▶ Regurgitation of food or drinks
- ▶ Coughing and choking, particularly when eating and drinking, or immediately afterwards
- ▶ Finding mealtimes distressing
- ▶ Loss of ability to recognise food and drinks (National Institute for Health and Care Excellence [NICE], 2006; National Patient Safety Agency [NPSA], 2011).

CONSEQUENCES OF POOR NUTRITION

Meeting the nutritional needs of those affected by dysphagia should be done in a safe and nutritionally adequate way. It is the author’s experience that often the gradual decline in swallowing is just accepted as an inevitable consequence of ageing, and that those affected accept that they have to adjust their food options and therefore do not seek support. Consequences of poor nutritional intake include:

- ▶ Reduced ability to fight infection
- ▶ Lethargy and inactivity reducing the ability to self-care
- ▶ Impaired wound healing
- ▶ Depression and self-neglect
- ▶ Increased risk of anaemia and other micronutrient deficiencies
- ▶ Muscle weakness
- ▶ Weight loss resulting in ill-fitting dentures (Taylor, 2014).

ASSESSMENT

As can be seen from the list above, malnutrition can result in a cycle that can be difficult to break. Any trigger can start this decreasing circle. It could be an illness that results in lethargy and inactivity that then causes muscle weakness and depression, which could lead to self-neglect and lack of interest in food shopping and preparation. Choosing less nutritious meals can become more frequent, resulting in anaemia, tiredness and further loss of energy. Early identification is key to prevent problems from escalating. The use of the malnutrition universal screening tool (MUST) is a simple five-step process that uses weight, body mass index (BMI), unplanned weight loss, and acuity to determine

the risk of malnutrition (Elia, 2003). When considering weight loss, it is important to remember that individuals may have a normal BMI, or even have been overweight, but unintentional weight loss would still increase the risk of malnutrition. It has been noted by the author that those who were often overweight might be unintentionally losing weight, but be pleased with this weight loss. However, if they are not trying to lose weight, further questions are warranted and could still be a trigger for concern and instigate the need for further monitoring.

If weighing scales are not available, more subjective measures are required. Questions to consider include:

- ▶ Are clothes still fitting or do they look loose?
- ▶ Are any rings or watches fitting?
- ▶ Do dentures look loose or are ill-fitting?

If any of these answers are yes, it could indicate unintentional weight loss.

If someone is considered at risk of malnutrition, it is worth trying to investigate possible causes. This can then ensure that treatment and support can be targeted to the correct solution. It may be that their underlying condition has increased their nutrient need, or is causing malabsorption. This can happen in conditions such as cancer, inflammatory bowel conditions, sepsis, liver disease, chronic obstructive pulmonary disease (COPD) or neurological conditions that cause increased spasm (Saunders and Smith, 2010).

Another cause of malnutrition is patients not eating enough. While the focus of this article is on those affected



Figure 1. IDDSI Framework (IDDSI, 2016). Copyright: The International Dysphagia Diet Standardisation Initiative 2016 @ <https://iddsi.org/resources/>.

‘... it is important to remember that individuals may have a normal BMI, or even have been overweight, but unintentional weight loss would still increase the risk of malnutrition.’

by dysphagia, it is also worth noting that other causes of patients’ reduced intake include lack of taste, or a desire to cook for themselves, so living mainly off snacks, nausea, and fatigue (Saunders and Smith, 2010). Further questions around the consistency of food is vital. When asking about the type of foods patients are eating, tips to pick up on are:

- ▶ Are they avoiding difficult to chew foods such as bread, meat, nuts, seeds? By doing this, they are cutting out a large section of possible nutrients
- ▶ Are they mentioning having to have gravy or sauces added to their meals? This may lead to nutrients being watered down, so a portion may not contain as many
- ▶ Is their diet consisting of mainly soft foods?
- ▶ Do they cough/choke or have a wet voice after eating or drinking?
- ▶ Are they drooling or struggling to control their saliva?

PRACTICAL ADVICE

In the author’s clinical opinion, the most important thing is to make sure that if there is a concern about someone’s swallow, that it is correctly assessed so the appropriate management can be put in place. There has been a standard grading of diet and fluid consistency produced by the International Dysphagia Diet Standardisation Initiative (IDSSI). This gives a global standard of descriptors for texture-modified diets and thickened fluids (IDSSI, 2016; Figure 1), and allows a uniform language to be used when educating and providing advice on suitable diets. This terminology has been supported by a national patient safety alert in 2018 following a number of incidences of patient harm following previously used terminology, such as ‘soft diet’ (Association of UK Dietitians et al, 2018).

Furthermore, in the author’s clinical experience, by having an appropriate assessment and the correct recommendations for consistency of foods, patients feel supported to confidently and safely manage every mouthful while balancing meal enjoyment and nutritional intake.

Practice point

The quicker a swallowing issue is recognised, the sooner it can be treated. Community nurses are well placed to identify any changes in a patient’s ability to swallow.

Practice point

Patients who are having difficulty in eating enough food to meet their nutritional needs, can be encouraged to take smaller, more frequent meals and snacks.

There is evidence that patients on a texture-modified diet have a 40% reduction in energy and protein intake (Wright et al, 2005). Thus, if they are having a softer diet than necessary, they could be putting themselves at unnecessary risk of malnutrition. There is also evidence that those on a texture-modified diet are more likely to withdraw from social situations and thus become more isolated (Warlow et al, 2008; Thompson, 2016). Therefore, having the assessment completed by a speech and language therapist or a healthcare professional who has been appropriately trained in swallow assessments enables patients to have the most appropriate consistency of diet for their condition.

To reduce the number of those struggling to meet their nutritional needs, various suggestions can be considered, such as:

- ▶ If sauces are needed, make sure they are nourishing, e.g. creamy and dairy-based sauces will increase calorie and protein intake
- ▶ Adding extra cheese and cream to meals, such as in mashed potatoes and soups
- ▶ Having yoghurts, mousses etc as snacks between meals
- ▶ Being aware that cooking foods for longer to soften them will reduce the nutrient content, especially for vitamins such as vitamin C which is destroyed by heat and water. Adding in additional fruit juice to supplement the vitamin intake would be a practical solution. Eating softer, fresh fruit may also be possible, such as bananas, melon, etc
- ▶ It may be that food needs to be softened further. This should only be done when necessary and to the highest consistency that is safe. There is evidence that there can be a tendency to puree

food when someone can actually manage a higher consistency (Pownall and Taylor, 2017).

Advising too soft a diet not only increases the risk of malnutrition, but also reduces enjoyment of meals, so patients may limit their intake further

- ▶ For those on a pureed diet, enjoyment of food can be severely affected by the appearance and sensory feeling of the food in the mouth (Hall et al, 2008). However, use of thickeners mixed with the pureed food and then set into moulds has been found to improve patients' acceptance of a pureed diet (Belardi, 2014)
- ▶ If there is continued concern about nutritional intake, referral to local dietitians would enable individual advice to be given, especially if there are other co-morbidities that may be causing a conflict of nutritional needs, such as diabetes, renal disease, food intolerances and allergies.

The situation can be more complex for those with dementia. It is often suggested that these patients can manage bite-sized, hand-held foods best (Volkert et al, 2015). For example, sandwiches, while easy for individuals with dementia to pick up and eat, can become more of a problem for those with swallowing difficulties. Thus, in the author's clinical opinion, it is better to use other techniques to encourage oral intake, such as ensuring that there are minimal distractions, contrasting colours of plates and table cloths, having plates and napkins rather than trays, and a selection of menu items (e.g. soft foods such as eggs, fish, cereals soaked in milk, and slow roast stews). Dementia UK have further advice to support this element (www.dementiauk.org/get-support/maintaining-health-in-dementia/eating-and-drinking/).

While a texture-modified diet may be required, consideration should also be given to those who are unsafe in swallowing thin fluids. Patients with dysphagia can struggle with a fast-flowing consistency of water and thin fluids. To slow the flow down and allow a more controlled and coordinated swallow,

a thickener is often recommended (Cichero, 2013). This will aid the safe passage of fluid to ensure hydration is maintained. As per the IDSSI recommendations, fluids may need to be thickened to differing levels. However, many people report a dislike of thickened fluids and therefore drink insufficiently — so maintaining adequate hydration becomes a challenge. In such cases, foods that can be safely managed and include a fluid element can help, such as thick, nourishing soups, custards, yoghurts, etc. It may be that thickened milkshakes or smoothies are better tolerated than previously enjoyed cups of tea or coffee, which will taste different due to the differing mouth feel when thickened.

ONGOING SUPPORT

In the author's clinical experience, it is vital that staff feel that they have adequate education and support to help patients have a safe swallow. A study developing a digital guide for care homes on dysphagia highlighted the request from care home staff for further training to develop skills and knowledge on training staff to ensure that clients are safely allowed to eat and drink suitable foods and fluids (Pownall et al, 2019). This ongoing training will reduce the risk of the wrong consistency being given.

SUMMARY

Risk of malnutrition is multifactorial, and one of these elements is dysphagia. As explained in this article, swallow involves three phases and issues in any one can result in dysphagia. Undertaking adequate nutritional and swallowing assessments can help identify those at risk, so that solutions can be implemented. Ongoing support and training for those involved in caring for the elderly will help to reduce the risk of malnutrition associated with dysphagia. **JCN**

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KEY POINTS

- There is evidence that dysphagia could occur in 13% of the elderly population, with this increasing to up to 75% of those in nursing homes (Holland et al, 2011).
- Swallowing happens in three stages, and dysphagia can occur at any one of these.
- Early identification of malnutrition is key to preventing problems from escalating.
- The International Dysphagia Diet Standardisation Initiative (IDSSI) gives a global standard of descriptors for texture-modified diets and thickened fluids.
- Appropriate assessment and correct recommendations for consistency of foods, will help patients to feel supported to safely manage every mouthful while balancing meal enjoyment and nutritional intake.
- Ongoing support and training for those involved in caring for the elderly will help to reduce the risk of malnutrition associated with dysphagia.

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Revalidation Alert

Having read this article, reflect on:

- How you would identify patients with nutritional needs
- Practical steps you can take for people with dysphagia to improve their nutritional intake
- What is meant by texture-modified diets.

Then, upload the article to the free JCN revalidation e-portfolio as evidence of your continued learning: www.jcn.co.uk/revalidation

Integrating adjunctive therapy into practice: recognising 'hard-to-heal' wounds

Kathryn Vowden, Peter Vowden

The problem of delayed wound healing has been highlighted in several publications which has stimulated debate on variance and the need for updated care pathways. This paper demonstrates how adjunctive therapy can be added to the 'standard care' model, described in the National Wound Care Strategy Programme's recommendations for lower limb wounds, to enhance outcomes for patients with 'hard-to-heal' lower limb wounds (NWCSP, 2020). A decision-making pathway based on published literature is described, which uses wound assessment and observed response to treatment to allow the effective and targeted introduction of adjunctive therapies for 'hard-to-heal' wounds. This approach will allow the cost-effective introduction of new and evolving therapies, such as WoundExpress™ (Huntleigh Healthcare), which addresses the underlying problems associated with resistant lower limb oedema and compromised venous function. The pathway also indicates how other adjunctive or innovative topical wound-based treatments can be integrated to optimise outcomes while providing cost-effective care.

KEYWORDS:

■ Hard-to-heal wounds ■ Venous leg ulcers ■ Adjunctive therapy

The original 'Burden of Wounds' studies undertaken by Guest et al (2015; 2017; 2018a) highlighted the cost, poor outcome and national variance in care provision in relation to the management of chronic lower limb ulceration, which was by far the largest category of chronic wounds. As a direct result of these studies, a national wound care strategy group was established (iWoundsnews, 2019). One area of focus for the group was to reduce variance and improve care and outcomes for patients with lower limb wounds. The output from the group, following review

'Milne et al (2020) ... reported on an international standardised survey of hard-to-heal wounds, finding that wounds are, in general, treated in the same way, irrespective of whether they are hard-to-heal or improving, suggesting that the healing status of a wound is not a major factor in treatment selection.'

and external validation, has been published and provides an updated pathway for lower limb wound management (National Wound Care Strategy Programme [NWCSP], 2020). This pathway emphasises the role of detailed assessment which should be undertaken within 14 days, the recognition and appropriate management of patients with

'Red Flag' conditions, and the early introduction of light compression for all other patients. The aim of this pathway being to progress all suitable patients to 'standard therapy' with a high compression bandage system or hosiery, and to monitor progress to allow early identification of non-responding wounds.

Guest et al (2018a) reported on the poor outcome for patients with venous leg ulcers who fail to respond to therapy, finding that only 53% healed within a year and that the healing rate for an ulcer present for more than a year was very poor, with only limited use of advanced wound care products and referral pathways. This observation is supported by Milne et al (2020) who reported on an international standardised survey of hard-to-heal wounds, finding that wounds are, in general, treated in the same way, irrespective of whether they are hard-to-heal or improving, suggesting that the healing status of a wound is not a major factor in treatment selection. Oien et al (2016) have demonstrated that treatment costs for the management of hard-to-heal ulcers can be reduced with well-developed treatment strategies resulting in shortened healing times.

A 'hard-to-heal' wound has been defined as one that fails to heal with 'standard therapy' in an orderly and timely manner (Troxler et al, 2006). The non-healing wounds highlighted in the Guest et al papers (2015; 2017; 2018a) and confirmed in a further follow-up study (Guest et al, 2020) represent a hard-to-heal cohort of patients and, as these papers show, represent a considerable cost burden to care providers. Current understanding of the complex pathophysiology of chronic wounds and the mechanisms by which healing is impaired has been

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reviewed by Wilkinson and Hardman (2020). The complex interaction between the pathophysiology of venous hypertension and abnormal cellular and biochemical responses within the wound environment have been described by Raffetto et al (2020). This group emphasise the importance of addressing both wound abnormalities and the underlying venous disease processes to maximise healing if cost-effective care is to be delivered.

Initial assessment of a patient with a wound should include the identification of factors that help estimate healing potential and the recognition of 'hard-to-heal' wounds. This will allow prompt addition of adjunctive therapies to 'standard therapy', thus helping to maximise treatment success, avoid protracted, costly, ineffective interventions, and prevent patient disillusionment and clinician frustration (Moffatt and Vowden, 2008; Vowden and Vowden, 2016). Parker et al (2017) and Edwards et al (2018) have developed and validated a risk assessment tool to identify patients at risk of delayed healing or ulcer recurrence, which can assist and guide early treatment decisions to help promote timely healing.

HEALING OF ACUTE AND CHRONIC WOUNDS

The healing of acute wounds is traditionally regarded as being divided into four overlapping phases: haemostasis, inflammatory, proliferation and remodelling (Canedo-Dorantes et al, 2019).

In contrast with the acute situation, in chronic wounds the highly orchestrated reparative response breaks down. There is a tendency for the inflammatory phase, which is initially so important, to become exaggerated. Increased infiltration of inflammatory cells, greater secretion of proinflammatory cytokine, elevated generation of reactive oxygen species (ROS), and increased production of proteolytic enzymes are combined with reduced inhibitor release, for example tissue inhibitors of metalloproteinases (TIMPs) (Medina et al, 2005; Trengove

et al, 1999). Elevated expression of the cytokines, tumour necrosis factor (TNF)- α , interleukin (IL)-1 β and IL-6 upregulates the synthesis of several matrix metalloproteinases (MMP-1, MMP-2, MMP-8, MMP-9) and serine proteases (elastase, plasmin) which, in excess, cause not only deleterious extracellular matrix destruction but also growth factor inactivation (Chen et al, 1997; Lauer et al, 2000; Harding et al, 2002; Medina et al, 2005). The chronic wound environment therefore consists of sustained matrix degradation, reduced growth factor bioavailability and increased fibroblast senescence, which all combine to inhibit cellular proliferation, angiogenesis and tissue repair.

The levels of some biological factors have been related to subsequent wound healing. These include markers of collagen remodelling in venous ulcers and ratios of MMP-9/TIMP-1 in pressure ulcers (Tarlton et al, 1999; Ladwig et al, 2002). It has also been found that a decrease in MMP-1 and MMP-2, but not COX-2, in wound biopsy samples after four weeks can predict better healing of chronic venous ulcers (Bergant Suhodolcan et al, 2021). Despite this information, a Cochrane Systematic Review by Westby et al (2018) identified very low validity evidence regarding any association between protease activity and venous leg ulcer (VLU) healing. In contrast, Lazaro et al (2016) conclude that levels of MMPs can be used to indicate the prognosis of chronic wounds and protease modulating treatments used to improve healing rates. In a systematic review, Tardaguila-Garcia et al (2019) conclude that high levels of metalloproteinases have been correlated with significantly delayed wound healing in wounds of a variety of aetiologies. Despite this, metalloproteinases are not routinely measured in clinical practice and Dissemond et al (2020) conclude that although there is evidence for the superiority of some MMP-inhibiting dressings, more research is needed for different types of hard-to-heal wounds if the routine use of MMP measurement and of dressings targeting MMPs is to be justified.

Table 1: General factors for delayed healing (adapted from Troxler et al, 2006)

Factors
Age
Anaemia
Concordance
Decreased oxygen
Decreased perfusion
Dehydration
Diabetes mellitus
Foreign body
Malignancy
Medication, such as corticosteroids, cytotoxics, immunosuppressives
Microbes — bacterial and fungal load
Necrotic tissue
Nutrition (vitamins, minerals)
Very high or low body mass index (BMI)
Oedema
Organ failure
Radiation
Smoking
Wound type and location

Despite these advances in our understanding of wound biology, predicting healing potential in individual patients remains difficult. Several wound and patient characteristics have been found to be associated with delayed healing of both acute and chronic wounds (Table 1). Xu et al (2014) suggest that routine assessment of wounds using stereophotogrammetric imaging can provide personalised predictions of wound healing time. Gethin (2006) emphasises the importance of accurate wound measurement in predicting healing and details the simple methods available to health care providers to document and record wound size.

VENOUS LEG ULCERS

Characteristics predicting delayed healing

Reviews by Raffetto (2016) and Raffetto et al (2020) emphasise that the pathophysiology of VLU is complex with genetic and environmental factors contributing to the development of chronic venous

disease. These abnormalities in turn potentiate the inflammatory and biochemical abnormalities within any wound. These reviews highlight the importance of a dual approach addressing both wound and venous abnormalities if venous leg ulcer healing is to be optimised. Shi et al (2021) have addressed the issues relating to compression therapy versus non-compression therapy in the treatment of venous leg ulceration, concluding that compression is probably beneficial in terms of improved wound healing, reduced pain and improved disease-specific quality of life.

Franks et al (2016) have highlighted the six perceived benefits of sustained compression therapy in the management of lower limb wounds, which include oedema control, reduced inflammatory mediators and improved haemodynamic function, while Young et al (2021) have outlined the potential benefits of intermittent pneumatic compression (IPC), in particular WoundExpress™ (Huntleigh Healthcare), as an adjunct to compression therapy in the management of mixed ulceration and hard-to-heal VLU. These review findings are supported by Nelson et al (2014), who conclude that there is some evidence to suggest that IPC, when added to compression bandaging in the management of venous leg ulcers, may improve healing.

Parker et al (2015) have reviewed the literature identifying risk factors for delayed VLU healing. Twenty-seven studies of mostly low-level evidence (levels III and IV) identified risk factors associated with delayed healing. Those that were consistently identified included:

- ▶ Larger ulcer area
- ▶ Longer ulcer duration
- ▶ Previous history of ulceration
- ▶ Venous abnormalities
- ▶ Lack of high compression.

Additional potential predictors with inconsistent or varying evidence to support their influence on delayed healing of VLUs included:

- ▶ Decreased mobility and/or ankle range of movement

- ▶ Poor nutrition
- ▶ Increased age.

Guest et al (2018a; 2020) identified that the presence, or suspected presence of infection was associated with delayed healing of many wound types, including VLU. Bui et al (2018) conducted a case record review and identified seven factors that were significantly independently associated with infection, including depression, chronic pulmonary disease, anticoagulant use, calf ankle circumference ratio <1.3, ulcer area ≥ 10 cm², slough in the wound bed, and ulcers with heavy exudate. Many of these factors have also been noted to be associated with delayed wound healing.

‘Stacey (2020) suggests that combining a validated point of care test of wound healing with a systematic approach to wound therapies, has the potential to create a new paradigm of chronic leg ulcer treatment based on biomarker directed wound therapy.’

Bosanquet et al (2019) have suggested that a gene signature can identify people with chronic venous leg ulcers that are unlikely to heal. Stacey (2020) suggests that combining a validated point of care test of wound healing with a systematic approach to wound therapies, has the potential to create a new paradigm of chronic leg ulcer treatment based on biomarker directed wound therapy. These diagnostic markers and their associated therapeutic partners are not, however, yet available for routine practice and fail to address the associated venous hypertension.

RESPONSE TO TREATMENT PREDICTS HEALING

Steed et al (2006) have demonstrated the differing, and early separation of, healing trajectories of ulcers that subsequently heal and those

that remain unhealed after up to 20 weeks of care. Prince and Dodds (2006) have shown that VLU that respond to treatment do so at an almost constant rate and that the initial response to treatment can be a reliable predictor of estimated healing time. These observations support the earlier findings of Phillips et al (2000) and van Rijswijk (1993), who found that the early response of a VLU to appropriate care was highly suggestive of subsequent healing times. These systems are based on Gilman’s formula (2004), which attempts to compensate for variations in ulcer size and shape at onset, and appear to give a good prediction of healing based on early response to treatment.

Phillips et al (2000), looking at percentage reduction in ulcer area, found that approximately 77% of outcomes could be predicted based on a size reduction of more than 44% at three weeks. Likewise, van Rijswijk (1993) suggested that a reduction in ulcer area greater than 30% as early as two weeks was predictive of outcome. Gelfand et al (2002), in an analysis of 29,189 patients, confirmed that, based on the area under the receiver operator characteristic (ROC) curve log rate, log area ratio and percentage change in area can indicate which patients will heal at 12 or 24 weeks of care (receiver operator characteristic 0.72–0.80).

This earlier work was confirmed by Bull et al (2021), who demonstrated that the healing of venous leg ulcers receiving multi-component compression bandaging follows a linear trajectory over a four-week period, as measured by gross area healed, percentage area healed, and advance of wound margin. Wound margin advance was the most linear and was also independent of initial ulcer size and is therefore a useful tool to assess healing response.

These observations indicate that, with careful assessment and repeated wound measurement, it should be possible to identify a sub-population of patients with

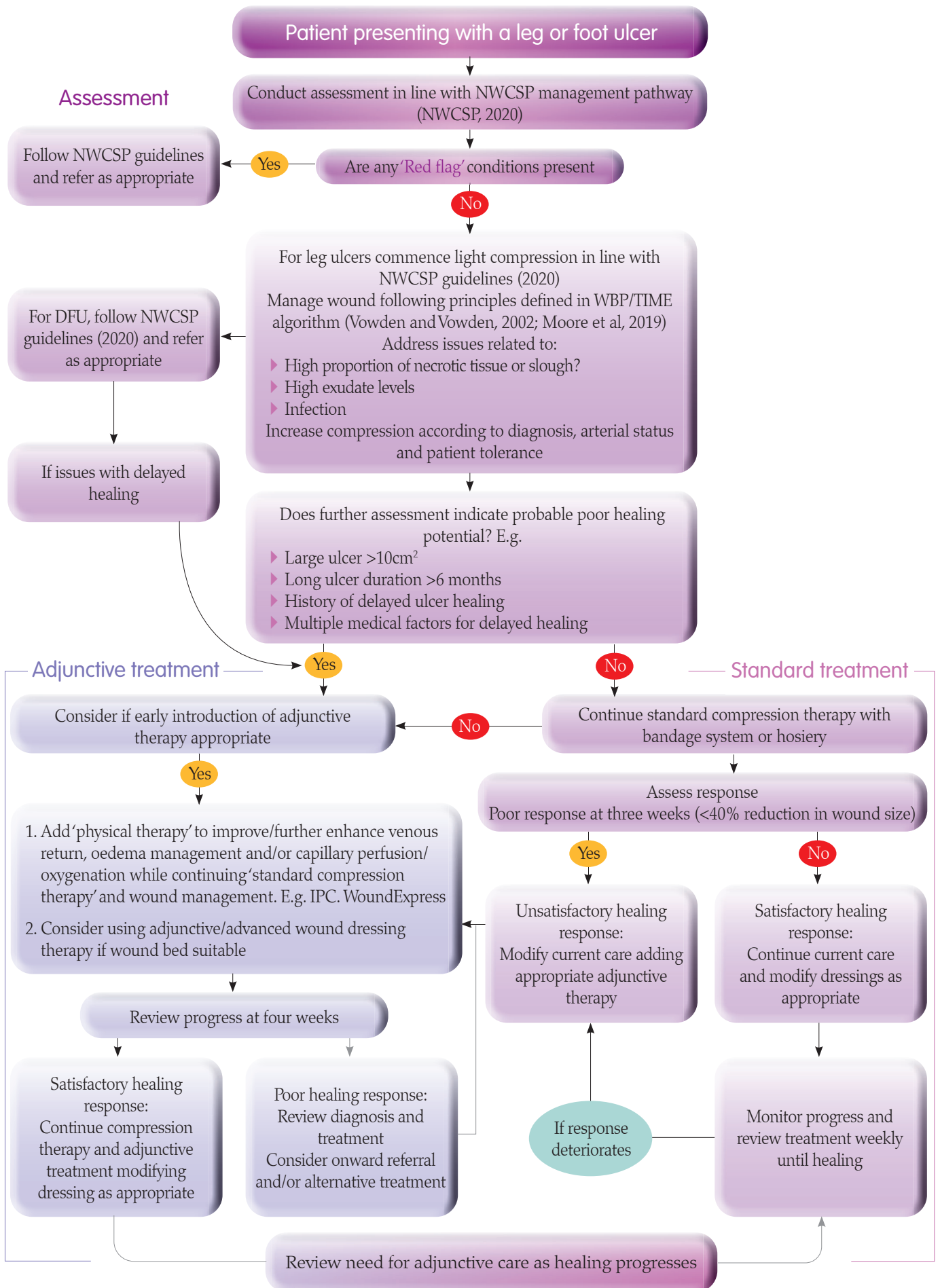


Figure 1. Management algorithm for hard-to-heal leg ulcers.

hard-to-heal venous ulcers within the first few weeks of treatment (Flanagan, 2003a; 2003b). Accurate measurement will allow tracking wound healing, allow healthcare professionals to give patients an indication of likely treatment times, facilitate the identification of complications such as infection at an earlier stage, and allow the targeting of adjuvant therapies (Prince and Dodds, 2006). *Figure 1* indicates how adjunctive therapy, whether additive physical therapy or the introduction of advanced wound dressings, could be included in a management algorithm based on both the assessment of initial risk factors and the evaluation of treatment response to standard care.

OTHER LOWER LIMB WOUNDS

VLU studies have shown that wound characteristics and early response to treatment can predict outcome and identify a 'hard-to-heal' lower limb wound population irrespective of wound aetiology (Troxler et al, 2006).

Characteristics for diabetic foot ulceration (DFU) were reviewed by Troxler et al (2006), who also detailed research predicting ulcer healing potential. Bender et al (2020) suggest that wound characteristics, as assessed at the bedside, have the potential to predict wound outcome and warrant further research. In a systematic review, Tay et al (2019) note that toe blood pressure (TBP) may be a useful bedside assessment to aid prediction of DFU healing. Atkins et al (2018) emphasise the importance of recognising and appropriately managing lower limb oedema in DFU management, as oedema has been associated with delayed healing. Ho et al (2013) suggest that there is promising evidence that active oedema reduction by IPC in the diabetic foot improves ulcer healing, and Young et al (2021) identify a potential role for thigh IPC as an adjunct therapy in DFU management.

The potential role of compression and oedema control in lower limb skin tear management has been highlighted by LeBlanc et al in Best Practice Guidelines (2014; 2018)

and Fletcher et al (2020). Young et al (2021) report the potential role of thigh IPC in oedema management for skin tears and in other lower limb wounds.

'While standard compression therapy is unlikely to be appropriate for patients with pressure ulcers on the lower limb thigh, IPC could be appropriate where oedema is considered to be a barrier to healing.'

Troxler et al (2006) highlight the paucity of literature on pressure ulcers related to the factors that predict healing. However, the factors that predict 'hard-to-heal' venous leg and diabetic foot ulcers are likely to be important in any type of chronic lower limb wound, including pressure ulcers. Certain factors have been associated with pressure ulcer healing and these include increased ulcer severity and greater patient weight (Itoh et al, 1991; Kramer and Kearney, 2000). These findings in relation to pressure ulcer category were confirmed by Guest et al (2018b), who identified worse healing for higher category ulcers but also noted poorer outcome for patients with low body mass index (BMI) (<18.5 kg/m²). Horn et al (2015) have suggested and validated a 'Wound Healing Index' predictive model for both body and heel pressure ulcer healing, which they suggest can identify patients most likely to require advanced therapeutic interventions to achieve healing.

While standard compression therapy is unlikely to be appropriate for patients with pressure ulcers on the lower limb thigh, IPC could be appropriate where oedema is considered to be a barrier to healing. Arvesen et al (2017) have demonstrated in a series of case studies the benefit of IPC in oedema control and wound healing in difficult-to-manage

lower limb wounds, including pressure ulceration.

CONCLUSION

The recently published National Wound Care Strategy for lower limb wounds provides an initial pathway for care which aims to optimise outcomes. Detailed initial assessment and careful wound observation will allow the early identification of patients with hard-to-heal wounds and the early introduction of adjunctive therapy. This may take two forms, manipulation of the wound bed by topical or systemic actions or the addition of physical therapies such as IPC or hyperbaric oxygen to an existing treatment regimen. The introduction of an adjuvant therapy should not, however, be seen as an alternative to good standard care, but as a specific targeted intervention where cost-effectiveness can be demonstrated due to a reduction in healing time and/or a reduction in required healthcare professionals' time. **JCN**

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KEY POINTS

- A national wound care strategy group has been set up to reduce variance in the management of chronic lower limb wounds, improve outcomes and reduce costs.
- A key output of this group has been to publish a pathway outlining the assessment and management of lower limb wounds, especially recognition of red flags and early light compression therapy.
- Chronic wound healing has a tendency for the inflammatory phase or healing to become exaggerated.
- Early response to treatment can predict outcome and identify 'hard-to-heal' lower limb wounds.
- Early identification of hard-to-heal wounds and a targeted, early introduction of adjunctive therapy can be cost-effective in terms of healing time and a reduction in required healthcare professionals' time.

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Revalidation Alert

Having read this article, reflect on:

- The problems associated with delayed wound healing
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Lymphovenous disease: changing the way we look at leg ulcer assessment

Julie Stanton

This article explores why we should adapt assessment of leg ulceration to be more mindful of the presence of lymphoedema. If clinicians can change the assessment process and begin to treat leg ulceration with a lymphatic component differently to venous oedema, this, in turn, can potentially reduce complications such as toe, foot and knee oedema. The introduction of simple changes in documentation and additional training can lead to improved outcomes for patients as well as potential cost savings for healthcare providers.

KEYWORDS:

■ Lymphoedema ■ Assessment ■ Multidisciplinary team working

The financial and health-related impact of chronic wounds cannot be understated, as the cost of wound care has increased from £5.3 billion in 2012–13 to £8.3 billion in 2017–18. Furthermore, the UK is treating more patients — a rise of 1.6 million patients since 2012–13 with a small increase of 9% in a five-year period in healing rates (Guest et al, 2020). We can thus assume that the problem is getting worse and current provision for wound care is inadequate, although this does need to be balanced by the argument that we are potentially identifying more patients due to better assessment and documentation.

Due to rising costs, there has been the development of the All-Party Parliamentary Group (APPG) on Vascular and Venous Disease, which has tried to highlight the extent of this problem in relation to venous disease and what can be done to improve care in the UK (APPG, 2019). The group has highlighted

'... lymphatic dysfunction is not a passive bystander, but an active player in relation to disease and should be targeted in relation to future therapeutic developments.'

that the predominant interest of those involved in the management of vascular disease is targeted towards arterial disease, and 'it is against this backdrop that venous disease sits in near silence' (Carradice, 2020).

The APPG also highlighted the inadequacy of the system with a failure of many GPs to diagnose and treat venous disease appropriately, with 75% of patients with known ulcers never receiving an appropriate assessment or being referred from primary to secondary care (Carradice, 2020). It was found that 64% of clinical commissioning policies were not compliant in providing access to venous treatment — in line with National Institute for Health and Care Excellence (NICE, 2013) guidance (APPG, 2019). This meant that over 90% of patients presenting with superficial reflux did not receive recommended evidence-based treatment within secondary care.

Alongside this, in the author's clinical opinion, it is vital to manage the long-term issues of chronic ulceration due to lymphovenous disease. Phlebolympheoedema or lymphovenous oedema is the most common form of lymphoedema in the Western world — a secondary lymphoedema that develops in patients with chronic venous insufficiency (CVI) (Farrow, 2010). Contributing factors are increased survival of heart failure patients, medications associated with oedema, and increasing obesity (Fife and Carter, 2009; Farrow, 2010; Mortimer and Rockson, 2014; Todd, 2016). In the author's clinical opinion, to improve outcomes for these patients, assessment skills need to be adapted to recognise lymphoedema, with treatment regimens considering oedema and not just assessing and treating patients purely for venous ulceration.

BACKGROUND

Mortimer and Rockson (2014) state that 'the lymphatic system is fundamentally important to cardiovascular disease, infection and immunity, cancer, and probably obesity — the four major challenges in healthcare in the 21st century'. They demonstrated that lymphatic dysfunction is not a passive bystander, but an active player in relation to disease and should be targeted in relation to future therapeutic developments.

Although lymphoedema is not directly responsible for leg ulcer development, it can affect wound healing (Mortimer and Browse, 2003). This is due to reduced oxygenation of the tissues resulting from the presence of oedema (Casley-Smith and Casley-Smith, 1997). As such, skin damage to an oedematous limb may lead to ulceration. Ulceration

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can also follow superficial infection (Green, 2007).

End stage CVI leads to the development of lymphoedema, especially if there are recurrent periods of infection or inflammation due to the bacterial bioburden present in the wound bed. This prolonged oedema and lymphatic impairment can delay wound healing. This tends to be the case in most chronic, hard-to-heal leg ulcer patients seen by the author's leg ulcer service, and it is these ulcers that need improved assessment and treatment to improve patient outcomes.

The term chronic oedema acts as an umbrella description of abnormal swelling of tissues which lasts for more than three months, regardless of whether the aetiology is lymphatic or venous in origin (Humphreys et al, 2017) (*Table 1*).

Mortimer and Rockson (2014) state that 'it may be better to consider the presence of chronic oedema as synonymous with the presence of lymphoedema, as all oedema represents relative lymph drainage failure'. Peripheral oedema on assessment is usually classified according to possible systemic causes, such as local obstruction, heart failure, infection, nephrotic syndrome, injury, or tumours.

The assessment approach taken needs to appreciate that there is usually more than one cause of

oedema, taking into account the central role of the lymphatic system in drainage and tissue fluid balance (Mortimer and Rockson, 2014).

The characteristics of chronic oedema are (Farrow, 2010; Bianchi et al, 2012; Ellis, 2015; Wound Care People, 2019):

- ▶ Swelling of more than three months' duration, which remains on elevation
- ▶ Skin and tissue changes that may include:
 - Dry, flaky skin
 - Hyperkeratosis — hard, scaly skin
 - Skin creases, e.g. around the ankle and toes
 - Fibrosis of the tissues
 - Lymphangioma — blister-like bulging of dilated lymphatic vessels
 - Papillomatosis — cobblestone effect on the skin due to lymphangioma and fibrosis
 - Increased subcutaneous fat
- ▶ Tendency to bacterial and fungal infections
- ▶ Positive Stemmer's sign (inability to pinch fold of skin at base of second toe due to thickening).

ASSESSMENT

Thorough, holistic assessment is required to tailor care to the patient's oedema type and the presenting problems within the wound bed (Wound Care People, 2019). This includes talking to the patient to understand their objectives and knowledge of their condition. In

turn, this can help with treatment concordance if a good patient–nurse therapeutic relationship is established (Charles, 1995; Mandal, 2006; Morgan and Moffatt, 2008; Stanton et al, 2016). Indeed, compared to patients without lymphoedema, those with the condition present with poorer psychological adjustment and lowered health-related quality of life (Moffatt et al, 2017).

A recent chronic oedema best practice document (Wound Care People, 2019) advocates a six-step assessment process:

- ▶ Story
- ▶ Self-care
- ▶ Site
- ▶ Skin
- ▶ Size
- ▶ Shape.

This is a simple process to follow and can easily be incorporated into leg ulcer assessment and allows for more accurate assessment of oedema.

Story

History and medical background

Ascertaining the duration of the oedema and when it started may help to indicate cause, e.g. if the swelling has followed recent surgical intervention or an insect bite, or if the patient has had recurrent venous ulcers. Arterial status should also be assessed. This should include either an ankle brachial or toe brachial pressure index, as well as clinical and physical examination of the leg and foot (British Lymphology Society [BLS], 2019), e.g. is there any family history of venous disease, primary lymphoedema or lipoedema? Assess nutritional status, as protein deficiency leads to lower oncotic pressure (a form of pressure in the circulatory system which encourages water to cross the barrier of the capillaries and enter the circulatory system, however when its low, it goes into the interstitial space which can cause oedema), which can cause oedema.

All co-existing morbidities or significant medical history should be identified and documented. The following have a significant effect on either wound healing or the development of lymphatic changes:

Table 1: Causes of chronic oedema (Lymphoedema Framework, 2006; Newton, 2011; Todd, 2016; Wound Care People, 2019)

Overload	Venous system malfunction leads to fluid overloading the lymphatics resulting in failure
Insufficient lymphatics	Congenital abnormality can result in the absence of some lymph vessels from birth, or treatment of disease may require the surgical removal of lymph nodes
Obstructed lymphatics	Lymph nodes or vessels can become obstructed by benign or cancerous growth
Abnormal lymphatic contractability	The lymph vessels do not move fluid as well as they should
Trauma to lymphatics	Damage may occur to the lymphatic system because of surgery or trauma
Obesity	Extra weight in the abdomen can put undue strain on the lymph vessels
Immobility	Puts undue strain on the lymph vessels
Chronic venous hypertension	Resulting from failed or damaged valves in the leg veins, can lead to pooling of blood in the legs, resulting in oedema

Table 2: Medications that may cause oedema (Todd, 2016)

Calcium channel blockers (e.g. amlodipine, felodipine etc)
Non-steroidal anti-inflammatory drugs (NSAIDs) (ibuprofen, naproxen, gabapentin)
Hormones (e.g. oral contraceptives, oestrogen, testosterone and tamoxifen)
Steroids, e.g. prednisolone
Diabetes medication (thiazolidinediones), e.g. pioglitazone, rosiglitazone

- ▶ Restricted mobility
- ▶ Obesity
- ▶ Diabetes
- ▶ Heart failure
- ▶ Dependency
- ▶ Chronic venous hypertension (lipodermatosclerosis)
- ▶ Hip/knee replacements
- ▶ Surgery, potentially involving damage to or loss of lymph nodes, i.e. hysterectomy, prostatectomy (Farrow, 2010; Newton, 2011; Humphreys et al, 2017; Wound Care People, 2019).

Psychological status and socio-economic circumstances

A best practice statement encourages the assessor to ask questions relating to how the patient is managing or coping with their condition, and any issues related to quality of life and assistance with activities of daily living (Wound Care People, 2019). Lifestyle choices which may contribute to swelling need to be investigated, e.g. sedentary lifestyle or obesity. Are there any work life or social circumstances affecting the condition due to prolonged periods of standing and sitting? This is important as it can influence the type of compression that patients require, which is usually stiffer with potentially higher levels of pressure.

Psychosocial assessment to determine the impact of the swelling on the patient is important, as this can adversely affect body image. Evaluating the patient's range of movement and dexterity will highlight any difficulty they might have in reaching their feet to allow washing or application of hosiery. Exaggerated skin folds provide the ideal environment for fungal infection. Often, hosiery gathers and tourniquets

here and repeated attempts to pull hosiery up can damage the skin (Todd, 2014). Pain should also be assessed, as 50% of patients experience long-term pain in the limb(s) (Moffatt et al, 2003). Almost one-third of patients with chronic oedema experience cellulitis, of which 27% of these episodes require hospitalisation for intravenous (IV) antibiotic therapy (Moffatt et al, 2003). It is important that any previous infections are also recorded.

Medications

At assessment, if patients have lymphoedema present this can lead to diuretics being prescribed by GPs to deal with the identified swelling. However, diuretics remove none of the waste fluid, as it is a heavier molecule fluid than just water itself, and so use of diuretics for patients with lymphoedema will merely increase concentration of proteins and macromolecules in the interstitial space and speed the inflammatory process, leading to irreversible skin and soft tissue changes and increased risk of cellulitis (Raymond et al, 2017; Murdoch, 2020). Thus, healthcare professionals need to establish if diuretics are solely to treat lymphoedema or for other medical conditions, such as heart failure, hypertension etc, as if the former and not related to heart failure, renal failure, or hypertension, a discussion should be undertaken with the general practitioner to discontinue their use to prevent further deterioration in the wound.

It is vital to assess all medications that the patient is taking, in case they cause or exacerbate oedema (Table 2).

Self-care

Healthcare professionals should evaluate how prepared the patient is to be proactive in their care and take responsibility for their condition, as compression therapy may need to be introduced which they will have to manage, or techniques such as simple lymphatic drainage (SLD) and exercises (Wound Care People, 2019). Patient willingness to participate in their care can improve outcomes alongside the normal treatment regimens provided by clinicians.

Site

The following points are important to check in this part of the assessment process:

- ▶ Is the swelling acute or chronic?
- ▶ Assess the whole limb and the abdomen for oedema
 - Is there bilateral or unilateral swelling?
 - Is swelling localised or more generalised?
 - Is there an inflammatory oedema due to allergies or contact dermatitis?

Bilateral swelling can indicate heart failure, chronic venous insufficiency, or nephrotic syndrome (Wound Care People, 2019). Patients with heart failure may present with swelling in both legs that extends into the trunk, usually accompanied by a dry cough, breathlessness on exertion or when lying flat. However, renal and liver conditions can also result in bilateral swelling. Oedema in one leg can indicate deep vein thrombosis (DVT) if accompanied with pain, tenderness to touch and redness. Swelling in one leg can also indicate CVI or malignancy (Wound Care People, 2019).

The location of lymphoedema gives clues to the possible underlying causes and informs where compression therapy should be applied (Wound Care People, 2019).

Skin assessment

In 2007, the Bonn Vein study found 100% of participants with active venous ulcers also had a positive Stemmer's sign, indicating lymphoedema (Rabe et al, 2013). To assess for lymphoedema, a simple,

Remember...

For many patients there is no single cause of their oedema. For example, a patient may have had surgery, such as a hip or knee replacement, DVT in the same leg, become immobile as a result of arthritis, have varicose veins and be on medication which may exacerbate oedema (Keeley, 2008). Therefore, identifying the cause is essential for correct treatment.

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Figure 1.
Assessing skin for lymphoedema.



Figure 2.
Limbs with chronic inflammation and fibrotic tissue.

manual test can be performed to identify early soft tissue changes indicative of lymphoedema and fibrosis. The Stemmer's Test, the Bjork Bow Tie Test, which is an expanded version of Stemmer's Test, and the pinch skin test (Wigg et al, 2016; Bjork, 2013; Bjork and Hettrick, 2018) can be performed anywhere on the body. The Stemmer's sign is to try to pinch and lift a skinfold at the base of the second toe. If you can pinch and lift the skin, Stemmer's sign is negative, if you cannot, the sign is positive.

Skin that is positive for lymphoedema will be thickened, less pliable and produce limited or no 'bow tie' of wrinkles (*Figure 1*). This is indicative of chronic inflammation, tissue thickening and fibrotic soft tissue changes (*Figure 2*).

Skin around a wound site should also be assessed by modifying the Stemmer's to assess skin texture in affected areas (Bjork and Hettrick, 2018). This pinch skin test can be undertaken on the leg to detect areas of fibrosis and soft flowing lymphatics. It is important to feel the skin to see where the fibrotic changes end and there are 'soft spots', i.e. where the lymphatics are draining to (Wigg, 2016). These soft spots can be

marked on a body map that identifies where wounds are. They can also be used to highlight areas of fibrotic, hard, or soft oedema.

The following should also be assessed (Lymphoedema Framework, 2006):

- ▶ Sensitivities to previous treatments
- ▶ Dry skin and hyperkeratosis (excess lymph fluid in the skin causes it to become thickened)
- ▶ Signs of venous hypertension, haemosiderin staining, induration, varicose eczema or atrophy blanche, sub-malleolar venous flare, varicose veins and lipodermatosclerosis (*Figure 3*) (Keeley, 2009)
- ▶ Any signs of infection or cellulitis (*Figure 4*). Lymphoedema means that the immune system is compromised, especially in the affected area. A delayed immune response and damaged lymphatics in the swollen tissue means that infection can occur suddenly. Cellulitis is nearly always unilateral (Opuku, 2015), so if redness and swelling is present in both legs, it is unlikely to be caused by cellulitis and a differential diagnosis should be considered, such as red legs or eczema
- ▶ Temperature and appearance of the surrounding skin (looking for peripheral arterial disease)
- ▶ Fungal infections, such as athlete's foot, which commonly occur between toes and in skin folds (*Figure 5*)
- ▶ Lymphorrhoea — leakage of lymph through the skin. This occurs in untreated oedema and results in rapid swelling that the skin cannot accommodate. It appears as beads of fluid which put the affected area at risk of skin damage, since the skin becomes very wet and broken, increasing the likelihood of cellulitis (Morgan and Thomas, 2018)
- ▶ The wound bed should be assessed utilising a wound bed assessment tool, such as TIME (tissue, inflammation, moisture, edge of wound; Moore et al, 2019). However, the surrounding periwound area should be evaluated for fibrosis and any

tissue hardening, as this will have a bearing on the microcirculation, oxygenation and nutrition of the wound bed (Williams, 2009).

Shape

Examine the shape of the limb:

- ▶ Is it regular or irregular? Does it resemble an inverted champagne bottle shape (*Figure 3*)?
- ▶ Are skin folds present?
- ▶ Is oedema pitting or non-pitting?
- ▶ Is swelling confined to the feet/foot or does it extend over the knees? (*Figure 6*)
- ▶ Are the toes affected?
(Wound Care People, 2019)

These factors will have a bearing on how the wounds and oedema are managed, effectively targeting compression therapy to oedematous areas and correcting the limb shape as far as possible. This may include adapting bandaging techniques to incorporate the toes, taking the compression therapy over the knee or to the thigh, introducing more complex techniques such as Kinesio® taping, the use of foam, and adapted bandaging techniques to break down fibrosis.



Figure 3.
Lipodermatosclerosis to lower limb.



Figure 4.
Infected lower limb.



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Figure 5.
Fungal infection between the toes.



Figure 6.
Swelling extending above the knees.

Size

Limb circumference measurements, which evaluate the degree of swelling and monitor the effectiveness of treatment, should also be undertaken. Clinicians usually record calf and ankle measurements in uncomplicated venous disease, however, when lymphoedema is present, more in-depth measurements may need to be considered. Within lymphoedema clinics, measurements are taken at every 10cms from the floor to the thigh, although it may be easier to measure at the standard hosiery measurement sites (*Figure 7*). Comparison measurements are undertaken on a weekly basis by observing for a reduction in the circumference measurements. This helps to assess whether the compression is effective and when the oedema has potentially stabilised enough to measure for hosiery, as maintenance therapy when healed. If only one limb is affected, the other limb can be measured as a comparison (Lymphoedema Framework, 2006).

Assessment should aim to identify what stage the oedema is, namely:

- ▶ Early stage — oedema usually presents as 'pitting' that reduces overnight or with elevation
- ▶ Disease progression — if allowed to progress untreated, the tissues become hard as waste products accumulate due to the lymphatic system's inability to drain excess fluid, meaning that the oedema does not reduce with elevation or overnight
- ▶ Late stage — the affected tissues become hard, fibrosed and non-pitting; oedema does not reduce with elevation or rest and you begin to see pronounced limb-shape changes with evident skin folds and an increasing risk of episodes of cellulitis (Wounds UK, 2014).

VASCULAR ASSESSMENT

Vascular assessment should include either ankle brachial pressure index (ABPI) or toe brachial pressure index (TBPI) measurement. The ability to undertake a toe pressure should, where possible, be incorporated into the general assessment of all patients with lymphoedema, as ABPI readings can be elevated when oedema is present due to the volume of fluid present in the tissue, which can potentially lead to inaccurate readings giving a falsely higher ABPI (Doherty et al, 2006; European Society of Cardiology [ESC], 2011). Automated systems can be used, but clinicians need to ensure that they can interpret waveforms as well as the ABPI/TBPI reading.

National guidelines recommend that vascular assessment be carried out as part of holistic assessment for patients with ulceration to exclude occult arterial disease before starting compression therapy for patients with leg ulceration (Clinical Resource Efficiency Support Team [CREST], 1998; Royal College of Nursing [RCN], 1998; Scottish Intercollegiate Guidelines Network [SIGN], 1998). However, there is no such guidance for patients with lymphoedema (Wounds UK, 2009), resulting in many instances where ABPI/TBPI measurements are not undertaken due to the size of the limb.

Cuff size is also important. Those



Figure 7.
Standard compression hosiery measurement sites.

suggested below are guidelines for arm circumference, but may also be applied to leg circumference:

- ▶ Limb circumference 22–26cm — small adult cuff 12–22cm
- ▶ Limb circumference 27–34cm — adult cuff 16x0cm
- ▶ Limb circumference 35–44cm — large adult cuff 16x36cm
- ▶ Limb circumference 45–52cm — adult thigh cuff 16x42cm (Wounds UK, 2009).

Paediatric cuffs can be placed around the hallux to undertake toe pressures, but care needs to be taken to ensure that the readings are interpreted slightly differently, as a normal TBPI is above 0.7 rather than 0.8 in ABPI.

The size of the Doppler probe is important due to the signal distortion caused by the oedema in this patient group. It may be necessary to use a Doppler probe with a lower frequency than usual, a 5mHz rather than 8mHz, to locate the signal.

Assessment of pedal pulses in patients with lymphoedema can be difficult due to the volume of fluid present in the tissue (Doherty et al, 2006). Although simple palpation techniques can be carried out, they are essentially flawed due to the distortion of the pulse signal through the oedematous tissue.

Another useful resource when looking at vascular assessment is the

utilisation of the British Lymphology Society (BLS) vascular assessment tool (BLS, 2019). This allows a simple checklist to be used to ascertain whether the arterial status is safe for the use of compression if you cannot perform a Doppler test.

DISCUSSION

A structural change within the NHS is needed to manage the increasing demand for wound care and improve patient outcomes (Guest et al, 2020). The author maintains that one of those changes is to train nurses in both tissue viability and lymphoedema to provide a one-stop service to patients, but also to educate general practice, community and district nurses to assess for the presence of lymphoedema, especially lymphovenous disease.

Using a multidisciplinary team (MDT) approach is vital for venous leg ulcer management to promote continuity of care (Kjaer et al, 2005; Harding, 2006). However, the findings from the 'Burden of Wounds' study suggest that the MDT approach is not always available or implemented (Guest et al, 2016), impacting on patient care and outcomes. The National Wound Care Strategy Programme (NWCSP) recommends referral of patients to lymphoedema services, however this is dependent on availability and their willingness to treat patients with lower limb ulceration.

A 'seamless service' through integration, coordination, and the sharing of information between different specialists and teams can promote continuity of care (Gulliford et al, 2006). The combined tissue viability and lymphoedema service at Healogics Wound Healing and Lymphoedema Centres offers

this, which, in the author's clinical experience, has led to better continuity of care, cost savings and improved outcomes.

A best practice statement looking at holistic management of venous leg ulceration (Wounds UK, 2016) highlighted the presence and distribution of oedema that is more likely to become non-pitting with chronicity due to development of fibrotic tissue, but fails to mention that this is due to damage to the lymphatic system due to end-stage venous failure. However, a later best practice statement (Wounds UK, 2019) mentions that specialist bandaging techniques using inelastic compression may be required to accommodate unusual limb shape or to treat toe swelling. It also recommends referral to a lymphoedema service if available. In the author's clinical opinion, a better approach would be for these patients to be seen by the same nurses and service. This would include changing the way we educate nurses in the community to include the assessment and treatment of lymphoedema at its earliest stages, rather than pure venous disease assessment and treatment.

SUMMARY

In the author's clinical opinion, there are some simple changes that can be made to treatment regimens for patients with oedema, such as:

- ▶ Correctly assessing the cause and appearance of any oedema present
- ▶ Measuring the limb circumference regularly to monitor treatment
- ▶ Assessing for swelling to the toes and above the knee
- ▶ Knowing where soft spots are on the patient's leg
- ▶ Assessing arterial status by utilising TBPI if able or using the BLS (2019) checklist.

More complex patients with venous leg ulceration due to CVI and late-stage lymphoedema can be cared for by specialist tissue viability nurses with additional lymphoedema qualifications and training, reducing the requirement for two assessments and waiting for

referrals to, in many cases, non-existent lymphoedema services.

To effectively treat lymphovenous disease, it is vital to first assess the type of oedema that is presenting in order to treat the wound effectively. This requires being trained and competent in recognising lymphoedema, rather than concentrating purely on venous, arterial or mixed aetiology ulceration. The assessment process and documentation thus needs to adapt to reflect the changing needs of patients in relation to oedema. **JCN**

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Practice point

If lymphovenous disease is present, it needs to be identified to be able to plan effective treatment regimens and prevent the cycle of recurrent infection and improve the healing outcomes in this group of patients.

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The three Ds: dementia, delirium and depression

Karen Harrison Dening, Zena Aldridge

When a person experiences symptoms that are suspected to be a possible dementia, they may be referred for specialist memory assessment. However, in the initial diagnostic stages, delirium and depression are differential diagnoses that require consideration, with attention paid to ruling these out as they can mimic the presentation of dementia. Similarly, delirium and depression can be superimposed on a person who already has an existing diagnosis of dementia. In both instances, this can be distressing and debilitating and requires community nurses to be able to differentiate between the conditions and to take appropriate measures to enable rapid identification and assessment and, when required, onward referral for treatment and management. The differentiating signs and symptoms of the three conditions can vary in their subtlety and similarity and require vigilance to identify in a timely manner. Community nurses have a significant role to play in the screening, identification, assessment and management of patients with dementia, delirium and depression. This paper is the fifth in a series that follows two patient stories in their experiences of dementia.

KEYWORDS:

■ Dementia ■ Delirium ■ Depression ■ Patient stories

When a person experiences memory loss or other features that may indicate symptoms of suspected dementia, they may be referred for specialist assessment, usually a memory assessment service which has expertise and knowledge in memory assessments and diagnosing dementia. However, in the initial diagnostic stages, delirium and depression are differential diagnoses that require consideration, with attention paid to ruling these out as they can mimic the presentation of dementia. As well as delirium or depression, there may be evidence of

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‘Dementia, delirium and depression are often referred to as “the three Ds” (Downing et al, 2013). These are all serious conditions that are common in older people and have similar presentations, which may go undetected and therefore untreated.’

vitamin deficiencies, infections and metabolic disorders, the effects of which may be reversible (Day, 2019). It is also important to recognise that a person diagnosed with dementia may also develop delirium and/or depression intercurrently. Therefore, it is vital to have an understanding of the risk factors that may increase the likelihood of developing delirium and/or depression at any time throughout the life course of dementia.

DIFFERENTIATING BETWEEN DEMENTIA, DELIRIUM AND DEPRESSION

Dementia, delirium and depression are often referred to as ‘the three Ds’ (Downing et al, 2013). These are all serious conditions that are common in older people and have similar presentations, which may go undetected and therefore untreated (Hoffmann et al, 2018; Harrison Dening, 2019). This might be especially so as dementia progresses, as sometimes dementia may diagnostically overshadow other serious conditions (Tolman and Harrison Dening, 2018; Aldridge et al, 2020). This is where it is assumed that certain behaviours, signs and symptoms are attributed to dementia, thus failing to recognise the presence of other conditions. There are differences in the assessment, treatment and support recommended for each of the three Ds, so it is vital that community nurses can identify the risks, signs and symptoms of all three conditions (Table 1) (Downing et al, 2013; Harrison Dening, 2019).

DELIRIUM

Delirium often involves a sudden, and fluctuating, deterioration of mental functioning, which is triggered by acute illness of the body or brain, acute injury or drug intoxication (Oh et al, 2017). It is a common and serious medical emergency (National Institute for Health and Care Excellence [NICE], 2010). Signs and symptoms can include impaired attention, memory disturbance, disorientation, and disorganised thinking, altered perceptions (visual hallucinations, illusions, delusions), and emotional disturbance (Manning et al, 2013). People with dementia are at

high risk of developing delirium superimposed on their dementia (MacLulich et al, 2013).

Poorly recognised and managed delirium in people with dementia is associated with adverse outcomes, such as premature admission into long-term care, increased length of hospital stay and even death (Kristiansen et al, 2018). The most significant challenges to care are the person’s compromised communication and the demand on nurses for expert knowledge, balanced against time constraints in clinical settings (Kristiansen et al, 2018).

However, it is recognised that nurses may often lack the skills or training to enable the early recognition and management of delirium (Thomas et al, 2021). These are all challenges experienced by community nurses in caring for patients with dementia generally. Distinguishing between dementia and delirium can though lead to fewer adverse outcomes and potentially harmful interventions, such as the inappropriate use of antipsychotic medicines (FitzGerald et al, 2019). However, for people who are experiencing symptoms of delirium that may cause them to place themselves or others at risk, and who have not responded to verbal and non-verbal de-escalation techniques, there may be a need to consider prescribing antipsychotic medication for a short period of time (usually a week or less) (NICE, 2010), i.e. not routinely, but on an individual case-by-case basis.

Also important in identifying delirium is knowing which patients are potentially at higher risk of developing the condition, including those (Holt et al, 2013):

- ▶ Aged over 65 years
- ▶ Experiencing cognitive impairment or dementia
- ▶ With hip fracture
- ▶ With severe illness.

Precipitating risk factors that may lead to hospital admission for delirium include: infections both urinary and lung, medication, dehydration and electrolyte

Table 1: Comparison of features of dementia, delirium and depression (Downing et al, 2013)

Feature	Dementia	Delirium	Depression
Onset	Insidious (months to years)	Acute (hours to days)	Acute or insidious (weeks to months)
Course	Progressive	Fluctuating	May be chronic
Duration	Months to years	Hours to weeks	Months to years
Consciousness	Usually clear	Altered	Clear
Attention	Normal except in severe dementia	Impaired	May be decreased
Psychomotor changes	Often normal	Increased or decreased	May be slowed in severe cases
Reversibility	Irreversible	Usually	Usually

Table 2: Signs and symptoms of depression (Royal College of Psychiatrists, 2014)

<ul style="list-style-type: none"> ▶ Low mood and sadness ▶ Loss of interest in life and being unable to enjoy usual activities ▶ Feelings of tiredness and lethargy, with simple tasks taking a large effort ▶ Loss of appetite and weight ▶ Restlessness ▶ Worry, more than usual ▶ Tendency to isolate oneself ▶ Irritability ▶ Sleep disturbances with early morning wakening and difficulty getting back to sleep ▶ Loss of confidence 	<ul style="list-style-type: none"> ▶ Feelings of worthlessness and/or being a burden to others ▶ Low concentration ▶ Anxiety and panic ▶ Loss of libido ▶ Feelings of guilt, perhaps dwelling on things from the past and/or getting things out of proportion ▶ Suicidal thoughts ▶ Somatisation, such as aches and pains that can sometimes lead to the person visiting their GP frequently
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disturbances (Magny et al, 2018). There are two main sub-types of delirium, hypoactive and hyperactive (NICE, 2010).

Hypoactive delirium

Hypoactive delirium is characterised by drowsiness and inactivity and can be confused with depression (NICE, 2010). The main features are (Hosker and Ward, 2017):

- ▶ Low concentration
- ▶ Reduced awareness of surroundings
- ▶ Reduced movement and mobility
- ▶ Functional decline
- ▶ Reduced appetite.

The increased likelihood of misdiagnosis or failure to diagnose hypoactive delirium in people with dementia can lead to an increased risk of mortality (Franco et al, 2014). This is probably because of a failure to detect the underlying, undiagnosed acute illness, often due to the person’s reduced ability to verbalise symptoms.

Hyperactive delirium

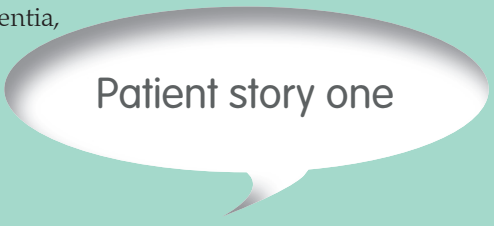
Hyperactive delirium is characterised

by restlessness and agitation (NICE, 2010). It is the least common type of delirium, yet most frequently diagnosed (Hogg 2013), possibly because of its presentation of agitation, delusions and disorientation, which are often pronounced and disruptive in many care settings. Some of these behaviours are associated with additional risk factors, such as increased risk of falls, lack of sleep, refusal behaviours, which can lead to difficulty managing treatment plans, and an increased risk of harm to themselves or others (Featherstone et al, 2018).

DEPRESSION

Depression is defined by low mood and/or a loss of interest or pleasure in most activities. Depression in older people is often associated with disability, increased mortality, and poorer outcomes from physical illness, with a subjectively worse symptom profile and longer recovery time than for younger people. As with dementia and delirium, most community nurses will encounter

Dhriti is a 58-year-old woman who has lived with a diagnosis of vascular dementia, heart failure and hypertension. It is now five years since her diagnosis of dementia and her husband, Arjun, is her main carer. Arjun shares Dhriti's care with a paid carer who now provides care twice a day over the entire week; helping Arjun to wash and dress his wife and then later in the day to prepare her for bed. Dhriti has had a longstanding problem with continence and has experienced a couple of urinary tract infections. It was difficult for Arjun to reach a point of feeling competent and confident in managing Dhriti's increasing urinary incontinence, but now she is experiencing occasional faecal incontinence, which is thought to be due to her ongoing issue of constipation.



Arjun is trying to negotiate an increased care package to include another call in the middle of the day to help maintain Dhriti's hygiene as her incontinence care needs increase.

Arjun notices that over the past week, Dhriti can present very differently day by day. She can seem her usual self one hour and almost unresponsive the next. She has also become less interested in their Asian news programme, something that she enjoyed as it was spoken in their native language, and seems less aware of both Arjun and their home environment. Coupled with this, is a general slowing down of her movements and loss of appetite. Dhriti has always enjoyed her food, especially that prepared by their daughter as her traditional Asian cooking skills were largely taught by her mother. Arjun wonders if this indicates a further decline in his wife due to her dementia.

pre-existing diagnosis of dementia through our two fictional patient stories that have run throughout this series on dementia care; 'Dhriti Singh' and 'Gregory Brewin' (Harrison Dening and Aldridge, 2021a; Aldridge and Harrison Dening, 2021a, Harrison Dening and Aldridge, 2021b; Aldridge and Harrison Dening, 2021b).

PATIENT STORY ONE: DHRITI SINGH

Older people with dementia can be at high risk of developing delirium that is superimposed on their dementia, so vigilance is needed. Dhriti is at high risk of developing a delirium, partly due to her increasing incontinence. She has already experienced a couple of urinary tract infections (UTIs), but these were in the earlier stages of her dementia when she was better able to tell others about how she was feeling. However, she is now in the moderate stages of her dementia, added to which she is experiencing incidents of faecal incontinence which increases her risk of infection. The cause of the faecal incontinence is suspected to be due to her ongoing issues with constipation, which itself can be a precipitating risk factor for delirium (Rosen et al, 2015).

It is suggested that 80% of delirium could be identified by asking the question: 'Do you think [person's name] is more confused than normal lately?' (British Geriatrics Society [BGS], 2019). NICE guidance (2010) recommends the confusion assessment method to support a diagnosis of delirium.

older patients with depression in their day-to-day care (Rodda et al, 2011). Treatment for depression can be effective for older people, however, depression is often under-recognised and under-treated due to the incorrect belief that sadness is inevitable or even normal as one ages (Rodda et al, 2011). Symptoms can differ to those typical in younger adults, for example, older people may experience additional physical symptoms and increased anxiety or agitation (Rodda et al, 2011; Royal College of Psychiatrists, 2014) (Table 2).

Sleep disturbances are increasingly common in older people and a risk factor for depression in this population (Fiske et al, 2009). There is also a higher risk of suicide among older people with depression, largely because of the failure to recognise it or the false attribution of the signs and symptoms of depression to the ageing process (Conejero et al, 2018).

This paper will now consider some of the issues of delirium and depression superimposed on a

Reflective points

The changes in Dhriti's behaviour have only been evident for about a week. Reflecting on what you know about the 'three Ds', what do you think might be the possible cause to this sudden change?

What would you consider as your next steps?

Table 3: Diagnosis of delirium (BGS, 2019)

1. Acute onset and fluctuating course	▶ Should be easily obtained from a collateral history
2. Inattention	▶ Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said? This can be assessed while talking to the patient, or, for example, inability to count backwards from 20-1. Ability to recite months of the year backwards is another good test for inattention
3. Disorganised thinking	▶ Was the patient's conversation rambling and incoherent? Did they demonstrate an unclear or illogical flow of ideas? Did they switch rapidly from subject to subject?
4. Altered level of consciousness	▶ Is the patient hyper-alert, drowsy or difficult to rouse?

Delirium can be diagnosed when items 1 and 2 are present, and either item 3 or 4 (BGS, 2019) (Table 3).

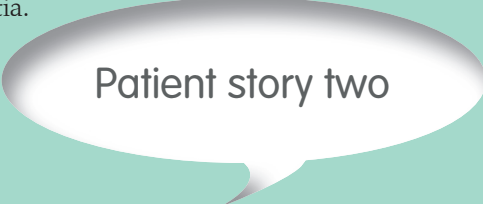
There are several diagnostic tools for delirium, but one commonly used in primary care is the confusion assessment method (CAM) (Inouye et al, 1990; Waszynski, 2012). CAM is a standardised evidence-based tool that enables non-psychiatrically trained clinicians to identify and recognise delirium quickly and accurately in both clinical and research settings. It includes four features found to have the greatest ability to distinguish delirium from other types of cognitive impairment, such as acute onset and fluctuating course, inattention, disorganised thinking, and altered level of consciousness (Inouye et al, 1990). Advances in recognition and diagnosis can improve the treatment and management of delirium (Oh et al, 2017).

Table 4: Recognising and preventing delirium (NICE, 2010)

Assess and plan
Factors that make delirium more likely are listed below, with steps to reduce the risk
Cognitive impairment or disorientation
<ul style="list-style-type: none"> ▶ Make sure the person can see a clock and a calendar ▶ Talk to the person to orientate them ▶ Make sure any hearing aids and glasses are being worn and work well
Dehydration or constipation
<ul style="list-style-type: none"> ▶ Encourage the person to drink ▶ Support the person to avoid or address constipation
Infection
<ul style="list-style-type: none"> ▶ Look for signs of infection ▶ Avoid using a catheter as far as possible
Disturbed sleep
<ul style="list-style-type: none"> ▶ Avoid disturbing the person during sleep periods
Limited mobility
<ul style="list-style-type: none"> ▶ Encourage the person to walk ▶ Provide support to do a range of active exercises, even if walking is not possible
Pain
<ul style="list-style-type: none"> ▶ Look for signs of pain ▶ Make sure pain is well managed
Poor food intake
<ul style="list-style-type: none"> ▶ Make sure any dentures are clean, being worn and fit well

Gregory Brewin has a mixed diagnosis of Alzheimer’s and vascular dementia.

He has managed to continue to live alone for several years, supported by community and primary care services who have monitored his other comorbid conditions of diabetes and chronic obstructive pulmonary disease (COPD). To their credit and care, he has remained well for the last three years with a small but growing package of care involving a paid carer going to see Gregory twice a day to support his eating and, more recently, his personal hygiene and safety. Gregory had been leaving his home during the night and early hours of the morning dressed in his pyjamas and sometimes with no footwear. Initially he had responded angrily to any attempts to help him, but now he has become more and more acceptive of support.



Patient story two

Over the last four weeks his usual care worker has noticed a change in Gregory. He is often pacing the kitchen and sitting room when she calls and wringing his hands. She is finding it increasingly difficult to reassure and calm him. When she has completed her care tasks and moves to leave, he does not seem to want her to leave and becomes very anxious and at times tearful — behaviours which are out of character. She has also noticed that he is eating less and less of the meals she has prepared for him and some days when she goes to make his bed, notices that it appears unslept in.

Delirium requires a holistic, person-centred approach, incorporating prevention and treatment which may overlap and may not be distinct (MacLulich et al, 2013). The individual’s needs should be identified and addressed (Table 4), for example, pain, hunger, thirst, and they should be enabled in the use of sensory aids such as spectacles and hearing aids. Nurses should adopt a reassuring approach, incorporating effective communication, such as gaining the person’s full attention before starting, choosing a quiet and uninterrupted setting, using short, simple sentences, and reorientation, such as having a clock within their sight, personal effects at their bedside that are familiar, etc.

PATIENT STORY TWO: GREGORY BREWIN

Identifying anxiety and depression in someone who has dementia is not always easy, especially if they are unable to articulate their feelings and symptoms, or live alone so signs may go unwitnessed. It is important that anxiety and depression superimposed on dementia is promptly recognised and assessed as this will lead to effective treatment, management

and appropriate support. Untreated, these conditions can become more severe, resulting in further distress or deterioration in health. It should not be assumed that a person with dementia cannot verbalise their thoughts and concerns and it may be worth considering asking these two questions as recommended by NICE (2009) in the recognition of depression:

- ▶ During the last month have you often been bothered by feeling down, depressed or hopeless?
- ▶ During the last month have you often been bothered by having little interest or pleasure in doing things?

Once Gregory’s anxiety and depression have been recognised

Reflective points

In what ways has Gregory’s behaviour changed over the last four weeks?

Think of other people you have cared for with dementia who live alone in the community. How easy might it be to recognise depression when superimposed upon a diagnosis of dementia?

and assessed, his GP may feel able to treat this within primary care; alternatively, they may consider a referral to the secondary mental health services and the community mental health team for a more specialist assessment of his condition.

There are various antidepressants that can be very effective in treating depression and anxiety in older people. Similarly, there may be certain psychosocial interventions that may be appropriate; either as a sole treatment intervention or in conjunction with antidepressants. Cognitive behavioural therapy (CBT) is a psychological treatment that can assist a person to understand how their thoughts or behaviours may be contributing to their depression. CBT is as effective in older people as in younger populations; similarly, there is evidence of the effectiveness of CBT in people with comorbid depression and dementia (Jayasekara et al, 2015; Tay et al, 2018). However,

there are known reduced rates of referral to Improving Access to Psychological Therapy (IAPT) services for older adults with mental health problems (Pettit et al, 2017).

A significant symptom of dementia, delirium and depression are sleep disturbances, which Gregory is experiencing. Sleep disturbances may be the direct result of dementia or due to other comorbidities, such as pain and limited mobility, and as in Gregory's case, may become further exacerbated when delirium and/or depression are superimposed (Kinnunen et al, 2018).

There is a growing body of research that indicates a multimodal approach to managing depression in older people. For example, Livingston et al (2019) developed a six-session manualised non-pharmacological therapy, which included: understanding sleep and dementia; planning (following assessment of sleep and activity); use of a light box; and elements of CBT to improve sleep and other associated outcomes in dementia. While such a lengthy programme may not be an option for Gregory considering his stage of dementia, many of its elements may be useful to support assessment and offer some immediate actions to remedy sleep disturbances.

CONCLUSION

Dementia, delirium and depression are all distressing and debilitating conditions, and some older people may experience more than one of these conditions at the same time. However, when delirium is present, it is crucial to differentiate between these conditions because it presents an acute medical emergency that requires rapid assessment, treatment and management. The differentiating signs and symptoms of the three conditions can vary in their subtlety and similarity and require vigilance to identify them in a timely manner. Community nurses can have a significant role in the screening, identification, assessment and management of patients with dementia, delirium and depression.

Further resources

- ▶ Delirium (confusion). Dementia UK: www.dementiauk.org/delirium/
- ▶ British Geriatrics Society. Fit for Frailty Series: www.bgs.org.uk/resources/resource-series/fit-for-frailty
- ▶ British Geriatrics Society (2019) CGA in Primary Care Settings: Patients presenting with confusion and delirium: www.bgs.org.uk/resources/14-cga-in-primary-care-settings-patients-presenting-with-confusion-and-delirium
- ▶ Managing anxiety and depression in a person with dementia. Dementia UK: www.dementiauk.org/get-support/maintaining-health-in-dementia/managing-anxiety-and-depression-in-a-person-living-with-dementia/
- ▶ NHS England and NHS improvement (2017) Mental Health in Older People A Practice Primer: www.england.nhs.uk/wp-content/uploads/2017/09/practice-primer.pdf

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KEY POINTS

- The differentiating signs and symptoms of dementia, delirium and depression can vary in their subtlety and similarity and require vigilance to identify in a timely manner.
- Community nurses have a significant role to play in the screening, identification, assessment and management of patients with dementia, delirium and depression.
- Dementia, delirium and depression are often referred to as 'the three Ds'.
- There are differences in the assessment, treatment and support recommended for each of the three 'Ds', so it is vital that community nurses can identify the risks, signs and symptoms of all three conditions.
- Poorly recognised and managed delirium in people with dementia is associated with adverse outcomes.
- Depression in older people is often associated with disability, increased mortality, and poorer outcomes from physical illness, with a subjectively worse symptom profile and longer recovery time than for younger people.
- Dementia, delirium and depression are all distressing and debilitating conditions, and some older people may experience more than one of these conditions at the same time.

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A gold standard bladder and bowel service

Jane Young

Bladder and bowel difficulties affect 20% and 10% of the UK population, respectively (Percival et al, 2021). This is most likely not an accurate reflection of the true scale of this often under-reported health issue. Pelvic floor dysfunction can cause symptoms relating to many different systems and its management involves numerous modalities. The management of bladder, bowel and pelvic floor dysfunction should be delivered in the community via general practitioners, pelvic health physiotherapists and bladder and bowel services. An effective multidisciplinary approach using pathways to reduce secondary care involvement unless required should be adopted. Post Covid, community bladder and bowel services are recovering from prolonged redeployment, a backlog of cancelled patients and a rising waiting list. Acute services are the same, with even bigger backlogs for benign lower urinary tract dysfunction and prolapse assessment. Scrutiny of current bladder and bowel services across new clinical commissioning group (CCG) collaborations will undoubtedly uncover the disparity in quality of service provision.

KEYWORDS:

- Gold standard ■ Bladder and bowel ■ Best practice
- Variation in service

Issues relating to bladder and bowel dysfunction can have far-reaching, life-altering consequences for patients, families and society. Despite this, it is often a neglected area of general healthcare practice. Clinical effectiveness is dependent on expert holistic assessment, aimed at the identification of person-centred interventions to cure or improve quality of life (Thomas, 2015).

Since March 2021, England has become composed of 42 designated

'... some bladder and bowel services are so under-resourced financially and clinically that they are merely pad providers. Many do not allow self-referral, which breaks down the barrier to accessing help.'

integrated care services (ICSs). Each ICS is based on a population of between one and three million patients. On 1 April 2021, 38 clinical commissioning groups (CCGs) merged to create nine new CCGs, as part of the 'NHS Long-Term Plan' — the aim being that such collaboration between local agencies would improve services, contributing to better population health (NHS England, 2019). While evidence suggests that integrated care may improve patient satisfaction and

improved access to quality services (Baxter et al, 2018), evidence on health outcomes is limited and potential benefits may be modest (Alderwick et al, 2019). The challenge of creating accountability and governance arrangements that are transparent has been highlighted as an issue (Moran et al, 2021).

Led by the new commissioning structures, working groups with acute and specialist community service providers are being created to review current pathways and ensure that patients are seen at the most appropriate place in a timely manner. With high admissions overburdening hospitals with constipation, urinary tract infections (UTIs) and the huge cost of containment products, medications and devices, ICSs should be ensuring that there is no disparity in best practice. Furthermore, other national strategies, such as the 'Stop the Pressure' campaign and the 'NHS Long Term Plan', which supports a 50% reduction in Gram-negative bloodstream infections (GNBSIs) by 2024/25 (NHS Improvement, 2017), should be key drivers.

The use of catheter passports and the 'patient journey' with their catheter varies widely, with some patients having to attend accident and emergency departments with blockages etc, an unnecessary pressure and wholly inappropriate. In the author's clinical experience, some bladder and bowel services are so under-resourced financially and clinically that they are merely pad providers. Many do not allow self-referral, which breaks down the barrier to accessing help, especially for men who are more reluctant to talk to healthcare professionals about urinary incontinence (Yates, 2021).

RECOMMENDATIONS FOR BEST PRACTICE

In 2013, the Francis report referred to continence as 'this most basic of need'. Failure to manage what is largely preventable and treatable can result in falls, pressure damage, moisture lesions and premature death (Francis, 2013). Bladder and bowel dysfunction have a significant financial burden on the NHS. In 2018/2019, 76,929 people were admitted in England with constipation, equivalent to 211 people a day. £168 million was spent by NHS England on treating the condition, which is made up of emergency admissions and laxative prescriptions; these figures have increased since the 2017/2018 report, with a rise of 7.7% in admissions and an increase of £6 million in spending (Bowel Interest Group, 2020). The forecast for 2019/2020 estimated that approximately 81,000 people in England would have been admitted to hospital (Bowel Interest Group, 2020).

In 2019, NHS England commissioned and is leading the national bladder and bowel health (NBBH) project (NHS Supply Chain, 2019) — a project which was established to improve continence care across the whole health and care system. It aims to research and implement recommendations from the 'Excellence in Continence Care' (EICC) report in 2018 (NHS England, 2018). The NBBH project has been delayed by Covid-19, but its objectives are to:

- ▶ Understand patient needs
- ▶ Improve patient safety and outcomes
- ▶ Agree national standards
- ▶ Promote best practice.

The quality of bladder and bowel/continence care has been under scrutiny for many years. Traditionally, 'continence advisors' worked within 'continence services', but services have evolved and many have opted to use the term 'bladder and bowel service' and 'bladder and bowel nurse specialist'. More recently, it has been highlighted that across the UK, patients are presented with an inequity of access to care resulting

from the patchy nature of services for continence and functional pelvic conditions (Booth et al, 2021). A qualitative study of bladder and bowel leads in England in 2013 found a gap in funding, commissioners' perception of bladder and bowel dysfunction as being unimportant as a barrier to providing quality services, and a need to empower themselves to effect meaningful change (Orrell et al, 2013).

Despite recommendations as far back as 2006 by the National Institute for Health and Care Excellence (NICE) and in 2011 by the All-Party Parliamentary Group for Bladder and Bowel Continence Care, commissioners seem to have paid little interest to what a quality, cost-effective bladder and bowel service should look like. Indeed, Wagg et al highlighted this in a national audit in 2011 stating: 'There needs to be concentration on evidence-based community provision of care by competent and interested clinicians before the aims of the NICE guidelines are met'.

Wagg et al went on in 2014 to publish a systematic review and expert consensus and create an internationally applicable service specification for continence care, recommending that services should be integrated across primary and secondary care wherever possible to:

- ▶ Ensure a seamless transition to more complex care
- ▶ Ensure ease of access by the establishment of robust referral pathways from detection of incontinence through to appropriate assessment and treatment
- ▶ Shift the responsibility of basic continence care away from primary care physicians to continence nurse specialists in primary care, where available. Where continence nurse specialists are unavailable, train existing healthcare professionals such as primary care-based nurse practitioners, community nurses, physician's assistants, or, in developing countries, local community healthcare workers, to provide evidence-based continence care

- ▶ Where possible, use a case co-ordinator to ensure collaborative working, especially to help delay or prevent admission of patients to permanent care settings. Given the general trend to more integrated clinical pathways, in particular concerning patients with multiple morbidities, it is necessary to strike a balance between specialisation and holistic case management approaches
- ▶ Promote use of self-management tools and techniques; provision of information on the use of containment products; use of enabling technologies; an emphasis on shared decision-making between healthcare provider and patient/caregiver; and educational campaigns on the nature of the illness and treatment strategies
- ▶ Ensure that specialists are well integrated with other parts of local care pathways, as they play a key role in quality governance, training and the dissemination of best practice
- ▶ Use a comprehensive assessment of user-, product-, and usage-related factors to assess the needs of patients and caregivers with regards to containment products. This process should be standardised, valid and easily reproducible. The final decision regarding choice of product should remain with the end-user, i.e. patient and/or caregiver
- ▶ Ensure that the use of technology is integral to the delivery of continence care. Technology should enable self-care and connect patients, caregivers and enable providers to monitor progress and troubleshoot problems
- ▶ Help payers provide the highest quality continence care, and ensure care standards are incentivised. This can be achieved through stipulating achievement of targets on clinical outcomes rather than operational measures alone, careful use of quality-related financial incentives, and an emphasis on clinical governance
- ▶ Establish accredited programmes of training for: 1) nurses wanting to become continence nurse

specialists, and 2) other health or social care professionals, such as social workers, wishing to improve their competence in delivering continence care.

A new report, 'Seizing the opportunity to improve patient care: Pelvic Floor services in 2021 and beyond' (Pelvic Floor Society, 2021) exposes significant shortcomings in the care of patients with pelvic floor disorders in the UK. It suggests locally actionable recommendations as gold standard for pelvic floor disorders. These include:

- ▶ Virtual consultations should be provided as an option for patients, but face-to-face appointments should be available where clinically indicated or requested, and to prevent inequality of access to care
- ▶ Questionnaires should be in widespread use to collect a full patient history before consultations, increasing efficiency, and could be provided online, although an alternative approach needs to be available for those with limited internet access or literacy
- ▶ Mobile apps or evidence-based information on approved websites could be encouraged to support self-management of patients' conditions, and to provide comprehensive resources and education
- ▶ Local/regional multidisciplinary team (MDT) meetings should be constituted to meet national guidance; accreditation is available from specialist societies, such as the Pelvic Floor Society and British Society of Urogynaecology (BSUG), to

Practice points

- ▶ Patients with bladder or bowel dysfunction should be assessed in a timely manner
- ▶ Community bladder and bowel services should not just be a pad provider
- ▶ ICSs have the opportunity to standardise practice and improve the quality of care for this patient group.

ensure a nationally standardised approach. Virtual meeting technology should be used to optimise attendance

- ▶ Local pathways for onward referral between specialties should be made clear, where initial non-surgical management does not resolve the patient's symptoms
- ▶ Selected procedures could be transitioned from general to local or regional anaesthesia, allowing them to be performed outside the operating theatre and freeing up space. Some protocol-driven procedures could also be performed by nurses rather than doctors
- ▶ Local/regional solutions should consider the role of private institutions and premises to improve efficiencies (reduce waiting times) and maintain quality.

Rantell et al (2015 epub; 2016) published the first attempt to standardise continence care and training for all healthcare professionals nationally borne from the UK Continence Society (UKCS) working party. This was a multidisciplinary multi-professional society comprising members with a clinical and/or scientific research interest in continence. NICE guidelines (2019) for urinary and bowel incontinence recommend both regional and local MDT meetings, and state that local MDTs are appropriate to review proposed treatments for patients with primary stress urinary incontinence, overactive bladder or primary prolapse, whereas regional MDTs should review proposed treatments for patients with complex pelvic floor dysfunction and mesh-related problems.

In the author's clinical opinion, to drive the implementation of an equitable, high quality service for patients with bladder and bowel dysfunction, CCGs should:

- ▶ Define clear minimum standards and outcomes for service provision
- ▶ Identify gaps in service provision
- ▶ Pilot new service models and auditing outcomes

Table 1: Components of a gold standard bladder and bowel service

▶ Allow self-referral
▶ Use International Consultation on Incontinence Questionnaire (ICIQ)/ International Prostate Symptom Score (IPSS)/neurogenic bladder and bowel dysfunction forms to gain objective evidence
▶ Use voiding and bowel diaries to gain objective evidence
▶ Perform rectal and vaginal examination
▶ Perform bladder scanning
▶ Have prescriber/s in team
▶ Offer clinic and home visits
▶ Do ambulant catheter changes
▶ Do complex catheter changes
▶ Do trial without catheter (TWOC)
▶ Gain clinical supervision
▶ Be involved in MDT meetings
▶ Provide education to colleagues

- ▶ Identify the resources required to ensure standardised service provision
- ▶ Share best practice/innovations in service provision.

Table 1 outlines what, in the author's clinical opinion, a gold standard bladder and bowel service should provide.

CONCLUSION

Ensuring that outcome measures are in the contracting, quality assurance and performance monitoring of commissioned services is of utmost importance (Thomas, 2015). An effective integrated approach from a multidisciplinary team both in assessment and management is essential to deliver quality care. However, the author questions if the new ICSs are the opportunity to finally implement recommendations largely ignored and give patients with bladder and bowel dysfunction the service they need and deserve? It is not appropriate for bladder and bowel teams just to be pad providers to contain the problem, or for the widespread variation in services to exist.

As echoed by the urology getting it right first time (GIRFT) document

(Harrison, 2018), all benign bladder and bowel dysfunction can be managed in the community by specialist nurses. GIRFT is a national programme designed to improve medical care within the NHS. Funded by the Department of Health and overseen by NHS Improvement, it sets out recommendations for a change in the patient journey supporting clinicians nationwide to deliver continuous quality improvement for the benefit of their patients. One of its aims is to ensure that patients are seen at the right time and place, as well as reducing emergency hospital admissions with urological presentations, such as acute retention. Ever more so during the pandemic, we need to keep out-patients out of hospital, unless absolutely necessary, with fit for purpose bladder and bowel services.

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Revalidation Alert

Having read this article, reflect on:

- What your local bladder and bowel service provides
- Your knowledge around bladder and bowel dysfunction.



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Domestic violence, our staff and our services

Here, the authors, who all work at Leeds Community Healthcare NHS Trust (see below), look at the definition, data and principles of recognising and supporting victims of domestic abuse among service users. They also explore how staff in their trust are equipped not only to address issues of domestic abuse and violence with patients, but also to support employees who themselves are going through these experiences.

In the midst of the first 2020 lockdown we were all urged to stay at home. For many, this created challenges or inconvenience, but for some it created far more significant worries. Victims of domestic abuse suddenly found themselves trapped at home with their abuser, with no options of respite or relief. For services supporting victims it became harder to communicate and offer support safely. The authors' trust, Leeds Community Healthcare (LCH), encouraged staff to work from home where possible, but with this came the reality that they are not immune to being victims of domestic abuse and violence and, as an organisation, the trust has a role to play in supporting them and promoting their safety.

Leeds Community Healthcare has 3,000 staff covering adult, children and family health in Leeds and across the region. Many of the staff are trained to recognise and support victims of domestic abuse among service users. However, in acknowledging the nature and prevalence of domestic violence, the trust is working hard to create an organisation that is able to do the very same thing for its own staff.

The cross-government definition of domestic violence and abuse is (Home Office, 2012):

Lynne Chambers, head of service, Children and Adult Safeguarding; Helen Barwell, safeguarding nurse advisor for children; Katie Rose Finnegan, social worker and domestic abuse champion, practitioner at Mindmate Spa; John Walsh, organisational development lead and Freedom To Speak Up Guardian, all at Leeds Community Healthcare NHS Trust

'A focus on supporting victims and survivors of domestic violence and robust safeguarding mechanisms are essential to all health and care organisations (indeed, all organisations).'

Any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality.

Abuse can encompass, but is not limited to:

- ▶ Psychological abuse
- ▶ Physical violence
- ▶ Sexual violence/abuse
- ▶ Financial abuse/economic abuse
- ▶ Emotional abuse (Home Office, 2012).

The data is stark. Key statistics about domestic abuse in England and Wales are:

- ▶ Each year nearly two million people in the UK suffer some form of domestic abuse — 1.3 million female victims (8.2% of the population) and 600,000 male victims (4%) (Black et al, 2011)
- ▶ Each year more than 100,000 people in the UK are at high and imminent risk of being murdered or seriously injured as a result of domestic abuse (Co-ordinated action against domestic abuse [Caada], 2012)
- ▶ Women are much more likely than men to be the victims of high risk or severe domestic

abuse: 95% of those going to a multi-agency risk assessment conference (MARAC), or accessing an independent domestic violence advisor (IDVA — specialist professionals who work with victims of domestic abuse to develop a trusting relationship and offer support, including through court processes) are women (Crofford, 2001). Within LCH at the time of writing, 87% of the workforce identify as female, which puts this statistic in a particularly bleak context

- ▶ In 2013–14, the police recorded 887,000 domestic abuse incidents in England and Wales (Caada, 2012)
- ▶ Seven women a month are killed by a current or former partner in England and Wales (Caada, 2012)
- ▶ 130,000 children live in homes where there is high risk of domestic abuse (Caada, 2014)
- ▶ 62% of children living with domestic abuse are directly harmed by the perpetrator of the abuse, in addition to the harm caused by witnessing the abuse of others (Black et al, 2011)
- ▶ On average, victims at high risk of serious harm or murder live with domestic abuse for two to three years before getting help (Crofford, 2001)
- ▶ 85% of victims sought help five times on average from professionals in the year before they got effective help to stop the abuse (Crofford, 2001).
(Safe Lives, 2021)

A focus on supporting victims and survivors of domestic violence and robust safeguarding mechanisms is essential to all health

and care organisations (indeed, all organisations). Safeguarding can make a tremendous difference to people. The findings of the Pathfinder Project (2020), which addressed the links between health and domestic abuse, concluded that survivors feel healthcare professionals could ask more questions and exercise professional curiosity to identify individuals experiencing domestic abuse. Thus, as healthcare professionals, we need to recognise the unique opportunities we may have to enquire about domestic abuse and have the knowledge and skills required to sensitively deal with a disclosure.

Good conversations with victims who are experiencing domestic violence should be respectful and supportive. They can help identify abuse the victim may not have previously recognised (<https://healthtalk.org/womens-experiences-domestic-violence-and-abuse/> recognising-domestic-violence-and-abuse). Giving information enables victims to identify areas of concern earlier, and helps to recognise where risk is escalating. It also enables them to explore possible next steps in a safe and supportive space — for employees experiencing domestic abuse, it is important to recognise that the workplace may be their only sanctuary.

The work done at LCH to support services and staff includes:

- ▶ Equipping services to create best safeguarding practice, namely:
 - Robust safeguarding training packages (includes domestic abuse)
 - A knowledgeable and experienced safeguarding team, including community nurses, which is both approachable and supportive. The team are mindful that their knowledge may be utilised to safeguard service users and staff alike
 - Policies, procedures, flowcharts, one-minute guides as a framework to work in and through
 - Domestic violence routine enquiry training (which was



‘... as healthcare professionals, we need to recognise the unique opportunities we may have to enquire about domestic abuse and have the knowledge and skills required to sensitively deal with a disclosure.’

developed in Leeds and is used in alliance with Safer Leeds — a local, council-based city-wide organisation). This introduces staff in asking the right questions and providing specific guidance. It is widely acknowledged that asking individuals about their experiences of domestic violence and abuse is more likely to encourage disclosures; in fact, evidence suggests that victims want to be asked about their experiences of domestic violence and abuse (Feder et al, 2019)

- Sharing domestic violence information (in training and via the daily briefing and on the internal intranet)
- All safeguarding staff have externally commissioned safeguarding supervision training
- ▶ The appointment of a domestic abuse champion, Katie Finnegan, to support staff who are undergoing domestic violence and abuse and raise issues

where needed to ensure services respond well to staff colleagues. Katie and Helen Barwell from the LCH safeguarding team have created a training module for managers and leaders to raise awareness and share good practice. This is part of a cohort of domestic abuse champions working across the trust

- ▶ A staff policy written in collaboration between safeguarding and human resources (HR) setting out the trust’s commitment to support employees who disclose they are experiencing domestic abuse
- ▶ Innovative project work in partnership with the local clinical commissioning group (CCG) to secure funding specifically to support staff members who wish to flee a domestic abuse home situation. Money may be provided to obtain temporary safe accommodation/change of clothes/food, etc to assist in the short term.

Leeds Community Healthcare aims to ensure that any staff experiencing abuse are supported by:

- ▶ Ensuring time is given to attend appointments (solicitors/police)
- ▶ Enabling a change in work pattern or base if required (due to control/coercion/stalking)
- ▶ Having access to safeguarding support, one-to-one conversations and trust counselling, available via the trust Employee Assistance Programme (EAP).

Practical and supportive measures, such as a change of work telephone number and strict security in teams about staff information, are also vital.

In the authors' opinion, good principles and practices that all organisations can look at and incorporate to support staff working with domestic abuse include the following three fundamental practices as a starting point.

First, is strong partnership working based on mutual understanding, good relationships and common purpose. An example in Leeds is working with Safer Leeds to create a conference looking at coercive control and stalking in December 2019. Following this, the trust's safeguarding team secured funding to develop a video giving a voice to a staff member who lost her sister due to domestic homicide. This video will be shared across partner agencies and placed on YouTube for teaching and learning experience. The first and second authors are fully involved in multi-agency meetings across health, social care and the third sector to work and learn together. There is a twice weekly MARAC meeting to create best responses. Joined up thinking and learning helps individuals and the trust as an employer to create specialist tailored approaches to each person and situation.

The second is offering active listening skills and creating good relationships. These build the supportive space and confidence to enable someone to have the confidence and courage to disclose. Active listening to verbal and non-verbal messages enables a person to feel listened to and valued (Hafford-Letchfield and Carr, 2014). Patience and sensitivity are the foundation of good listening and they are imperative as there may be several disclosures. This is considered in conjunction with the knowledge that a victim may not wish to take any action. By adopting this approach with and towards staff, they are more likely, in turn, to be able to continue this culture in their clinical practice.

The third is seeing the whole

person. This means putting the person at the centre. Seeing through the issues to the human person who is sat or stood before us. This means hearing someone's story, struggles, fears and hopes. It means a holistic approach which could involve housing, benefits, mental health, interpretation services, befriending services, physical health considerations, the children involved and many other central factors. This links back to the need to listen and work closely and collaboratively with other key agencies.

The agreed behaviours of LCH include 'caring for each other', 'working together' and 'finding solutions'. This sums up well how the trust seeks to support staff and patients who suffer domestic abuse and violence. The more this is done, the better and more caring organisations become. Sheila Sorby, assistant director of nursing and clinical governance at LCH said:

In the most challenging of years for our staff, we have continued to strive to take responsibility for providing staff health, safety and welfare at work. We acknowledge that domestic abuse is a serious issue within our society and affects many people's lives and can affect an individual's work performance. As an employer, we have responsibility to care for our staff in the same way we do our patients and seek to provide support to those affected within a supportive and confidential environment that does not discriminate against people who are experiencing domestic abuse. The work undertaken across the trust, led by our safeguarding team and in collaboration with our key partners, is instrumental in achieving this. While we have more to do as a society, I am extremely proud of the progress so far in raising awareness, skills, knowledge and confidence of managers, alongside building a supportive environment to help people speak out within the trust.

Thank you to the *Journal of Community Nursing* in allowing us to

share our story and awareness of this subject, which affects so many. **JCN**

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