JOURNAL OF COMMUNITY NURSING
JCN

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Solving the crisis in district nursing and health visiting

Nurses volunteering their skills outside of work

QNI and Marie Curie call for a new deal for end-of-life care

Thinking outside the box: hypnotherapy

Managing hypergranulation in wounds

Necrotising fasciitis: is follow-up supported self-care an option?

A simple approach to treating lower limb oedema and lymphorrhoea

Fundamentals of diet for type 2 diabetes

'What I would like to say' findings: cancer care for everyone

Managing LARS in the community

Chronic obstructive pulmonary disease and comorbid conditions

Enhancing the care of older people: role of community hospitals

New parents share feeding worries at virtual allergy group

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Contents

Journal of Community Nursing
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Essential healthcare services face challenges

Although we are all both constantly and consistently busy all day every day, I am sure you will agree that at this time of year demand on services escalates even further and the challenges we face increase even more. How can this be possible we ask, but each year it is! Our teams seem to struggle to recruit and those we do recruit, no matter how well they are inducted and supported, seem to swiftly become disheartened. Experienced team members are leaving, many due to retirement, although because of the many flexible retirement options available we do manage to retain some hours. If this is all very familiar to you, please read this issue's 'community matters' piece (*pp. 8–12*) which discusses the crisis that district nursing and health visiting services are enduring.

There's no doubt that community nursing is becoming ever more complex with multifaceted challenges necessitating a holistic approach that combines medical interventions with patient empowerment and self-care strategies. I was particularly interested to read Luxmi Dhoonmoon's article on necrotising fasciitis (*pp. 28–32*) and the increase in younger patients with this condition as a result of aesthetic treatment abroad. But, despite the complexity of this potentially life-threatening condition, there is still the option for supported self-care, as the case study shows, to help patients regain their confidence and self-esteem. Type 2 diabetes mellitus (T2DM) is another area where people can actively take control of their own health. Do read the informative piece on diet (*pp. 40–45*) and how by significant weight loss patients can possibly put T2DM into remission — which aligns with growing understanding of lifestyle interventions and their impact on managing chronic conditions. The chronic obstructive pulmonary disease (COPD) and comorbid conditions article by Beverley Bostock (*pp. 56–60*) also provides an excellent summary of symptoms, assessment and management, helping to take some of the complications out of increasingly complex consultations.

There is a wealth of practical information here, so I hope you enjoy reading this issue as much as I did.

Finally, as always, the JCN study days are rolling out across the country, so don't forget to check when we are in your area, as they are a great way to hear experts speak, meet exhibitors and discuss latest products and treatments and, of course, to network and catch up with colleagues — www.jcn.co.uk/events.

Annette Bades, editor-in-chief, *JCN*

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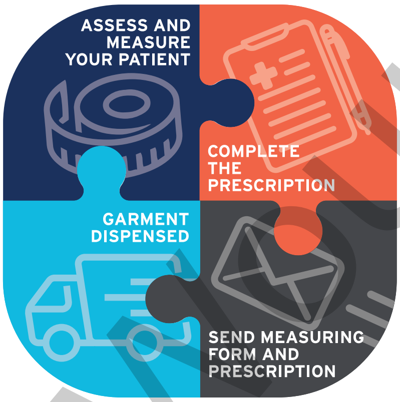

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Editorial board

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I am a district nurse, nurse teacher in practice, associate lecturer and Queen's Nurse who believes that excellent community nursing is vital and that community nurses should be more visible. Care should be available to everyone who wishes to remain at home. I have an interest in dementia, end-of-life care and teaching in practice to support newly qualified nurses. I am very pleased to be a part of the JCN editorial board, an accessible journal for all community nurses to inform their practice and strive for excellent care.
Gail Goddard

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

I am a district nurse and an academic with a passion for end-of-life care, older people and nurse education. I believe that care at home gives people the best opportunity to remain in control of their own health and wellbeing. It is a privilege to be a guest in a person's house and to help them achieve their goals. It is also a privilege to train nurses of the future to adopt this personalised care approach to really make a difference. I am excited to join the editorial board of the JCN where I can see the hard work that community nurses undertake.
Amanda Young

I've been working in district and community nursing for 20 years. My particular passion is for continuity of care in community nursing, which encourages healthy behaviour, builds trusting relationships, can reduce healing times, and makes people feel more positive about their healthcare experience. We have a responsibility to prepare for the future by continuing to develop leadership and clinical skills. The JCN is a great resource for support, education and to share best practice.
Hattie Taylor

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In each issue of the *Journal of Community Nursing*, we investigate a topic affecting our readers. Here, we look at...

Solving the crisis in district nursing and health visiting

For the general public, community staff such as district nurses and health visitors are in danger of becoming a fond memory, much like those other pillars of society we didn't know we needed until they were gone — neighbourhood policeman say, or a functioning post office.

But going they certainly are. A slew of recent reports has highlighted the falling numbers of district nurses and health visitors in the UK, with poor funding, an ageing workforce and burnout all contributing to recruitment issues.

Unfortunately, like the much-lamented local bobby, once these skilled nurses have disappeared, they won't be coming back. But without them, community care as we know it is starting to come apart at the seams.

BRAIN DRAIN

A recent report from a House of Lords select committee made some damning conclusions about the current state of primary care in the UK, recounting how 'patients are being deprived of the benefits of readily accessible, preventive, and highly effective community care services due to a shortage of healthcare professionals' ('Patients at the centre: integrating primary and community care' — committees.parliament.uk).

And we all know which sector of healthcare professionals have faced the most stringent cuts in recent years… yup, district nurses and health visitors.

District nursing was conceived as a universal service but is struggling to meet the demands of an ageing population. The drive to provide more care in the community without appropriate allocation of resources, or recognition of the invaluable skillset that district nurses have, has also contributed to the problem.

The Queen's Nursing Institute (QNI) workforce standards for district nursing (2022) highlights the workforce issues and the need for patients in the community to be visited by appropriately skilled registered nurses. These standards note that nurses in the community regularly defer visits, including palliative care visits, due to workforce issues in some areas. The QNI and Marie Curie, in their new report on 70 years of end-of-life care in the community (see page ??*), also highlight the challenges faced by nurses to deliver palliative and end-of-life care to those who wish to die at home. District nurses in the past have always been able to prioritise these patients, but due to the lack of resources this is no longer the case.*

There has been a 6% reduction in district nurses qualifying, with a further decrease of 9% of students enrolled in 2022/23 (QNI report on District Nurse Education in the UK 2021-2022). Health education institutions state that information on funding is lacking, contributing to universities considering the sustainability of their programmes.

The call for an increase of 10,000 district nurses in 2014 has not materialised and numbers continue to decline. Arguably, an emphasis on advanced practice has further depleted the available workforce, with more recognition and financial recompense being given to those with advanced practice qualifications. The QNI has long argued that district nurses work at an advanced level of practice, which is now reflected in the new field-specific standards for specialist practitioner qualifications, which align with the Nursing and Midwifery Council (NMC) post-registration standards.

District nursing services should be invested in to support the increasing number of individuals requiring care at home. Their expertise, problem-solving ability and knowledge of their communities enables them to provide person-centred holistic care, rather than being task focused.

Amanda Young
Director of nursing programmes, Queen's Nursing Institute (QNI)

Since the pandemic, the number of people who are unable to leave their home to seek care and treatment has increased — many of whom have complex needs. Many patients also find it harder to access other primary care services for a variety of reasons and so the community nursing teams become a catch all for those who do not fit the criteria for other teams, which have been more recently commissioned and formed. Block contracts still exist in many areas and so district nursing teams have to expand their caseloads and workload with the same resources, resulting in problems with retention of staff as they are tired and burnt out. Community nurses are rushing from patient to patient trying to deliver the highest standards of care in less time, as they have many more patients to see in their working day and do not feel, sadly, that they have always given their patients the best care possible. This is not for want of trying, but often it is not possible due to time constraints and other pressures. Experienced and highly knowledgeable district nurses are moving into different roles, such as rapid response teams and advanced practitioner roles, where they feel more valued and more in control of their workload.

Alongside this, many employers are not recognising the value of the specialist practitioner qualification and are not supporting students in this training, which lessens the number of qualified district nurses across the country and reduces the provision of a career pathway for those wishing to stay in community nursing. Being a qualified district nurse is, in my opinion, the best job in the world and I would highly recommend it. But, to encourage others into this role, there needs to be more recognition of the expertise required and community nursing must be valued, raising its profile. As the writer of this article states, '… once these skilled nurses have disappeared, they won't be coming back'. We simply can't allow this to happen.

Gail Goddard

Floating district nurse manager and senior lecturer; Queen's Nurse

But what are we actually missing? Does the modern responsive NHS that the government keeps promising really need these nurses, many of whom — as we are tired of hearing — are reaching retirement age? ('Record recruitment and reform to boost patient care under first NHS Long Term Workforce Plan' — www.england.nhs.uk)

Well, for the record, we're not simply talking about any old NHS staff, but a whole generation of skilled and experienced nurses that the NHS will find difficult to replace. According to the Queen's Nursing Institute (QNI), district nurses have traditionally provided vital services such as wound care, continence care and palliative care, as well as prescribing medicines ('District nurses' — qni.org.uk).

As for health visitors, they provide vital antenatal advice for parents and children, as well as having additional training in public health to oversee immunisation programmes and monitor child protection issues ('What is a health visitor?' — ihv.org.uk).

Are these really people we can do without?

COMMUNITY IN CRISIS

The House of Lords report states that community services are facing unprecedented demand from a perfect storm, including an ageing population with multiple long-term conditions who require complex care. Compounding this, the report emphasises that the NHS has 'failed to improve its organisational structure, funding mechanisms, infrastructure, and workforce' and as a result is struggling to provide an 'acceptable standard of care.'

At the heart of the crisis is a drastic reduction in staff, not least experienced district nurses and health visitors. One of the report's contributors, John Campbell, professor of general practice and primary care at the University of Exeter, commented that the health visiting workforce has been so depleted that it was no longer able to function: 'Sadly, we have lost so many health visitors that we do not know who these people are or where they are.'

While the House of Lords report is welcome, this crisis should not be news to anyone. In the summer of last year, it was reported that decades of cuts to health visitor numbers meant that they are only providing a skeleton service and focusing on urgent cases ('Health visitor shortages leaving primary care overwhelmed' — www.nursinginpractice.com).

And back in 2019, the QNI warned that a lack of experienced staff could have a devastating effect on community care, hastened by a fall in English district nurse numbers of almost 43% in the previous ten years ('Outstanding Models of District Nursing' — qni.org.uk).

The talk about district nursing services disappearing has been swirling for decades. However, I believe that because people really need the care we deliver, the district nurse role will survive and, in a way, it will be what we make it. We have seen many experienced district nurses retire or move to other roles and, through this, change opportunities arise for other careers developing; most areas continue to support the district nurse specialist practitioner (DNSPQ) course, possible because of funding from Health Education England, through universities continuing to offer (and in some cases going back to offering) the SPQ courses, provider organisations understanding and valuing the role, and also through district nurses who facilitate the professional development and practice placements of DNSPQ students.

We know that the number of qualified specialist district nurses has declined (funding was then either cut or, if lucky, used for a different skill mix bringing in more supportive roles), yet many more people are staying at home for their care. This is possible through transformation of services, including work around safer staffing (Community Nursing Safer Staffing Tool – CNSST), correct skill mix/workforce planning, and embracing tech that allows more real time ways of communicating across the multidisciplinary team (MDT) (virtual meetings). This makes vital professional conversations more accessible, they can take place exactly when needed, with decisions being made that get the right care in place for people (sometimes immediately, as tomorrow is too late).

Also helping to meet the higher demand for care in the community are the many emerging roles that support the work of district nurses. This might be roles within their teams such as healthcare assistants with extended roles, such as catheter care and administering insulin or other medications, nursing associates who can give most aspects of care given by registered nurses under their direction. This may also be new roles across other teams such as phlebotomists, advanced clinical practitioners, continence assessors, health and social care coordinators, specialist nurses in diabetes, respiratory care and for enhanced care into care homes, community pharmacists and health and wellbeing coaches, to mention a few. As ever in the community, good, immediate communication is key to the collective work being effective, and any tech that supports this communication is pivotal to quality care, as well as district nurses being invited, present and engaged in the MDT discussions around care planning.

The district nurse is often still best placed to take the reins when complex care needs to be co-ordinated, planned and executed (we work every single day of the year and often a 24-hour service). We often guide those delicate conversations that need to take place with people and their loved ones and carers to ensure that wishes are known, documented and respected. This is a part of the role that many of us love the most — we are experts in diplomacy and problem-solving, a crucial aspect of quality care in the community.

In contrast to vanishing, there's currently a lot of positive energy in the district and community nursing arena nationally. For example, the Community Nursing Practitioners Network led by Sam Sherrington, who is deputy director for community nursing at NHS England. This platform includes many resources, work on the plan for community nursing, sharing of best practice and discussion forums, as well as access to a monthly live event online.

Finally, a mention of the fabulous focus on wellbeing and protecting nurses in the continually challenging environment we work in, the professional nurse advocate community is growing, district nurses will gain knowledge of how to protect their colleagues and themselves though getting on board with this positive movement (please read more on NHS England website). District and community nurses and their teams of supportive colleagues will survive through coming together to reflect, share, restore, celebrate, and shine a light on what we do.

Hattie Taylor
District nurse lead (Purbeck), Dorset Healthcare University NHS Foundation Trust; Queen's Nurse

There are a multitude of reasons why the district nursing and health visiting workforce numbers are being drastically reduced. Some of these reasons are national due to the ageing workforce and pay and conditions, whereas others are specific to an area such as rural patches being harder to find staff due to their isolated location. District nurses and health visitors have specific skill sets and a profound knowledge base and their diminishing numbers deeply impacts upon the health and wellbeing of the individuals that they care for within the community arena.

Health visitors and district nurses provide professional, knowledgeable and informed care, enabling person-centred integrated care to be provided throughout the community setting regardless of the person's age, socioeconomic or ethnic background, presenting condition or kinship situation.

From an educational perspective, student nurses need to have the concept of community nursing introduced to them at an early stage and the variety of options clearly explained. Myths such as having years of experience prior to commencing in the community setting need to be debunked, although the community arena does need to have a clear educational training pathway in place for newly qualified nurses joining their workforce.

Community placements need to be supportive and structured with a clear sense of purpose and designated assessors in the practice arena being provided to each student to ensure a worthwhile experience. The practice of an ad hoc presentation with just a few days being spent with health visitors when being on a district nurse placement, for instance, needs to be diminished as both avenues need equal weighting as a valid career trajectory for student nurses once qualified.

Such actions will help with initial recruitment, but retention is vital too. Although the big issue is, of course, pay for health visitors and community nurses, there are other avenues to explore. These include work practices, such as addressing the work/life balance, including part-time work or the use of set days to enable individuals to follow other interests or to accommodate family or caring demands, and utilising other innovative strategies. Addressing mileage payments to ensure that they adequately reflect the cost of fuel, and wear and tear of practitioner's cars, would also be useful.

Retention as well as recruitment is vital to ensure that the community workforce remains sustainable over the long term and remains viable to provide supportive, knowledgeable person-centred integrated care to all individuals regardless of age or condition who are in need in the community.

Teresa Burdett
Principal academic, Bournemouth University

A recent report in *The Guardian* also detailed how a lack of district nurses was making it harder for staff in A&E to discharge patients because there was just not the capacity to look after them in the community ('Like a horrific board game: 33 hours inside an NHS in crisis'— the guardian.com).

IMPACT ON PATIENTS

A report from the Institute of Health Visiting laid out the impact on patients of the crisis, with only the most vulnerable families receiving visits, and health visitors unable to fulfil their primary role of 'promoting health… and offering families early support to reduce potential long-term negative health and social outcomes for their children' ('Worrying cuts to health visiting services across England: Ticking the box but missing the point'— ihv.org.uk).

Similarly, the House of Lords report bemoaned a situation where care home residents frequently have to make unnecessary visits to GPs or hospitals due to a lack of available community nurses, including district nurses. As a result, many patients with non-urgent complications are simply not receiving treatment, or in some cases resorting to A&E to access care.

FINDING SOLUTIONS

The good news is that the House of Lords report does at least try and offer some solutions, stating that 'patients in the community should be treated by a multidisciplinary team of social care workers, community nurses, their GP and other specialist community clinicians' who should be easily able to 'share records, and meet to plan patient care'.

Nothing groundbreaking there, perhaps. But the report's authors do cite the need for more joined-up and integrated community care in four main areas: structure and organisation; contracts and funding; data sharing; and workforce and training:

- Structure and organisation: health, social care, and voluntary sector providers should work as equal partners, particularly as experienced practitioners such as district nurses and health visitors are likely to have a deep understanding of their patients and respective communities. This will encourage integrated working, with local 'champions' exploring any barriers to patients receiving appropriate front-line care
- Contracts and funding: better funding for infrastructure was highlighted, with suitable environments for community staff a priority. As one contributor to the report commented, 'Everyone has a story about having consulting rooms upstairs without a lift, or having disabled access through the bins'
- Data sharing: while hardly a new concept, the report noted that single patient records are vital, with all district nurses or health visitors having instant access to a patient's records, reducing the need for multiple consultations. Such technology would also mean that nurses themselves were in less danger of missing vital patient information, such as allergies to medicines
- Workforce and training: the report noted that district nurses in particular were being held back by a lack of career progression and burnout. The answer? Unsurprisingly, better pay. One suggestion, however, was that community nurses should be given enhanced prescribing and referral rights, enabling them to prescribe from a wider formulary of drugs and refer to services such as physiotherapy.

LAST WORD

Of course, the government will say that all of this will be solved by its *NHS Long Term Workforce Plan*, which promised that training places for health visitors will grow by 17% and for district nurses by 41% by 2028–29 (NHS Long Term Workforce Plan — www.england.nhs.uk).

But, it is hard to predict whether these targets will be translated into actual posts, and the Royal College of Nursing for one, is less than optimistic, stating that district nurses are 'critically endangered' and without significant investment could be extinct by 2025 ('District nurses face "extinction" in 2025' — www.kcl.ac.uk).

Perhaps the last word should go to the Institute of Health Visitors, which has been a vocal campaigner for improved recognition of its members:

> *Without an immediate plan of action, health visitor numbers will continue to fall and families with babies and young children will face the brunt of this… and for some, this has life-changing and catastrophic consequences.*
>
> ('Health visiting in the NHS Long Term Workforce Plan: In brief' — ihv.org.uk).

We couldn't have put it better ourselves. **JCN**

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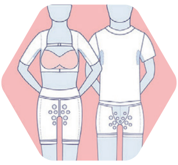

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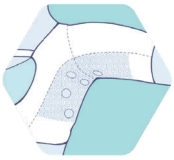

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[1] Moloney S, Fitzgerald D, Roshan D, Gethin G. Impact of hidradenitis suppurativa-specific wound dressing system on patient quality of life and dressing-related pain: pilot study. J Wound Care. 2022 Nov 2;31(11):898-906. 95% CI, P <0.001 HidraWear is clinically proven to show 95% of patients will experience a significant benefit Vs previous management solution. Patients experience a significant improvement in dermatological quality of life (19.4 down to 4.6 DLQI Scoring) using HidraWear Vs traditional wound dressing products and techniques, 95% CI, P <0.001

DAY070 v1

Nurses volunteering their skills outside of work

Kim Gregory, digital communications and content officer, ERIC, The Children's Bowel & Bladder Charity

ERIC, The Children's Bowel & Bladder Charity, helps thousands of families struggling with continence issues, including through their free helpline. But, they could not do it without the generosity of volunteer nurses.

Bowel and bladder issues can ruin children's lives — and their families. Daily battles with problems like wetting and soiling can affect everything from school attendance to social plans. Some children and teens struggle with anxiety, depression and low self-esteem because of their conditions.

But, it need not be that way. ERIC, The Children's Bowel & Bladder Charity, is on a mission to support all children, young people and their families to live a healthy and happy life regardless of any bladder or bowel issue they may face. It is working to break the stigma around wee and poo; to get everyone talking openly about good bladder and bowel health.

NURSE VOLUNTEERS

For over 30 years, ERIC has been empowering children, parents and carers with emotional support, information and resources through their advice-packed website, family events, healthcare professional training and online shop.

'ERIC, The Children's Bowel & Bladder Charity, is on a mission to support all children, young people and their families to live a healthy and happy life regardless of any bladder or bowel issue they may face.'

The accredited ERIC Helpline is a vital part of ERIC, directly reaching families in need.

However, ERIC could not reach the number of families it does if it were not for the generous, selfless contributions of many nurses who are volunteering their time, skills and knowledge to work shifts on the ERIC Helpline telephone and email services.

Sarah Timms, head of family services and support, said:

> *We rely on our nurse volunteers. There aren't words enough to express how much they are hugely appreciated and greatly valued. It's not just about them giving time. They bring an amazing wealth of knowledge as they become part of the team.*

COMMON BUT MISUNDERSTOOD CONDITIONS

Conditions like constipation, bedwetting and withholding are common conditions, but they are often misunderstood.

This means that sometimes parents or carers do not recognise their children's toileting issues as medical conditions — rather, they wonder if it is simply naughtiness or laziness.

Stigma results in some families' reluctance to seek help; while others want help but don't know where to turn, as getting access to children's continence services has become increasingly difficult in recent years.

Yet, the impact of getting the right support and information to deal with a continence difficulty can be dramatic.

Children can start to live a normal life. They can take part in social activities. They are less likely to miss school. They feel happier and more confident, and the strain on family life is lifted.

When specialist bowel and bladder services are not easily available, ERIC steps in.

Sarah Timms, head of family services and support, ERIC.

ERIC HELPLINE

ERIC's team of expert helpline advisors are trained by continence specialists to provide up-to-date information and emotional support on a wide range of continence issues based on National Institute for Health and Care Excellence guidelines (NICE, 2007; 2010a; 2010b).

Although a small team, helpline advisors work tirelessly: last year alone, they helped around 4,000 families. But, demand is huge, with ERIC estimating that they can only answer one in four calls.

'IT TRANSFORMS LIVES'

ERIC Helpline advisor Karen worked in the NHS for 43 years, including as a school nurse working in a nurse-led enuresis clinic. When Karen retired, she began volunteering at ERIC for one day a week.

> *Being a nurse has always been part of my identity. It's hard to give up when you retire. I'd used ERIC's resources in the past, so I volunteered to help.*
>
> *I feel passionate because I believe in what ERIC do. I see how much development there has been in our knowledge and understanding of children's continence issues. I'm not a continence nurse specialist and there are occasions, for more complex cases, when I rely on support and advice from the helpline team's specialists. But I know the difference it makes to families. You know that once they get the help, it just transforms lives.*
>
> *Because it's quite a small organisation, I feel very much part of the team. I love it. There's a real job satisfaction.*

The Children's Bowel & Bladder Charity

'Although a small team, helpline advisors work tirelessly: last year alone, they helped around 4,000 families.'

WHY VOLUNTEER AT ERIC?

Here at ERIC, we are developing our volunteer programme and the roles available so we can help more children, young people and their families. Volunteers become a vital part of our well-respected national charity, with the opportunity to influence how we work and to make a difference — while developing their own skills and learning new ones. All that is needed is enthusiasm and a desire to help!

ERIC's Helpline volunteers receive training and complete an induction programme, so that they feel confident to give families support. They are all homeworkers and receive equipment. Volunteers join a friendly, enthusiastic team who help and support one another, while reaching families in need.

Do you enjoy talking to families and have an interest in helping children with life-altering continence conditions? If so, why not contact ERIC's volunteer co-ordinator, Jayne, to find out how you can get involved at: www.eric.org.uk/volunteer **JCN**

More information

ERIC, The Children's Bowel & Bladder Charity has been awarded a quality standard accreditation by The Helplines Partnership.

ERIC's next Paediatric Continence Care Conference is taking place on 14th October, 2024. Tickets are available to book at: https://eric.org.uk/paediatric-continence-care-conference/

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ERIC...

... is the national charity dedicated to improving children's bowel and bladder health. Its mission is to reduce the impact of continence problems on children and their families. Visit: https://eric.org.uk/

Advertorial

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Ali Hedley, Medical and Professional Affairs Manager, UK, Mölnlycke

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Chronic wounds, such as leg ulcers, often produce an excessive volume of exudate. If not managed appropriately, this can lead to maceration of the surrounding skin and in some cases accelerate wound infection, which lengthens healing time.

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QNI and Marie Curie call for a new deal for end-of-life care

Matthew Bradby, head of communications, Queen's Nursing Institute (QNI)

A new report on palliative and end-of-life care in the community has been published by the Queen's Nursing Institute (QNI) and Marie Curie.

The report by the two charities is based on a national survey of health and care staff undertaken in 2023. The majority of survey respondents were community nurses. The findings reflect how palliative and end-of-life care is delivered today, and shines a light on the challenges being faced by nurses. People at end of life need high-quality holistic care and support but worryingly, 9 out of ten respondents to the survey reported being unable to meet the needs of the people they care for, or those close to them, at least in part.

The survey was inspired by a similar project by the two charities in the early years of the National Health Service, 70 years ago, which was very influential in the development of the hospice movement. Despite huge advances in medicine and care delivery since that time, services are still hampered by many of the same social and economic ills as in the 1950s, and by a lack of resources.

Dr Crystal Oldman CBE, the QNI's chief executive commented:

> *Nurses working in the community know that they have 'only one chance to get it right' when it comes to end-of-life care. Working with families is at the very heart of community nursing but as this report highlights, many frail older people are living alone. Having the right resources in place, alongside careful advance planning, are absolutely critical. If not properly resourced, there are huge risks inherent in services' capacity and capability to deliver high quality palliative and end-of-life care.*
>
> *Community nurses are the expert coordinators who manage this care, but there are simply not enough of them to meet the needs of everyone in our communities. District nursing was conceived as a universal service, but it is struggling to meet the growing demand of an ageing population. It is absolutely essential that more resources are allocated, if we are to avoid the tragedy of unmet palliative and end-of-life care needs.*
>
> *Healthcare provider organisations are well aware of the challenges they face, and community nurses have continued to manage ever larger and more complex caseloads, and they deserve admiration and praise for that. But this way of working is not sustainable for nurses, the individuals and families served or for the system as a whole. Palliative and end-of-life care services should be properly resourced, for everyone, when they are in time of need. In the same way that we need specialist and fundamental care at the beginning of life, palliative and end-of-life care is a service that nearly every citizen will need one day.*

The report makes four main recommendations:

- A new funding solution for hospices, and palliative and end-of-life care
- A national palliative and end-of-life care strategy, supported by a delivery plan, in every nation of the UK
- An end to poverty among people at the end of life
- A new deal for families and carers of people living with a terminal illness.

As part of its objective to support and improve care for those at the end of life, the QNI has published new Standards for Palliative and End of Life Care. Universities are invited to map their specialist practitioner qualifications (SPQ) to the new standards. For more information, visit: https://qni.org.uk/nursing-in-the-community/standards/

Dr Oldman also called on politicians to take note: 'The evidence presented in this report should be a wake-up call for politicians of all parties. The extent to which our politicians are prepared to support the recommendations in this report might be seen as a measure of our respect as a society for human life.'

The QNI would like to thank all community nurses who contributed to the survey. **JCN**

More information

To download the new report, '70 Years of End of Life Care in the Community', go to: www.mariecurie.org.uk/globalassets/media/documents/policy/policy-publications/2023/1952-report-final.pdf . The lead author of the report was Dr Emma Carduff, who has written a blog on Marie Curie's website: www.mariecurie.org.uk/blog/food-banks-and-loneliness/376376

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- Identify the challenges for children, parents, and siblings.
- Children get Cellulitis too!
- Children need to be active, but fears can get in the way.
- Make compression therapy work for younger patients!
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Professor Vaughan Keeley & Margaret Sneddon
Monday 4th March 12-12.45
Children and young people get lymphoedema too!

Dr Kristiana Gordon & Ellen Collard
Tuesday 5th March 12-12.45
Lymphoedema in children and young people: getting the treatment right

Rebecca Elwell & Cheryl Tierney
Wednesday 6th March 12-12.45
Lymphoedema: a challenge for the whole family

Natalie Phillips - Haddenham Healthcare & Cheryl White
Thursday 7th March 12-12.45
Children and young people and overcoming the challenges of compression therapy

Didi Okoh & Mark Pearson
Friday 8th March 12-12.45
Young people with lymphoedema: managing fears, risks and barriers to being active

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Register (free) as a Friend of BLS and get regular updates and our quarterly publication

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Thinking outside the box: hypnotherapy

Dr Chhaya Pandit (top), consultant in child and adolescent psychiatry; John Walsh (bottom), Freedom to Speak Up Guardian, both at Leeds Community Healthcare NHS Trust

There is an old saying about 'thinking outside the box'. The basic idea is that we are often caught in conceptual thinking boxes which stop us seeing and discovering new ways of life and work.

Despite the phrase being widely used, the sad truth is that we often keep doing the same old things and are surprised when we get the same old results. The eminent Jungian therapist James Hollis shared how a client said, 'This isn't working, but I do it very well'.

It is often when we discover new ways of working that change starts to happen. However, in the authors' experience, we are often stopped from doing this across the NHS by many factors — old patterns that keep us stuck, thinking we are doing some new work when we are just doing the same old stuff under different names, and sometimes a fear to let staff innovate and create new byways.

This feature provides a good example of what thinking outside the box is.

Leeds Community Healthcare (LCH) NHS Trust has a closed peer support group for staff who are extremely clinically vulnerable and were shielding during the pandemic. It also operates as an expert reference group for the organisation to hear and shape policy and practice based on staff stories and needs. One of the psychiatrists, Dr Chhaya Pandit from the Leeds Children and Young Peoples Mental Health Service (CYPMHS), offered staff hypnotherapy sessions aimed at relaxation, de-stressing and positive affirmations. Chhaya is a trained hypnotherapist as well as a psychiatrist.

These sessions are successful, with staff reporting positive outcomes. Currently, they are open for all LCH staff members. There are two types of sessions running. One is a full one-hour hypnotherapy session and the other is a bite size 30-minute session.

WHAT IS HYPNOTHERAPY?

Hypnotherapy is a means of accessing the deeper mind. The mind we usually operate from is always thinking, problem-solving and seeking solutions. Hypnotherapy is a pathway to deeper, more relaxed ways of thinking and being. Hypnotherapy uses hypnotism for health and change.

In the early days of psychoanalysis, Sigmund Freud used hypnotism as a way for clients to see what was happening in the unconscious (later he left it to focus on dreams and free word association as a means to hear what the unseen parts of our psyche might be telling us; https://royalsociety.org/blog/2017/05/hypnosis-medicine-and-freud/). In the authors' experience, hypnotherapy can be helpful with relaxation, better sleep, working with anxiety and having a more calm place to think and work from, and is used in the NHS (www.nhs.uk/conditions/hypnotherapy/).

HOW WE WORK

The sessions are facilitated by the authors. Notes are sent to participants before each session (which are re-iterated at the beginning of each session). These notes say:

- If you wish you can lie down or be in the most comfortable position you can during the session. Please keep your camera on. This is to ensure that you are OK
- You may feel sleepy — this is a normal reaction for some people
- You may feel emotional — this is a normal reaction for some people
- It is not advisable that anyone withdrawing from alcohol or any substance be part of the session. We would advise a person to seek GP advice before any attendance
- If a person has a serious mental health issue, such as psychosis, depression or trauma, this session would not be appropriate. Please discuss with us before attending
- If you wish to discuss these issues and anything else about the session please contact Chhaya on email — cpandit@nhs.net
- Chhaya and John will remain on the session afterwards if anyone needs to talk.

Photograph: ibreakstock/Shutterstock

The last parts are all about support and aftercare for anyone attending.

The actual sessions usually have eight to nine staff members attending and run for an hour. They start with introductions and what staff might want from the session, and an explanation as to what hypnotherapy is and isn't is given. This is important, as it dispels any misconceptions or misunderstanding. Chhaya then leads into a guided hypnotherapeutic experience. The actual hypnotherapy session has two parts. The first part includes guided relaxation to achieve a deep hypnotic state. When a deep hypnotic state is achieved, the therapist suggests positive affirmation to help achieve wellbeing. The examples participants are given include being able to manage work stress and pressure better and more efficiently, improving work/life balance, developing self-confidence, etc. After the suggestions, the therapist brings participants back to their alertness and awareness. Staff are then invited to share any experiences or feelings and everyone who attends gets a recording of the session, i.e. a voice recording done by the the hypnotherapist for their personal use.

A half-hour bitesize hypnotherapy session focusing on stress reduction has also been introduced on a monthly basis.

Those who have attended the sessions commented:

> *(My experience was) relaxing, could have quite easily fallen asleep and Dr Chhaya's voice was out of this world, so calm, soothing, gentle, just amazing. Dr Chhaya was really clear in terms of what to expect and made everyone on the call feel as comfortable as possible.*
>
> *People were very friendly... (I felt) peaceful and it was good to hear people's experience after and willingness to share.*
>
> *I felt relaxed and happy and glad I took the time to attend. It was very relaxing and easy to engage with. I closed my eyes early and felt able to immerse myself in the session.*
>
> *Afterwards (I felt) refreshed and invigorated.*
>
> *Really enjoyed it... I felt relaxed afterwards.*
>
> *I think in the current times this could be essential to someone's health and wellbeing. It's taking time out of a busy schedule to do something for yourself with a structured session, would definitely promote.*

This work is outside the box because it is created by staff (not mandated by organisational bodies), it focuses on staff needs and allows a new way for staff to find a more relaxed state at work.

WHY THIS MATTERS

The authors believe that there are a number of key lessons that can be learnt from this work.

First, the importance of clinical and corporate colleagues working together to co-create new health and wellbeing measures. The Covid pandemic showed that the silos between people, services and systems need to fall. Colleagues with different gifts and skills should come together to create different ways of working. In this case, someone from a clinical and another from a corporate background came together to create sessions to support staff obtain better sleep, deeper relaxation, and stronger self-worth. These new alliances for care are a sign of hope to systems, as people work across systems, learn together, and build what helps others.

Second, finding the best psychological and emotional places to do our work from. In the authors' clinical experience, these are critical and deeply challenging days for the NHS, and staff wellbeing is key to going forward. The authors feel that hypnotherapy has an important part to play in this work. Being able to access places of calm and peace during times of turmoil is important. The good news is that people can access this and hypnotherapy is a great enabler of this experience.

Third, everyone who attends these sessions has made a conscious act of self-care, which can be difficult as endless things can get in the way. We can have our own internal critic telling us that we are being selfish or self-centred when we focus on self-care. These sessions focus on staff making that act of conscious self-kindness for themselves.

There is a strong need for community services and nursing to major on self-care and find ways to ensure and enable this. Supporting staff is fundamental. There are many ways to do this — psychology, coaching, mindfulness, creating a good culture, clinical supervision, peer support, critical incident debriefing and lessening heavy workloads. As the authors have found, accessible hypnotherapy has a role to play in this work too. JCN

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Managing hypergranulation in wounds

Annemarie Brown

Normal wound healing follows four distinct phases: haemostasis, inflammation, proliferation and finally, maturation. If any barriers to healing occur within these four phases, the healing process will be delayed or may even stall (Mitchell, 2021). One of the common barriers to healing is hyper or overgranulation, or 'proud flesh'. Hypergranulated wounds can cause concern to both patients and healthcare professionals, and, although common in wound care, there is a limited evidence base and currently no guidelines for management. This article discusses the causes of hypergranulation, with suggestions on how it can be managed.

KEYWORDS:
■ Hypergranulation ■ Types ■ Identification ■ Management

WHAT IS HYPERGRANULATION?

Granulation tissue develops during the proliferation phase of wound healing and consists of newly developed capillaries which develop into new blood vessels, delivering oxygen and nutrients to the newly formed tissue in the wound (Mitchell and Llumigusin, 2021). Healthy granulation tissue contains capillaries and is highly vascular, which enables the wound to progress to the maturation phase (Vuolo, 2010). Hypergranulation tissue, on the other hand, consists of excessive, exuberant, and vascularised scar tissue that responds to chronic irritation within a wound during the early granulation and epithelialisation phases of wound healing (*Figure 1*; Leon et al, 2019). It is suggested that prolonged and excessive inflammation can lead to the development of hypergranulation, and this results in the overgrowth of granulation tissue above the surface of the wound, which interrupts the migration of keratinocytes during the reepithelialisation phase, resulting in the wound failing to close (Duff and Lisec, 2022).

> **'To treat hypergranulation tissue, it is vital to ascertain the cause or type by careful clinical examination and taking a patient history.'**

Unhealthy granulation tissue tends to be dark in colour, swollen in appearance, bleeds easily and produces a higher volume of exudate (Vuolo, 2010). It may also increase the risk of scar formation in the wound, as the wound margins cannot be readily aligned. The risk of wound infection is also increased as the wound will be open for longer than usual (Dunford, 1999; Brown, 2019).

Although common, the exact cause of why hypergranulation develops is not well understood (Madden et al, 2011; Hirotsu et al, 2019). It has been suggested that predisposing factors for hypergranulation include:

- Wounds healing by secondary intention
- Excess moisture
- Use of occlusive dressings
- Prolonged inflammation due to infection and/or dressing residue
- External friction
- Prolonged stimulation of fibroplasia and angiogenesis

(Jaeger et al, 2016).

WHAT CAUSES HYPERGRANULATION?

Vuolo (2010) categorised hypergranulation tissue into three types according to cause:

- Type I: hypergranulation which is inflammatory in nature resulting from elevated levels of bacteria, or persistent friction to the wound bed
- Type II: hypergranulation which is a result of an occluded wound environment. As a result, a hypoxic environment is created with an increased level of moisture which stimulates angiogenesis and prolonged inflammation
- Type III: hypergranulation which is a result of cellular imbalance, such as collagenase and matrix metalloproteinase. For instance, an imbalance of the collagenase and matrix metalloproteinases (MMPs) which are responsible for degrading excess collagen.

To treat hypergranulation tissue, it is vital to ascertain the cause or type by careful clinical examination and taking a patient history (Vuolo, 2010). This is particularly important to rule out the possibility of malignancy, such as Marjolin's ulcers, in the

Annemarie Brown, Lecturer, BSc Adult Nursing, School of Health and Human Sciences, University of Essex

wound as both conditions have similarities on clinical examination (Pavlovic et al, 2011; Day et al, 2018). It is recommended that any chronic wound with irregular borders, rolled and/or raised wound edges, an irregular wound bed and excess granulation tissue extending beyond the margins should be biopsied (Enoch et al, 2004; Grey et al, 2006; Day et al, 2018).

IDENTIFYING THE CAUSE OF HYPER GRANULATION

Type I

This type is a result of inflammation and the first step of management is to identify and remove the source. It may be possible to see dressing fibre remnants or other irritants at the wound bed on close examination (Vuolo, 2010). An example of this is hypergranulation at the site of medical devices, such as gastrostomy tubes, suprapubic catheters, and central lines due to friction as a result of badly sited devices (Vuolo, 2010; Leon et al, 2019).

If no obvious sources of irritation are evident in the wound, local wound infection or a high bacterial burden, resulting in inflammation, should be suspected. Clinical signs may be subtle as, in addition to hypergranulation, there may be delicate tissue which bleeds easily, the wound may start to break down, a delay in healing and malodour (International Wound Infection Institute [IWII], 2022). More obvious signs include erythema, local warmth, swelling and a purulent discharge (IWII, 2022). First-line treatment should be application of topical antimicrobials. Antibiotics and topical antimicrobials may be required if systemic wound infection is suspected, and selection should be based on exudate volume, with duration of use being in accordance with trust formulary guidelines. Use of topical antimicrobials should be for an initial period of two weeks only and then reviewed (Wounds UK, 2013). If the hypergranulation has resolved, topical antimicrobial therapy can be discontinued. If the hypergranulation persists, an alternative approach may be needed (see below).

Type II

This generally develops when an occlusive dressing, for example a hydrocolloid, has been used, or when a permeable dressing has been occluded by applying an adhesive film over to secure it. In the author's experience, this sometimes happens in clinical practice when an adhesive dressing, such as a foam, is not available and so the dressing is secured with an adhesive film dressing.

The use of occlusive dressings, however, can create an hypoxic environment which results in the body producing an increase in immature blood vessels to compensate (Dealey, 2008). Furthermore, occlusive dressings may keep the wound surface wet, resulting in oedema and swelling in the wound bed. Van Luyn et al (1992) found that occlusive dressings can induce cytotoxic effects which are detrimental to wound healing. In the case of hypergranulation, therefore, substituting hydrocolloids, which are oxygen impermeable, with polymer foam or film dressings, which are oxygen permeable, may help reduce the hypergranulation (Vuolo, 2010; Tan et al, 2019). These have a high moisture vapour transmission rate (MVTR), meaning that gaseous exchange at the wound interface will improve and the rate of vapour loss will increase through the back of the dressing (Vuolo, 2010).

From the author's clinical experience, applying a double layer of foam, that is, a piece cut from a foam dressing placed directly on the wound under a full size foam dressing can also help to flatten the hypergranulated tissue. If it persists despite change of dressing, an alternative approach may be needed (see below).

Type III

This type, according to Vuolo (2010), is considered to occur as a result of an imbalance of MMPs within the wound. MMPs are protein degrading enzymes, in particular, collagenase, which is involved in the development of new connective tissue and the destruction and absorption of the extracellular matrix (ECM). The process of regenerating new tissue together with the destruction of the ECM, which physically supports the newly formed blood vessels and granulation tissue in the proliferative phase, is delicately balanced. This imbalance between regeneration and destruction of tissue has been suggested as a cause for the development of hypergranulation (Sussman and Bates-Jensen, 2007). This imbalance is not visible within the wound and healthcare professionals, having ruled out signs and symptoms associated with types I and II hypergranulation tissue, may need to treat the hypergranulation as detailed below.

Figure 1.
Hypergranulation tissue.

MANAGEMENT OF HYPERGRANULATION

In the past, caustic products such as silver nitrate sticks were used to reduce hypergranulation by burning the tissue. There have been several documented disadvantages for using silver nitrate, including:

- Skin damage to the surrounding skin
- Increase in pain
- Potential for necrotic tissue and infection to develop

(Jaeger et al, 2016).

As a result, their use is seen to be outmoded and should only be considered under specialist instruction and local policy guidelines as a last resort when all other treatment options have been tried and failed.

Topical steroids

The initial strategy to manage hypergranulation is to eliminate any obvious causative factors (listed above). These include re-siting any medical devices, such as a percutaneous endoscopic gastrostomy (PEG) tube or suprapubic catheter if possible, addressing wound infection or a high bacterial burden, and replacing the occlusive dressing with a more permeable product, such as foam dressings.

If the hypergranulation fails to respond to the above, licensed topical steroids can be considered. However, healthcare professionals need to be aware that these are not licensed for treating hypergranulation (Johnson, 2007; Mitchell and Llumigusin, 2021). In addition, despite anecdotal evidence supporting their application in treating hypergranulation, their use remains controversial due to concerns that steroids may interfere with the progression of healing and increase vulnerability to infection (Hofman et al, 2007; Coondoo et al, 2014).

Topical corticosteroids are used because they suppress the inflammatory response that contributes to the growth of hypergranulation tissue (Bosanquet et al, 2013). In addition, they suppress the formation of new capillaries and reduce oedema in the wound bed (Jaeger et al, 2016). Waldman et al (2019) advocated twice-daily application of timolol maleate ophthalmic gel forming solution 0.5% for up to 14 days or until complete resolution of the hypergranulation has been achieved. Trimovate® cream (Ennogen) is commonly used topically to treat hypergranulated tissue and contains three ingredients:

- Clobetasone butyrate, which reduces inflammation
- Oxytetracycline, which is an antibiotic and prevents bacteria producing proteins
- Nystatin, which acts on fungi and yeasts by interfering with their cell membranes

This is applied directly onto the wound and covered with a dressing. Treatment continues for seven days and should then be reviewed.

Box 1 Key points in management of hypergranulation

- Rule out the possibility of malignancy. Signs suggestive of this include any chronic wound with irregular borders, rolled and/or raised wound edges, an irregular wound bed and excess granulation tissue extending beyond the margins. Refer for further investigation if suspected
- Inspect the wound for any obvious foreign bodies, such as dressing remnants or fibres that may be causing the hypergranulation
- If an occlusive dressing is being used, consider changing to a dressing that has a high moisture vapour transmission rate (MVTR), meaning that gaseous exchange at the wound interface will improve and the rate of vapour loss will increase through the back of the dressing. Consider applying a double layer of foam, that is, a piece cut from a foam dressing placed directly on the wound under a full size foam dressing. This can help to flatten the hypergranulated tissue
- If wound infection or a high bacterial burden is suspected, treat with systemic antibiotics if required and use antimicrobial products according to exudate volume. Type and duration of their use should be in accordance with trust formulary guidelines. Use of topical antimicrobials should be for an initial period of two weeks only and then reviewed
- If the hypergranulation fails to respond to any of the above, consider use of topical corticosteroid products. Review for efficacy regularly. If no improvement is noted, consider referral to a tissue viability nurse or dermatological healthcare professional for further investigation.

Steroid tapes

Burr (2021) discusses the use of Fludroxycortide Tape, formerly called Haelan Tape®, for the treatment of hypergranulation tissue within or around the edge of the wound. It is a translucent polythene adhesive, waterproof film, impregnated with fludroxycortide (a moderately potent steroid) (4µg/cm2) and protected by a removable paper liner. It provides the dual effect of topical steroid application/absorption, plus occlusion (covering, providing optimum absorption potential). Burr (2021) suggests that an application of Fludroxycortide Tape to the granulation tissue, once to twice weekly, alongside usual dressings for six to eight weeks or daily for up to eight applications, can help reduce the hypergranulation.

An alternative corticosteroid-impregnated tape is Betesil® (Derma UK), which comes with four or eight individually packed small plasters, 10x7.5cm, impregnated with betamethasone valerate 2.25mg (corresponding to 1.845mg of betamethasone), a more potent corticosteroid than fludroxycortide. Fludroxycortide Tape comes in 7.5x20cm and 7.5x50cm sizes, which can be cut to size. Depending on the wound size, Betesil may be more cost-effective per square metre compared to Fludroxycortide Tape because it is a more potent preparation and therefore may need a shorter treatment duration to be effective (Buchanan, 2019). Betesil plasters need to be changed daily and treatment duration is recommended for a maximum of 30 days (Buchanan, 2019).

Either tape product should not be used if there is any hypersensitivity to the active ingredient or any excipients, and application should be avoided on any lesions considered to have bacterial, viral, or fungal infections (Buchanan, 2019). This includes tuberculosis of the skin, herpes simplex and herpes zoster. They are also contraindicated for inflammatory lesions such as acne, rosacea, perioral dermatitis as well as ulcers, burns and frostbite and, therefore, are not licensed for use on open wounds. More recent studies on corticosteroid-impregnated tapes focus on closed wounds, dermatological conditions and keloid and hypertrophic scar management and are therefore not relevant to open wounds (Goutos and Ogawa, 2017).

Potential side-effects

The higher the concentration of steroid tape used, the more pronounced the associated side-effects will be (Goutos and Ogawa, 2017). The following side-effects with their use have been reported in the literature, including:

- Burning or stinging sensation
- Contact dermatitis.
- Skin irritation and/or eczematous reaction
- Folliculitis
- Aggravation of pre-existing dermatitis
- Sensitivity
- Temporary hypopigmentation

(Adapted from Goutos and Ogawa, 2017).

CONCLUSION

Hypergranulation in wounds can cause distress to both patients and healthcare professionals. Although common, there are currently no guidelines on management. This article has discussed the causes of hypergranulation and described strategies to identify and treat in order to enable wounds to progress onto healing. The key point, however, is that healthcare professionals should be mindful that malignancies can occur in wounds and, if suspected, onward referral for further investigation is essential. Topical steroid products are commonly used in clinical practice and are a useful adjunct to managing the condition. However, clinicians should be aware that these products are not currently licensed for use on hypergranulation.

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Practice point

Further useful educational tools for healthcare professionals and patients are available online at: www.typharm.com/ tape, including an application video and a cutting template among others (Haelan; fludroxycortide) and Betesil at: www.betesil.co.uk

Necrotising fasciitis: is follow-up supported self-care an option?

Luxmi Dhoonmoon

Necrotising fasciitis (NF) is a life-threatening condition, consisting of a soft-tissue infection with rapidly progressive, widespread fascial necrosis and sepsis. Prompt diagnosis and treatment are essential, but in the early stages, it is difficult to differentiate from other skin conditions such as cellulitis. A high level of suspicion and a low threshold for surgical referral are essential to avoid significant mortality. Following often lengthy hospital treatment, patients will be discharged for management in the community — usually with extensive wound care needs. As part of recovery, supported self-care is an option for some patients and the benefits may help improve outcomes.

KEYWORDS:
■ Necrotising fasciitis ■ Diagnosis ■ Treatment ■ Self-care

Necrotising fasciitis (NF) is a severe and life-threatening bacterial infection of the skin and soft tissue which requires rapid diagnosis and surgical treatment (Neilly et al, 2019). It is typically caused by toxin-producing bacteria and is often sub-classified as:

- Type 1 (polymicrobial) — the most common
- Type 2 (beta haemolytic *Streptococcus pyogenes*, monomicrobial)
- Type 3 (Clostridium species and Gram-negative bacteria)
- Type 4 (fungal)

(Morgan, 2010).

Estimates of mortality rates vary between 23–76% (Hakkarainen et al, 2014; Misiakos et al, 2017). Without treatment, fatality reaches 100% (Misiakos et al, 2017) and surgical amputation is performed in 11–14% of cases (Nawijn et al, 2021).

> **'Although uncommon, NF is not rare and can occur because of a minor injury and sometimes postoperatively.'**

Necrotising fasciitis commonly occurs in the lower limbs, perineal region, genitals and abdomen (Misiakos et al, 2017). It is clinically characterised by very rapid disease progression, with significant local tissue destruction. The degree and timing of systemic toxicity depends on the strain of bacteria and toxins produced (Hakkarainen et al, 2014). Most patients require multiple surgical debridements, and often have large and complex wounds requiring prolonged care (Hakkarainen et al, 2014).

This article examines the diagnosis, risk factors and management of NF, with a particular emphasis on postoperative care in the community. From the author's own clinical experience, this may involve an element of supported self-care as part of a strategy to improve outcomes.

ARE CASES INCREASING?

Although uncommon, NF is not rare and can occur because of a minor injury and sometimes postoperatively (Lee Spark NF Foundation, 2020).

While there are few studies examining the actual incidence of NF (Nawijn et al, 2021), almost 20 years ago it was estimated that in the UK, 500 people develop the infection every year (Hasham et al, 2005). However, there is no ongoing surveillance system in place to record NF so this could be an underestimate (Hasham et al, 2005; Anaya and Dellinger, 2007).

Based on clinical experience in North West London, there has been a recent spike in NF cases, particularly among younger people following aesthetic surgery performed outside the UK. Many of these patients are embarrassed about the likely cause of their illness and appear to delay seeking medical advice. Interestingly, a recent audit from the British Association of Aesthetic Plastic Surgeons (BAAPS), recorded a 94% increase in three years in the number of people needing hospital treatment in the UK after cosmetic surgery abroad. Complications recorded by BAAPS range from wound healing problems to life-threatening sepsis, (BAAPS, 2023).

There are few reports regarding NF as a complication after aesthetic surgical procedures, but a literature search provided some supporting data and case studies

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(Gaede et al, 2008; Marchesi et al, 2017). The majority of infections were monomicrobial, promoted by *Streptococcus pyogenes*. In most cases, NF occurred by the third postoperative day with non-specific signs and symptoms (Marchesi et al, 2017).

The potential association with aesthetic surgery is relevant, as these patients are often young, female and previously healthy (e.g. the author's team treated a 16-year-old girl with NF, following an aesthetic procedure outside the UK). This questions the stereotypical patient with NF — usually described as older, male and with multiple comorbidities (Puvanendran et al, 2009).

DIAGNOSIS

At the onset, NF is difficult to differentiate from cellulitis and other superficial infections of the skin, such as non-necrotising fasciitis, myositis, neoplasm, myonecrosis, inflammatory myopathy, and compartment syndrome (Ammar et al, 2015), yet early diagnosis is essential to reduce mortality and morbidity (Puvanendran et al, 2009). A distinctive feature of NF is the rapidity with which it progresses, which is in contrast to cellulitis or abscesses (Hakkarainen et al, 2014).

It can occur anywhere on the body, but most commonly at the perineum (36%), lower extremities (15.2%), postoperative wound sites (14.7%), as well as in the abdomen, oral cavity, and neck (Diab et al, 2020).

In the early stages, a patient may become systemically ill with fever, hypotension and tachycardia, (Misiakos et al, 2017), but with no visible skin changes or very minor ones (Armstrong et al, 2021). This is due to the deep nature of the infection which starts at the level of subcutaneous fat and deep fascia (Armstrong et al, 2021).

The initial non-specific signs and symptoms develop rapidly (Diab et al, 2020) and progress to localised pain, swelling and erythema (Misiakos et al, 2017). Skin changes may include crepitus, numbness over the site of infection, erythema, necrosis and haemorrhagic blisters on the skin filled with blood due to damaged blood vessels (cutaneous blisters) and oedema extending beyond the erythema (Diab et al, 2020). Left untreated, large areas of soft tissue damage will develop, together with extreme pain and systemic sepsis (Timmons, 2005). Patients who present with systemic toxicity or shock are already in the advanced stage of the disease (Hakkarainen et al, 2014).

Diagnosis of NF is clinical and requires a high index of suspicion and a low threshold for referral to emergency surgical care (Diab et al 2020). Yet studies have shown that only 15–34% of patients with NF have an accurate diagnosis on admission to hospital (Wong et al, 2003; Hefny et al, 2007).

LABORATORY RISK INDICATOR FOR NECROTISING FASCIITIS (LRINEC)

A laboratory risk indicator for necrotising fasciitis (LRINEC) has been developed to help differentiate the disease from other soft tissue infections. It offers a method of identifying early cases. This is based on a statistically positive correlation between LRINEC score and a diagnosis of NF. While it may be a useful clinical determinant, if there is doubt about the diagnosis, time is of the essence in performing surgery to mitigate the significant risks of the disease (Bechar et al, 2017). BMJ Best Practice (2020) advice is:

> *If you suspect necrotising fasciitis, immediately refer the patient for urgent surgical debridement; do not wait for the results of investigations before referral.*

CAUSES

Necrotising fasciitis infections develop from an initial skin lesion, trauma or minor injury; and group A Streptococcus (GAS) is recognised as the most common causative micro-organism. A study in the Netherlands found that in up to 42% of all NF infections, GAS is the causative organism (Nawjin et al, 2021).

Lesions are caused by a traumatic wound, insect bite, injection site, surgical wound or perianal source in 80% of cases (Stevens et al, 2014). However, in 50% of patients with infections caused by GAS, there is no defined portal of entry or visible skin lesion. Yet, the infection process becomes established precisely at the site of a prior, non-penetrating minor injury (Bryant et al, 2006).

A study of 257 patients showed blunt trauma and seemingly innocuous musculoskeletal injuries, such as muscle strains, to be significantly associated with the development of GAS NF (Nuwayhid et al, 2007). Although the reasons for this remain unclear, it has been suggested that the underlying damaged muscle is predisposed to infection and that the regenerating muscle cells may be susceptible to *Streptococcus pyogenes* via a binding protein (Bryant et al, 2006).

RISK FACTORS

Necrotising fasciitis can affect anyone at any age, including children. Documented risk factors include age (over 50), diabetes mellitus, peripheral vascular disease, hypertension, chronic renal failure, intravenous (IV) drug use, alcoholism, immunosuppression, malignancy, and obesity (Hasham et al, 2005; Phan and Cocanour, 2010). Diabetes is the most common pre-existing condition found in 44.5% of patients (Goh, 2014).

In the author's experience, patients significantly younger than 50 are being seen, who were previously healthy. Therefore, age as a risk factor should be treated with caution.

MANAGEMENT

Early diagnosis, preferably within four hours, and surgical management are vital to improve morbidity and mortality. It has been observed that delays in treatment of more than 12 hours can be fatal (Misiakos et al, 2017).

The mainstay of treatment is urgent surgical debridement to remove necrotic tissue until healthy, viable tissue is reached, together with broad-spectrum antimicrobial therapy, haemodynamic and intensive care support (Sartelli et al, 2018). A systematic review showed that mortality falls to 19% when surgery is undertaken within 12 hours after presentation. Where surgery is delayed for more than 12 hours, mortality rates increase to 34% (Diab et al, 2020).

While radical debridement of necrotic tissue is potentially lifesaving, it often creates difficult challenges in terms of wound care, particularly when the patient returns to the community, usually following lengthy hospitalisation. Rehabilitation is recognised as an essential and integral component of recovery (Sartelli et al, 2018), and patients recuperating from NF often encounter similar problems to those experiencing severe burns.

Postoperative care, which extends from early wound care through reconstruction and long-term rehabilitation, is of paramount importance in attaining the best long-term functional and quality-of-life outcomes for patients, (Hakkarainen et al, 2014). The goal should not simply be survival, but rather the reintegration of patients back into their communities with a successful return to daily life activities (Hakkarainen et al, 2014).

PATIENT IMPACT

Even with a rapid diagnosis and optimum treatment, patients recovering from NF are frequently left with extensive wounds, scars and functional deficits, which can negatively impact their health-related quality of life (Suijker, 2020). A study identified three key chronological stages of NF which depict pivotal patient experiences. These are:

- Regaining awareness in intensive care unit (ICU)
- Transitioning to the hospital ward
- Returning home

(Fagerdahl et al, 2020).

Each stage was characterised by ambivalence. Initially, relief at surviving, followed by distress of serious illness, then the relief of independence and distress of abandonment, and finally the relief of being home and distress of still being dependent on others (Fagerdahl et al, 2020). Fear of infection characterised the lives of people recovering from NF. This fear had a debilitating effect on all aspects of their daily life. It is therefore essential that primary care health professionals are aware of these not-always-visible factors to help alleviate concerns and optimise recovery (Fagerdahl et al, 2020).

A study of 56 adult patients who recovered from NF demonstrated the long-term impact on both their mental and physical quality of life (Gawaziuk et al, 2018). Distress regarding reduced confidence about their appearance and the extent of scarring highlights the long-term devastation that NF may have on many patients (Gawaziuk et al, 2018), some of whom need to adjust to a changed body appearance, reduced mobility and decreased physical functioning (Kruppa et al, 2019).

Understanding a patient's specific needs, concerns and hopes for the outcome of their care is an important first step in their community-based rehabilitation. Research supports that effective clinician communication with patients and their families leads to improved patient outcomes (Armstrong et al, 2021). It is thus a vital part of care.

SUPPORTED SELF-CARE

Supported self-care (also referred to as shared care) for the management of chronic wounds has been gaining significant traction, particularly since the National Wound Care Strategy Programme (NWCSP) described it as an 'opportunity for quality improvement to deliver better patient outcomes' (NWCSP, 2023).

However, a literature search for shared care following discharge of patients with NF revealed little data of significance. This may be due to the small number of patients with NF, or possibly a perception that the serious nature of a necrotic wound precludes any element of shared care. This is a perception which is challenged in the case study here.

Shared care relates to the active involvement of patients (and other members of their network) in their own care, under the guidance of a healthcare professional (Wounds International, 2016). It typically incorporates aspects of treatment, decision-making, care planning, and undertaking condition-specific tasks. This approach values the patient as an active participant rather than a passive recipient of care, (Wounds International, 2016). Indeed, patient involvement can improve wound care outcomes and quality of life (Hibbard and Gilburt, 2014).

Given the evidence for the negative physical, mental and social impact of NF, interventions which can help increase health-related quality of life following discharge into the community deserve consideration. In the author's experience, it is essential that patients recovering from NF are supported and empowered to speak openly about the care and treatment they receive, and become equal partners in rather than simply recipients of care. This approach is demonstrated in the case study below.

CASE STUDY

A 55-year-old self-employed male presented to his GP with a very small black patch of skin in the anal area (approximately 1x1cm). The GP diagnosed an anal boil, which did not require treatment. Apart from a body mass index (BMI) of 28, the patient was observed to be in good health and was not taking any prescribed medication.

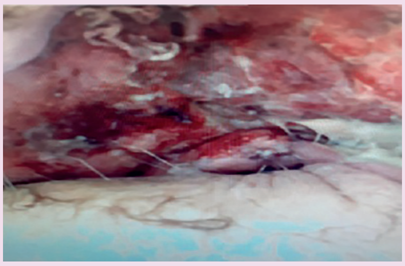
Within 48 hours, he became very unwell, experienced breathing difficulties and sudden collapse. The 'anal boil' spread rapidly across both buttocks and the skin became black. He was admitted to A&E, where NF was diagnosed based on a visual examination and history-taking from his partner. The description of the rapidity of his decline, the appearance of the skin and the spread of the infection were key diagnostic indicators.

The patient required extensive surgical debridement to remove all necrotic and infected tissue. A temporary colostomy was performed to facilitate wound healing. Due to the complexity of the surgery and extensive tissue removal, he was admitted to the intensive care unit for seven days. Laboratory tests confirmed he had type 2 NF (monomicrobial *Streptococcus pyogenes*).

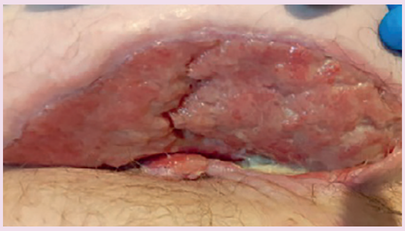
Clinical support was requested postoperatively from the tissue viability team. The wound bed was treated daily using Kerlix® gauze (H&R Healthcare) soaked in octenilin® wound irrigation solution (schülke), which contains octenidine as a preservative capable of inactivating pathogens. This may help reduce the risk of pathogen transmission into the surrounding areas (www.schuelke.com/gb-en/products/octenilin-wound-irrigation-solution.php).

The dressing was held in place using an incontinence pad. Treatment with negative pressure wound therapy (NPWT) was not required and no further debridement was necessary.

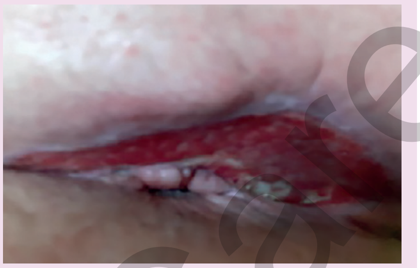
After spending two weeks on a surgical ward, the patient was discharged home to the care of the community team, including tissue viability, stoma care and district nurses. While the wound appeared to be healing well, the patient was having difficulties adjusting to the after effects of his surgery — the challenges of living with a stoma and the anal pain which made sitting impossible. He expressed concern about the number of healthcare professionals visiting to treat his wound. This was a mixture of embarrassment and an extreme fear of infection. Prior to NF, the patient had needed little engagement with the NHS, whereas now he felt totally reliant on the provision of healthcare services.



On admission.

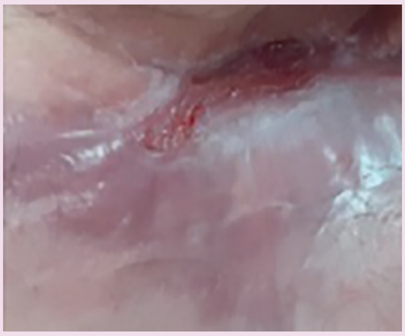


Two weeks after starting daily skin care with octenisan® wash mitts.



Six weeks after starting daily skin care with octenisan wash mitts.

Nine weeks after using wash mitts — cleansing reduced to alternate days.



Wound completely healed at six-month review.

Understanding the patient's concerns meant that the tissue viability team, working closely with district nurses, were able to plan a programme of shared care with the patient and his partner. She learnt how to clean the periwound area twice a week using disposable octenidine-containing wash mitts. This meant fewer nurse-led appointments were necessary. It was emphasised that the healthcare team were available for support at any time. Once the patient started to feel he was taking back control of his life, the speed of his recovery increased and his mental health improved. At his six-month review, the wound had completely healed and he was booked in to have his stoma reversed.

This demonstrates why it is essential to understand how a disease like NF can impact on the life of a previously healthy, younger person and how supported self-care can help a patient regain confidence and self-respect.

CONCLUSION

Necrotising fasciitis is regarded as one of the most 'difficult disease processes' encountered by medical professionals (Sartelli et al, 2018), and represents a devastating spectrum of disease with high case mortality and resource-intensive care. The severity of the disease and the aggressive treatment required puts patients at risk of significant long-term physical, mental and psychological health issues, related to the trauma of both the disease and treatment.

Post-discharge management requires an integrated multi-disciplinary approach which looks at the needs of the patient holistically. A shared-care approach can help patients regain their independence and self-confidence, which in turn may have a positive impact on outcomes. **JCN**

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KEY POINTS

- Necrotising fasciitis (NF) is a life-threatening condition, consisting of a soft-tissue infection with rapidly progressive, widespread fascial necrosis and sepsis.
- Early diagnosis is essential to reduce mortality and morbidity.
- Following often lengthy hospital treatment, patients will be discharged for management in the community — usually with extensive wound care needs.
- The severity of the disease and the aggressive treatment required puts patients at risk of significant long-term physical, mental and psychological health issues.
- A shared-care approach can help patients regain their independence and self-confidence, which in turn may have a positive impact on outcomes.

A simple approach to treating lower limb oedema and lymphorrhoea

Katie Gillam Price

The vast majority of wound care is undertaken by community nurses (Dhoonmoon, 2023), with £941 million attributed to venous leg ulcer care and a further £836 million spent on unspecified leg ulcer management (Guest et al, 2017). If signs and symptoms can be recognised and a diagnosis made, a plan of care can be drawn up and treatment implemented quickly and efficiently to reduce costs escalating further. More important though, the patient's condition will improve quickly and deterioration in quality of life can be avoided. Nursing staff are currently encouraging patients to take a more active role in their own care, guiding them in how to look after their own long-term conditions, which can promote long lasting healing and independence.

KEYWORDS:
■ Chronic oedema ■ Lymphoedema ■ Chronic venous insufficiency
■ Assessment ■ Management ■ Compression therapy

Treating people with leg wounds and chronic oedema makes up a large part of community nurses' caseloads, impacting on quality of life for the patient and imposing a severe financial burden for the NHS (Guest et al, 2020). Chronic wounds can be hard to heal (Velickovic and Jankovic, 2023) and become a source of debilitation for patients resulting in potential problems such as reduced mobility, dependent leg oedema, pain, loss of social interaction and sleep deprivation (Chima et al, 2022; Weir and Davies, 2023). Healthcare professionals may become frustrated and stressed when little progress is made, especially considering the constant and labour-intensive interventions involved.

> **'... empowering nurses to prescribe various wound care products and compression therapy has contributed to a more holistic and streamlined approach to patient care.'**

Over the past 30 years, there have been significant advancements in the management of wounds and related lower leg conditions. The advent of compression therapy available via the Drug Tariff has played a pivotal role in treating both wounds and chronic oedema. In addition, the *Cumberlege Report 1986* (also titled *Neighbourhood nursing: a focus for care*) highlighted the importance of community nursing care (Department of Health and Social Security [DHSS], 1986). Legislation was also enacted to extend prescribing responsibilities to non-medical professionals with the publication of the Crown Report, *Review of prescribing, supply and administration of medicines,* in 1999 (Gov.UK, 1992; Department of Health [DH], 1999).

Indeed, empowering nurses to prescribe various wound care products and compression therapy has contributed to a more holistic and streamlined approach to patient care. Tissue viability nursing roles have also evolved with training in the importance of calculating the ankle brachial pressure index (ABPI), education around leg ulcer aetiology, assessment, care-planning, and in applying compression therapy — all of which, in the author's opinion, have revolutionised the approach to wound care, particularly leg ulcer care. Lymphoedema specialists have also emerged into community settings and offered another

Practice point

Chronic oedema describes a swelling that has persisted for more than three months and is often associated with venous disease (Cooper-Stanton, 2020). Lymphoedema relates directly to a damaged or impaired lymphatic system, often as a result of a congenital abnormality (primary lymphoedema), or due to damage to the lymphatic system (secondary lymphoedema), e.g. from cancer and adjuvant therapy. Both terms are inter-related and managed similarly, but onward referral to a lymphoedema specialist service is more likely with specific lymphoedema, whereas community nursing staff tend to manage chronic oedema (Cooper-Stanton, 2020).

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discipline to support the patient in the primary care setting. However despite these developments, variations in clinical practice still persist (Guest et al, 2015; Atkin et al, 2021).

The widely read work by Guest et al (2015) and the subsequent reviews (Guest et al, 2017/2020) highlighted that there was a discrepancy and inconsistency in delivering wound care and oedema management. In addition, community nursing numbers fell (Queen's Nursing Institute [QNI], 2019), ulcer aetiology was not being diagnosed and wounds were not healing quickly enough (Guest et al, 2020), despite efforts to improve education around chronic oedema and tissue viability.

Following Guest et al's reports, the findings of the All-Party Parliamentary Group (APPG) on Vascular and Venous Disease (APPG, 2016), and the House of Lords debate (Hansard, 2017), the National Wound Care Strategy Programme (NWCSP) was born aiming to streamline nurses' approach to leg ulcer care by every practitioner adopting the same pathway, thus reducing variations in practice (Adderley 2020; NWCSP, 2020).

However, common threads remain running through literature reviews and educational articles quoting facts and figures of financial drain on the NHS (Guest et al, 2017), low numbers of community nursing staff (Wound Care People, 2019), as well as the negative impact on patient quality of life as a result of living with a wound (Dhoonmoon, 2023), both in terms of financial and social implications.

These elements make for stark reading and with the challenges and pressure on the NHS (Warner and Zaranko, 2022) lesser mortals would turn and run, but NHS staff are resilient, as seen during the Covid-19 pandemic (Maben and Bridges, 2020). They want the best for their patients and constantly strive to provide the highest level of care even when times are difficult. In the author's community experience, there has never been a time when rotas have been flush with staff, so trying to complete daily caseloads means that nurses need to be resourceful, using their powers of observation to recognise clinical signs and symptoms and act accordingly and swiftly. There does not seem to be a monetary government investment imminently coming to give community nursing teams all the staff they need, but they have adopted new ways of engaging with patients to encourage them to care for themselves.

> **'Making patients more responsible for their own health decreases the impact on community staff allowing them to care for more complex and sicker patients on their caseload.'**

The NWCSP advocates that patients takes a more prominent role in their own care and engage with family members in their planned treatment. Making patients more responsible for their own health decreases the impact on community staff allowing them to care for more complex and sicker patients on their caseload.

Moffatt et al (2019) stated that chronic oedema posed a major clinical problem within community nursing services and predicted that it would become more prevalent as the population increases. As the population continues to grow, with a corresponding increase in patients needing nursing care, too many complexities and too few staff to care for everyone, a solution is needed.

SIGNS AND SYMPTOMS

Healthcare professionals should learn how to recognise the interrelated conditions of chronic oedema (CO), lymphoedema and chronic venous insufficiency (CVI, see below) (*Figure 1*) (Rasmussen et al, 2016) — assess the signs and symptoms and plan care appropriately to ensure that these conditions do not become chronic.

CVI is a term used to describe a broad range of venous disorders characterised by impaired blood-flow return in the veins of the lower legs. Signs and symptoms are dull pain, aching legs, haemosiderin staining, varicose veins, atrophy blanch, ankle flare and ulceration to the gaiter region (Orhurhu et al, 2021).

CO (oedematous tissue) may present as firm non-pitting, stretched skin, and clothing and jewellery may become tight. Other signs include skin folds, skin creases, hyperkeratosis, a positive Stemmer's sign, lymphangiomata, lymphorrhoea, as well as limb shape distortion (Twycross et al, 2000).

Assessment should include measuring the patient's ABPI, evaluating capillary refill and blanching erythema, as well as pain assessment, considering any underlying medical conditions, and listening to the pedal pulses/looking at pulse volume recording.

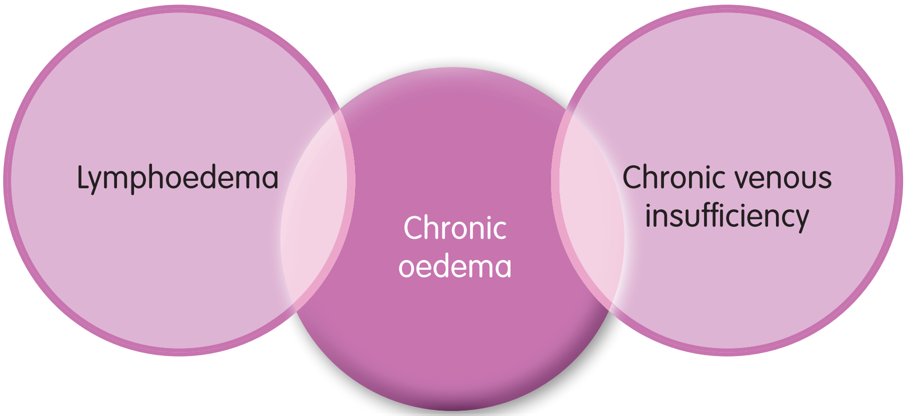

Figure 1.
Recognising chronic oedema within lymphoedema and chronic venous insufficiency.

Care plans should take an holistic approach addressing, for example, sleep patterns, nutrition, obesity, mobility and exercise, with attention to an appropriate skin care regimen, debridement of the wound, as well as application of safe and effective compression therapy (Lymphoedema Framework, 2006).

Regular, ongoing assessment, within the parameters of allowing the planned care time to work, should be undertaken.

Engagement with the patient is crucial to lead hopefully to independence. Through education, encouragement and support, patients can learn to take control of their long-term condition, such as chronic oedema/lymphoedema or lymphovenous disease, which, in the author's clinical opinion, could give staffing levels a better chance to become stable.

The following case report highlights how introducing effective patient-led compression systems, in conjunction with following principles from the NWCSP lower limb recommendations (2023), demonstrates improved patient outcomes, reduction in nurse visits and time, and a smoother transition to patient independence.

CASE STUDY

Following referral from a general practitioner (GP) onto the district nursing (DN) caseload, this female patient presented with an 18-month history of trying to self-manage bilateral lower limb oedema and lymphorrhoea ('leaky legs').

Red Flags **NWCSP red flags**

- Acute infection/cellulitis (and symptoms of sepsis)
- Ischaemia
- Suspected deep vein thrombosis (DVT)
- Skin cancer
- Bleeding varicose veins.

Box 1 Visual inspection of the lower legs

This identified haemosiderin staining to gaiter regions, hyperkeratosis, skin creases, oedema, lymphorrhoea, and a positive Stemmer's sign. (Photograph reproduced courtesy of Sandwell district nurse team.)

On visual assessment, both legs had haemosiderin staining to the gaiter regions, with areas leaking clear exudate (lymphorrhoea) circumferentially. On the periphery of this area, the skin was dry and crusty with evident hyperkeratosis. There were defined skin creases around both ankles and firm, but pitting oedema to the subcutaneous tissues. The patient was unable to wear normal shoes, which affected her mobility and made her reluctant to go out. Stemmer's sign was positive (unable to pinch a fold of skin at the base of the toes) and the toenails were ragged, with a suspected fungal infection (later discounted). These signs and symptoms link CVI and CO (lymphoedema) together, necessitating the skills of tissue viability and lymphoedema nurses under the speciality of the community nursing service. The patient listed her problems as being wet, swollen legs, unable to get normal-sized shoes on, reduced mobility, pain, discomfort, and malodour.

The approach of the community nurse followed a prescribed format: assess, heal, and prevent reoccurrence. Assessment should be subdivided into visual inspection (*Box 1*) of the localised problem, as well as holistic consideration of the patient's issues (i.e. social and environmental circumstances (*Box 2*), examining the underlying medical history (*Box 3*), and assessing the vascular status (*Box 4*) of the arteries to rule out peripheral arterial disease (PAD) and gauging a safe level for compression therapy to be applied.

The NWCSP (2023) drew up a

Box 2 Social and environmental circumstances

- Lived with caring husband
- Warm, well-maintained house, but unable to get upstairs to bed, so sleeping in her recliner chair overnight
- Difficulty in mobilising outside because of reduced mobility and being unable to wear normal shoes; husband managed shopping
- Nutrition assessed revealing adequate, well-balanced and regular meals were being taken.

Box 3 Personal medical history

- Insulin-dependent diabetes.

Box 4 Vascular assessment

- Calculation of ABPI had been undertaken within three months in secondary care (as her GP referred her there before DN involvement) and the results were within normal parameters revealing 1.1 indices to both legs
- Rapid capillary refill to the digit
- Warm feet and good sensation to touch
- No pain experienced upon walking, overnight or at rest
- No loss of colour upon leg elevation.

list of five red flags (see *Box*) to seek immediate advice and necessary attention to improve patient care, prevent deterioration of the patient's condition, and allow better use of healthcare resources, thus enabling clinicians to concentrate on more complex patients in their caseload as required.

The signs and symptoms seen in this case study stem from an impaired venous system where the valves, to prevent backward blood flow, have either become damaged or deteriorated due to age and or immobility. If blood starts to pool in the superficial venous system, it leaks out into the interstitial tissues creating skin discoloration known as haemosiderin staining (Zamboni et al, 2008). The damaged venous system then impacts on the proximity of the superficial lymphatic system and through poor drainage routes leads to the formation of oedema. In turn, if this is not resolved, skin changes will occur (Lymphoedema Framework, 2006). The initial lymphatic capillaries become congested and with impaired drainage routes bulge and push through the skin creating a 'bobbly' effect with the skin becoming an uneven texture like a cobblestoned road. These raised projections are known as lymphangiomata, which can leak lymph fluid known as lymphorrhoea (Lymphoedema Framework, 2006).

At this perilous stage, with the risk of wet legs leading to macerated skin and infection (Freitas, 2022), if compression is not applied, they become fibrosed appearing like warts over the skin. This is called papillomatosis and is not only unsightly, but could potentially lead to a risk of leaking too. Despite the increase in moisture caused by lymphorrhoea, hyperkeratosis may occur. This is caused by over proliferation of the keratin layer of the skin creating dry, crusty scales resulting in a perfect ground for bacteria to hide and infection to develop. Left untreated, the increasing oedema stretches the skin giving a feeling of tightness and heaviness in the limb, reducing mobility and leading to skin folds and limb shape distortion (Boyages, 2022).

To arrest lymphorrhoea, improve skin integrity and reduce chronic oedema, compression therapy is needed in conjunction with improved skin care.

In this case, the patient was not able to shower herself. However, using a lined bowl, nurses washed her legs using UCS™ debridement cloths (medi UK) to reduce hyperkeratosis. This debridement cloth has an incorporated softening agent called allantoin, which helps to lift the scales of hyperkeratosis and lock them away in the fibres of the cloth (Gillies, 2019). The use of these cloths provides a further measure to enable self-care (Smith, 2020).

Compression bandages are not possible for patient independence as self-application is too difficult (Partsch, 2019). Multilayer compression bandaging can also inflict significant discomfort for patients in terms of footwear, mobility and hygiene routines (Stather et al, 2019). However, compression therapy has evolved over time, and advancements in technology and materials have made it more convenient and accessible for patients. Traditional compression garments were often considered cumbersome and might be challenging for some individuals to put on and wear regularly. However, the introduction of compression wraps has addressed some of these issues, offering a more user-friendly and adaptable solution (Thomas, 2017).

In most cases, these consist of a liner or undersock, with individual bands which are positioned to create the compression securing the tension by hook and tabs. Compression wraps have been available in the UK since 1996 (Lund, 2000) and have

Figure 2.
PAC band to right leg. juxtafit interlocking foot wrap to left leg.

Figure 3.
Initial assessment (left) and five days after treatment had started with juxtafit (right).

been found to be more effective than inelastic bandages (Kline et al, 2008; Mosti et al, 2015; 2020), with evidence of benefits in terms of time-saving and cost-reduction (Elvin, 2015; Freeman and Norris, 2016; Stather et al, 2019). Thomas (2017) states that there should be a measuring guide to ensure that the tension is applied accurately, particularly if being applied by patients themselves.

The Circaid® juxta® range (hereafter referred to solely as juxtafit®) offers that with a built-in pressure system that allows the compression device to be applied and readjusted with minimal training, thus allowing patients to care independently for their condition (McGlynn, 2019).

juxtafit is a latex-free, breathable compression device which comes in a range of sizes and lengths fitting the contours of the limb. The inelastic bands interlock rather than overlap, allowing the patient to readjust it easily without having to remove the whole device. Two parallel lines imprinted on each band correspond to a pre-calibrated measuring card (built-in pressure system — BPS) to give various levels of compression from 20–30, 30–40 and 40–50mmHg. The compression is set according to the results of holistic assessment to give therapeutic levels throughout the day, with the possibility of the device being loosened overnight if needed — in this case, strong compression was applied (40mmHg).

The liner of juxtafit is a knee-length sock with compression only in the foot to address any dorsum oedema, which allows normal footwear to be worn. The benefit of this is that it enables activation of the foot pump and calf muscle to pump blood back up to the heart, further assisting in the reverse of venous hypertension and reducing oedema (Recek, 2013). The pack of the juxtafit also has an extra compression device incorporated for the foot called the PAC band (power added compression) in case there is any stubborn oedema to address, and this was applied to the patient's right foot in this case (*Figure 2*).

Oedema was more pronounced on the patient's left foot and a juxtafit interlocking foot wrap was applied, as this has the same stiffness as the juxtafit device. The patient's husband took a keen interest in her care and was taught how to use the BPS card and readjust the juxtafit device regularly throughout the day. This enabled the nurses to reduce daily visits to just once a week.

In line with the NWCSP (2023), the patient received a full holistic assessment within two weeks of admission to the district nursing caseload. Simple dressings were applied to cope with exudate volume, as well as juxtafit to give the prescribed level of compression required.

Within five days, the lymphorrhoea had stopped, oedema reduced, and the patient's mobility had improved (*Figure 3*). Over the course of several weeks she became independent of nursing staff and was attending to her skin care regimen and juxtafit application herself. The patient was now entering the maintenance stage of chronic oedema management and had the option of continuing with the juxtafit (as it has guaranteed compression life of 12 months), or using compression stockings (hosiery).

Long-term commitment to compression therapy is imperative to prevent the deterioration and break down of skin and oedema rebound (Todd, 2014; Ousey et al, 2021). However, the type of fabric used for compression, the standard of measurement (RAL/British) and class or strength (1, 2 or 3) should be considered.

There are two different types of compression hosiery, categorised

Figure 4.
Application of flat-knit, class 2 garment, also supporting the patient's knees.

according to the fabric used. Circular-knit garments, sometimes referred to as round knit, are manufactured on a round cylinder using an uncovered elastic thread, giving low working pressure. The garment produced has no seam and is generally made to a specifically defined size with the ability to prescribe or purchase off the shelf. They are more pertinent to pure venous conditions where there is no limb shape distortion (Todd, 2015).

Flat-knit garments are knitted in flat rows with a variable stitch count using an additional covered thread, and always require a seam as the garment is brought together in the finished product. These garments can be made to any shape and provide a firmer feel to the fabric. Flat-knit garments have high working pressure when the muscles are active and low resting pressure when the muscles are relaxed. The high wall stability of flat-knit prevents the rebound of lymph fluid and associated problems (e.g. lymph leakage, skin breakdown) and, because the garments are firmer, they contour more favourably to areas with skin folds allowing a comfortable result (Wounds UK, 2021).

In this case, measurements were taken for a flat-knit fabric called mediven mondi® (medi UK) for a closed, toe-to-thigh style with class 2 strength (23–32mmHg). This allowed the patient's knees to also be supported and provided a streamlined effect (*Figure 4*). Again, her husband was instructed in how to apply and remove the compression garment.

Upon review 12 months later for remeasuring of her mediven mondi®, healing had been maintained and there had been no rebound oedema. The patient was satisfied with her situation and compression hosiery was represcribed.

CONCLUSION

Patients should always be the centre of nursing care. However, evaluation and analysis of costs incurred by the NHS has necessitated a move towards new models of treatment which engage more with the patient, encouraging them to be responsible for their own care, thus freeing staff to concentrate on sicker, more vulnerable and complex patients on their caseload.

Taking responsibility for their own care also enhances patient quality of life, as they are no longer restricted to timed DN visits and, where possible, can become more independent and less reliant on nursing staff. Medical industry has produced easier compression methods to allow safe and accurate application that can be self-applied after instruction by a healthcare provider. These measures, along with the NWCSP guidance, could see a reduction in wound care and nursing costs.

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KEY POINTS

- Chronic wounds can be hard to heal and become a source of debilitation for patients.
- The advent of compression therapy available via the Drug Tariff has played a pivotal role in treating both wounds and chronic oedema.
- Healthcare professionals should learn how to recognise the interrelated conditions of chronic oedema (CO), lymphoedema and chronic venous insufficiency (CVI).
- Through education, encouragement and support, patients can learn to take control of their long-term condition.

Revalidation Alert

Having read this article, reflect on:

- Your understanding of chronic oedema
- What an holistic approach to care planning for patients with chronic oedema should cover
- The different compression therapy options available
- Why shared self-care can improve patient quality of life.

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

Fundamentals of diet for type 2 diabetes

Patrick Ward-Ongley

This article provides an update on the dietary management of type 2 diabetes mellitus (T2DM) for community nurses. Dietary change can greatly modify the trajectory of T2DM. Weight changes are a key factor, as significant weight loss can put the condition into remission, and even less dramatic weight loss can have positive effects on glycaemic control and cardiovascular risk factors in individuals with T2DM. Protein intake supports various aspects of glycaemic management and is an especially important nutrient for older adults, who are more prone to T2DM. Carbohydrate restriction is widely advised in clinical practice, although current guidelines do not support this as the sole dietary management strategy for T2DM; it is simply one of various potentially effective measures. Carbohydrate quality is important and high fibre carbohydrates are the preferred source. Excessive alcohol intake can exacerbate T2DM via its damaging effects on the liver. Knowledge of the dietary management of T2DM is vital for community nurses, as it allows them to offer advanced and comprehensive care to their patients.

KEYWORDS:
■ Type 2 diabetes ■ Diet ■ Weight loss ■ Protein ■ Carbohydrates

Type 2 diabetes mellitus (T2DM) is a chronic, metabolic condition characterised by a relative insulin deficiency, usually accompanied by insulin resistance, resulting in hyperglycaemia (American Diabetes Association, 2021). Dietary changes are a fundamental aspect of care for T2DM, with the ability to dramatically alter its trajectory and simultaneously manage comorbidities (Davies et al, 2022).

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'Dietary changes are a fundamental aspect of care for T2DM, with the ability to dramatically alter its trajectory and simultaneously manage comorbidities.'

The classical risk factors for T2DM include:

- Obesity and physical inactivity
- Smoking
- Family history
- Asian, African or Afro-Caribbean ethnicity
- A diet lacking dietary fibre

(National Institute for Health and Care Excellence [NICE], 2023a).

It is estimated that approximately 7% of the UK population (five million people) have some form of diabetes, up from 4% in 2009, 90% of whom have T2DM (Diabetes UK, 2010; Diabetes UK, 2023).

Haemoglobin A1c (HbA1c) is the most frequently used diagnostic test for T2DM. A single HbA1c of 48mmol/mol or above in the presence of symptoms of hyperglycaemia (i.e. polyuria, excessive thirst, tiredness and/or weight loss), or two consecutive HbA1cs of 48mmol/mol or above, are satisfactory for diagnosis (NICE, 2023b). To confirm the diagnosis of T2DM, other types of diabetes, such as type 1, should be excluded based on the clinical presentation.

T2DM presents a major public health issue. Indeed, in 2018, £8.8 billion (9%) of the annual NHS England budget was spent on T2DM, with 80% of the direct costs being attributable to treating the complications of T2DM (Public Health England [PHE], 2018; *Table 1*). The risk of these complications can be mitigated by improvements in glycaemic control and hence this is a major aim in treatment (Davies et al, 2022).

T2DM, BODY MASS INDEX AND FAT MASS

Recently, evidence has been mounting to support the notion that T2DM specifically occurs when there is a build up of ectopic fat mass in the liver and pancreas, at a level beyond which that particular individual can tolerate, based on their genetics. This is known as the personal fat

Table 1: Micro- and macrovascular complications of T2DM (Mansour et al, 2023)

Microvascular	Macrovascular
Retinopathy	Heart disease
Neuropathy	Cerebrovascular disease
Nephropathy (diabetic kidney disease)	Peripheral vascular disease

threshold hypothesis (Taylor and Holman, 2015; Taylor et al, 2023). Indeed, excess fat accumulation in the liver is a primary driver of insulin resistance, and excess fat accumulation in the pancreas limits insulin secretion. Where possible and appropriate, reducing bodyweight is therefore a mainstay in the lifestyle management of T2DM, as this will facilitate reductions in liver and pancreatic fat mass (Taylor and Holman, 2015).

Despite T2DM often being simplified to a 'disease of obesity', one in six of all newly-presenting T2DM cases in the US and UK have a body mass index (BMI) of less than 27kg/m2 (Taylor et al, 2023), and hence are only moderately overweight at most. In the author's experience, many normal-weight (i.e. BMI 18.5–24.9kg/m2) individuals with T2DM are told by their healthcare professionals that they 'shouldn't really have diabetes'. This can be a real source of frustration for these patients. For many individuals, receiving a logical explanation as to how they can still have T2DM without being overweight, per the personal fat threshold hypothesis, is relieving. Weight loss in this group can still be highly efficacious (Taylor et al, 2023), however referral to a diabetes specialist dietitian is recommended to ensure this is appropriate and feasible.

REMISSION OF T2DM

T2DM was once considered a purely 'progressive condition', and while this often is the case, recent evidence has clearly demonstrated the possibility of remission via significant weight loss. Remission of T2DM is defined as an HbA1c of <48mmol/mol measured at least three months after cessation of glucose-lowering medications (Riddle et al, 2021).

The groundbreaking DiRECT trial took individuals with T2DM of less than six years' duration, aged 20–65, with a BMI of 27–45kg/m2 and had them follow an ~850kcal/day formula 'soup and shake' diet for three to five months, followed by stepped food reintroduction and structured support for long-term weight loss maintenance (Lean et al, 2018). Of the 36 participants (24% of the intervention group) who had lost 15kg or more at 12 months, 31 (86%) of them had put their T2DM into remission.

> **'T2DM was once considered a purely "progressive condition", and while this often is the case, recent evidence has clearly demonstrated the possibility of remission via significant weight loss.'**

Utilising this same methodology, NHS England (2023) has released its 'NHS Type 2 Diabetes Path to Remission Programme', which is gradually being rolled out across England to those who meet the criteria. Notably, this excludes individuals over 65 years as drastic weight loss in this age group has not been closely studied and could exacerbate frailty. It also excludes individuals with T2DM duration greater than six years, as evidence of remission in this population is limited. Nonetheless, there are reports of remission in individuals with T2DM even 10–20 years after diagnosis (Steven et al, 2016).

An aim of remission certainly will not be suitable for many with T2DM. However, even weight loss of only 5–10% bodyweight, whether done rapidly or gradually, still offers clinically significant improvements in HbA1c and various other markers of health such as blood pressure (Horn et al, 2022). It is estimated that for every 1kg of weight lost, HbA1c will reduce by an average of 1mmol/mol — however, the greater the baseline HbA1c, the greater the reduction in HbA1c there will be for the same degree of weight loss (Gummesson et al, 2017).

Discussing the topic of weight with individuals who are overweight or obese is notoriously difficult, and if not done sensitively can be counterproductive. Guides on how to perform this successfully are available (e.g. Public Health England, 2017).

However, weight loss might not be appropriate in the following circumstances (Fougère and Morley, 2017; Hussain et al, 2023):

- A recent history of unintentional weight loss
- Chronic disease with a high risk of malnutrition, e.g. cancer, liver cirrhosis, chronic kidney disease (CKD) 4–5, inflammatory bowel disease
- Individuals over 75 depending on their frailty status.

ENERGY AND THE MACRONUTRIENTS

Energy

Energy (kcals) is derived from dietary macronutrients: protein and carbohydrates (both 4 kcal per gram), fat (9 kcal per gram) and alcohol (7 kcal per gram). Overall energy intake is the most significant dietary factor affecting the long-term trajectory of T2DM, as energy intake predominantly dictates whether one gains or loses weight (Hall et al, 2011). That energy intake matters most is evidenced by the fact that many different diets are effective for T2DM management, from low carbohydrate to high carbohydrate, only while they keep the total energy intake under control to avoid weight gain or facilitate weight loss (Diabetes and Nutrition Study Group [DNSG] of the European Association for the Study of Diabetes [EASD], 2023).

Protein

Protein can often be overlooked in the management of T2DM. Nonetheless, it remains an important macronutrient for a variety of reasons. This is because protein intake (Moon and Koh, 2020; Guess, 2022):

- Acutely increases the metabolic rate, a phenomenon known as dietary-induced thermogenesis, significantly more than fat/carbohydrates
- Supports maintenance and development of muscle mass, further supporting the metabolic rate, as muscle mass is more metabolically active than fat mass
- Is particularly satiating compared

to fat/carbohydrates, ultimately meaning fewer kcals are needed to make one feel 'full'

- Acutely stimulates insulin secretion, even in individuals who have lost a significant proportion of their ability to secrete insulin in response to glucose, reducing postprandial glycaemia.

Good sources of protein include eggs, meat, fish, yoghurt, low fat soft cheese, beans, lentils, chickpeas, tofu, soya mince and Quorn™. High protein drinks, puddings and bars are now readily available in most supermarkets.

T2DM is most prevalent in older adults, aged >65 years (Sun et al, 2022). Older adults are less responsive to the anabolic stimulus of protein intake and therefore require larger doses of protein to maintain muscle mass and minimise functional decline (Baum et al, 2016). Therefore, a high protein diet (i.e. 1.2–1.5g/kg bodyweight) is clearly indicated for many with T2DM.

A caveat is that many individuals with T2DM go on to develop CKD, and it is recommended that those with CKD and diabetes follow a moderate (i.e. 0.8/kg/day), rather than high, protein diet to preserve kidney function (Kidney Disease Improving Global Outcomes [KDIGO], 2022).

Carbohydrates and fibre

The carbohydrate (starch and sugar) content of a meal is considered to be the primary determinant of postprandial glycaemia, hence restricting this macronutrient would seem logical in those with T2DM. However, major guidelines do not support the notion that individuals with T2DM should simply reduce their carbohydrate intake. There is no one-size-fits-all approach here. In fact, a wide range of carbohydrate intakes are considered acceptable in the management of T2DM, with more emphasis placed on the quality of the carbohydrate intake (DNSG of the EASD, 2023).

Practice point

In the author's clinical experience, many individuals with T2DM are advised to restrict fruit intake by healthcare professionals because of the sugar content. However, whole fruits are an important source of fibre, vitamins, minerals and antioxidants and are satiating due to their high water content. If they stop having fruit, what will they have instead? Often, it ends up being replaced by ultra-processed food such as crisps, hence this advice can worsen overall diet quality.

The primary marker of carbohydrate quality is the fibre content. As such, an emphasis on high fibre carbohydrates from wholegrains, legumes, nuts, seeds, whole fruit and vegetables is recommended. These types of carbohydrates also tend to have a lower glycaemic index/load (i.e. they cause a more gradual rise in postprandial glycaemia). Individuals with T2DM benefit from obtaining a dietary fibre intake of 35g per day, or by increasing their habitual intake by 15g per day (Reynolds et al, 2020). Achieving this can help to reduce:

- HbA1c
- Body weight
- Total and low-density lipoprotein (LDL) cholesterol
- Premature mortality.

Decreases in glycaemia resulting from moderate carbohydrate restriction seem to be more closely linked to the diminished overall energy intake and subsequent weight loss, rather than the direct reduction in carbohydrate intake itself (Guess, 2022). That is, if one moderately reduces carbohydrates and replaces them with an energy-matched amount of fats, glycaemic improvements are unlikely. Very low carbohydrate ketogenic diets (<50g carbohydrate per day), on the other hand, do seem able to reduce glycaemia independent of weight loss. Unfortunately, such a diet is notoriously difficult to adhere to in the long term and has been associated with vitamin and mineral inadequacies and greater mortality (DNSG of the EASD, 2023). Given its efficacy in reducing glycaemia, great caution is warranted when implementing a very low carbohydrate ketogenic diet while on hypoglycaemic medications, such as gliclazide and insulin. There are also reports of diabetic ketoacidosis in those combining this diet with SGLT2 inhibitors, such as empagliflozin (Guirguis et al, 2022).

Practice point

In the author's experience, many individuals with T2DM are advised to restrict carbohydrate intake regardless of their preferences. It should be noted that those with a moderate–high carbohydrate intake habitually may find this difficult for many reasons, especially that it may not coincide with cultural/environmental norms. Many individuals find it easier to swap to wholegrain sources of carbohydrates (i.e. white pasta to wholewheat pasta) in the first instance and, where necessary, gradually swap out some of their starchy carbohydrate portions for lean protein sources or vegetables and focus on protein- and/or vegetable-based snacks.

Individuals who want to follow a low carbohydrate diet to manage their T2DM can be encouraged to do so in a way that includes plenty of fatty fish, nuts, seeds, avocado and non starchy vegetables, so that the quality of the diet remains high. Low carbohydrate diets typically include 50–130g carbohydrate in a day (Feinman et al, 2015); the bulk of these carbohydrates should come from high fibre carbohydrate sources.

For those on multiple daily insulin injections, the mealtime insulin dose is ideally altered based on the carbohydrate content of the meal. This is likely to involve some degree of trial and error, and often requires the support of a diabetes specialist nurse and/or diabetes specialist dietitian. Such a meticulous approach is unlikely to be suitable in various scenarios, including advanced age and/or frailty.

Fat

Fat intake appears to have less significant impacts on glycaemia compared to protein and carbohydrates (Guess, 2022). Of major concern however, is the impact of dietary fats on cardiovascular disease risk in T2DM. It is recommended that dietary fats come mainly from plant-based foods high in both mono- and polyunsaturated fats, such as nuts, seeds and vegetable oils, such as olive and rapeseed oil (DNSG of the EASD, 2023). High saturated fat intakes reliably increase LDL cholesterol and hence may heighten the risk of cardiovascular disease (Antoni, 2023). An exception to this is full fat dairy, such as milk and, especially, cheese and yoghurt, which although high in saturated fat do not seem to increase the risk of cardiovascular disease (Hirahatake et al, 2020).

Alcohol

When considering the contribution of an individual's diet to their blood glucose levels, alcohol intake should be considered (*Table 2*). Alcohol consumed in excess (i.e. >14 units/week) (UK Chief Medical Officers, 2016) promotes hyperglycaemia in the long term both by contributing to a surplus energy intake and by specifically increasing fat storage in the liver (Li et al, 2019). A handy alcohol unit and kcal calculator is available from drinkaware: www.drinkaware.co.uk/tools/unit-and-calorie-calculator.

Non-alcoholic fatty liver disease (NAFLD) is an underdiagnosed condition present in up to 70% of individuals with T2DM (Targher et al, 2018), and European guidelines suggest that alcohol should be kept below the risk threshold in individuals with NAFLD (European Association for the Study of the Liver/European Association for the Study of Diabetes/European Association for the Study of Obesity [EASL/EASD/EASO], 2016). It is worth considering that even individuals with significant liver disease can still have normal liver function tests (Ahmed et al, 2018), hence alcohol moderation should not be applied only when liver function tests become deranged.

Table 2: Units of alcohol and energy in commonly consumed alcoholic beverages (drinkaware, 2023)

Alcoholic beverage	Alcohol content	Energy
A large glass of 13% wine (250ml, or 1/3 of a bottle)	3.3 units	228 kcal
A pint (568ml) of 4% beer	2.3 units	182 kcal
A pint (568ml) of 4.5% cider	2.6 units	216 kcal
A shot (25ml) of 40% spirits	1 unit	61 kcal, excluding mixer

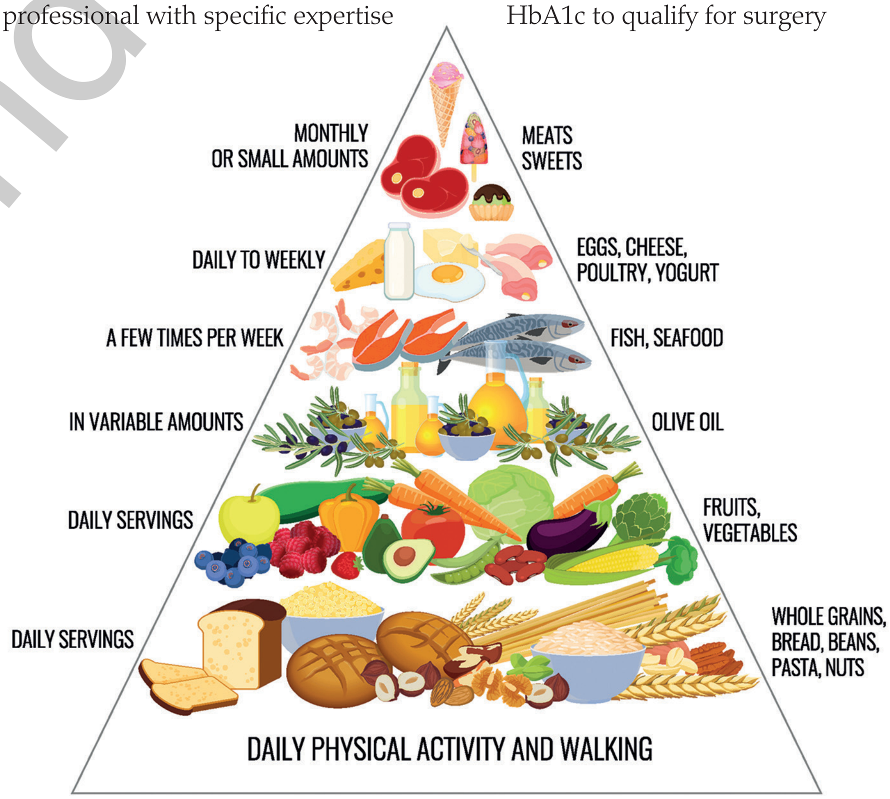
DIETARY PATTERNS

A variety of dietary patterns are suitable for the management of T2DM, as long as they emphasise the consumption of wholegrains, vegetables and whole fruits, nuts, seeds, and legumes, while limiting binge drinking, red and processed meats, sugar-sweetened beverages, sweets and refined grains (DNSG of the EASD, 2023). A key example of this with ample evidence to support its efficacy is the Mediterranean dietary pattern (*Figure 1;* Bussell, 2023). Most importantly, such a dietary pattern not only improves HbA1c, but also facilitates reductions in major cardiovascular events and all-cause mortality.

INDICATORS FOR REFERRAL TO A DIABETES SPECIALIST DIETITIAN

Per NICE (2022) guidelines, individuals with T2DM should receive individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition (i.e. a diabetes specialist dietitian). The following issues may indicate that referral is necessary:

- HbA1c above target and the individual would like to implement dietary change
- Individuals with a relatively new diagnosis who have not attended group education sessions but would still like dietary advice
- Individuals with a BMI less than 25kg/m2 (i.e. normal weight) or especially, less than 19kg/m2 (i.e. underweight)
- When considering significant treatment escalation, for example starting someone on insulin
- Difficulty matching mealtime insulin to mealtime carbohydrate intake which causes frequent postprandial hypo- or hyperglycaemia
- Individuals requiring a lower HbA1c to qualify for surgery



Photograph: Leka Leck/Shutterstock

Figure 1.
Mediterranean diet pattern.

Patient story

Mr X was referred to the author by his practice nurse due to worsening HbA1c (65mmol/mol) despite a 'very healthy diet' at a 'normal' bodyweight (24.8kg/m2). The following diabetes medications were prescribed: metformin 1g BD and dapagliflozin 10mg OD. Insulin therapy was being considered.

Dietary assessment confirmed a well-balanced food intake. However, it became apparent that Mr X was drinking half a bottle of red wine each night (5 units and 325 kcal per night) and an average of four shots-worth of whisky (4 units and 240 kcal) with a diet mixer over the weekend; a weekly total of 39 units of alcohol and 2,515 kcal.

Mr X was surprised to learn that he was consuming almost three times as much as the 14-unit weekly alcohol threshold and, given the looming risk of insulin therapy, he was happy to address this as a priority. The author and Mr X jointly agreed that he would gradually reduce his alcohol intake to no more than 14 units of alcohol per week, by developing new habits in the evening which he did not associate with alcohol intake, starting to go to sleep earlier and occasionally utilising alcohol-free wines.

After six months, with no changes in medications, HbA1c was reduced to 53mmol/mol (his individualised target), likely through a combination of his weight loss (3kg) and improved liver function.

who have been unable to achieve the desired improvement with medications alone
- Individuals with CKD who struggle with hunger/appetite management, to facilitate an appropriate protein intake (individuals with CKD 4–5 will already have access to a kidney dietitian via their consultant nephrologist).

CONCLUSION

T2DM is an increasingly prevalent condition which is highly influenced by lifestyle factors including diet. Dietary changes, which include reducing overall energy intake (to facilitate weight loss), increasing protein and fibre intake and avoiding binge drinking, can drastically alter the trajectory of T2DM. Such interventions are useful as they reduce glycaemia as well as improve other aspects of health.

A basic understanding of the dietary management of T2DM is important for community nurses who frequently come into contact with these patients, given the significant impact of diet on the disease. Additionally, knowing when to refer to a dietary specialist, such as a diabetes specialist dietitian, allows for an enhanced level of nursing care for individuals with T2DM. **JCN**

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KEY POINTS

- Dietary changes are a fundamental aspect of care for T2DM, with the ability to dramatically alter its trajectory and simultaneously manage comorbidities.
- Evidence is mounting to support the notion that T2DM specifically occurs when there is a build up of ectopic fat mass in the liver and pancreas.
- T2DM was once considered a purely 'progressive condition', and while this often is the case, recent evidence has clearly demonstrated the possibility of remission via significant weight loss.
- Knowing when to refer to a dietary specialist, such as a diabetes specialist dietitian, allows for an enhanced level of nursing care for individuals with T2DM.
- Knowledge of the dietary management of T2DM is vital for community nurses, as it allows them to offer advanced and comprehensive care to their patients.

'What I would like to say' findings: cancer care for everyone

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As part of the 'Whatever It Takes — Cancer Care for Everyone' programme (Wessex Cancer Alliance [WCA], 2023), the 'What I would like to say...' project involved two disabled researchers carrying out creative and engaging workshops and interviews with 45 disabled and neurodivergent people, with the support of Bournemouth University's Public Involvement in Education and Research [PIER] team. These individuals were from various community groups in the Wessex region, including Autism Hampshire's Fareham Serendipity group; the Dorset Blind Association [DBA]; the Multiple Sclerosis [MS] Centre Dorset; the Royal National Institute of Blind People [RNIB]; and the Bournemouth and Poole Lymphoedema and Lipoedema Support group. This article reflects on the deep and rich insights shared by attendees, which were facilitated by the PIER community researcher model, and which have already begun to impact practice. It is hoped that the outcomes of this project will contribute to improving disabled people's experiences of accessing cancer services.

KEYWORDS:
▪ Cancer care ▪ Disabled and neurodivergent people ▪ Insights

Wessex Cancer Alliance's [WCA] strategy for 2019–24 focuses on a requirement to identify and reduce inequalities in the cancer pathway, from prevention to care (WCA, 2020). WCA recognises that some patients are not currently well-served by existing pathways. Its goal is to improve patient outcomes and experiences during one of the most emotionally straining periods in their lives, by ensuring that cancer is prevented where possible and managed proactively and equitably when it is detected. Recognising that there is a wide range of inequalities that require further consideration, WCA commissioned an independent literature review on the equitability of cancer services (WCA, 2022). From this, WCA recognised the necessity to gain a deeper insight into disabled people's experience of cancer care. Nationally, there is a significant amount of literature that supports and further explores how disabled peoples' needs are often misunderstood, and their experiences of not feeling listened to, that they are perceived as patients of low priority due to their pre-existing conditions. This suggests that they may be less likely to be treated as effectively or quickly compared to their non-disabled counterparts (Sakellariou et al, 2019).

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WCA's equality health impact assessment stated that they would 'work with disabled people and other partners to ensure [they] continue to learn and adapt [their] communications to meet individual needs' (WCA, 2021). To this end, a pilot study was commissioned by Macmillan Cancer Support and WCA and overseen by Help & Care (Involving People), Bournemouth University's Public Involvement in Education and Research [PIER] Partnership and the Research Centre for Seldom Heard Voices to delve deeper into the experiences of cancer services for disabled people. This study was carried out in collaboration with Bournemouth University, with a secondary aim of building an empirical evidence base for the Bournemouth University Public Involvement in Education and Research (PIER) community researcher model. The purpose of this model is to ensure that lived experience expertise is central to all stages of research, by supporting community members' involvement as both researchers and public contributors.

APPLYING THE BOURNEMOUTH UNIVERSITY PIER COMMUNITY RESEARCHER MODEL

In line with the model, Bournemouth University research staff provided support and mentoring to two community researchers with lived experience of accessing cancer services, as disabled and neurodivergent individuals. The community researchers led on all elements of the project and were fundamental in developing a safe space for open and honest connection with attendees at the creative

Practice point

The 'Whatever It Takes' programme was developed as an approach to address the issues raised by the cancer patient experience survey carried out by Macmillan that highlights inequality in experience for particular groups, including those with long-term health conditions.

workshops, through their shared understanding and culture. A specialist cancer nurse, with expertise across hospital and community settings in supporting patients during their cancer journey, was also an essential presence at all workshops. Their understanding of individualised cancer care meant that they were able to signpost attendees towards resources where needed, and provide specialist knowledge, which was vital in developing a safe environment for attendees to share their experiences.

A rapport was initially built between the project team and the leaders of the community groups, which allowed for discussions around accessibility of the workshops. This meant that each workshop could be tailored to meet the needs of each group. Attendees were provided with various arts and crafts materials and the option to create a piece of art that they felt represented them, their identity, and their experiences. The group activities lasted approximately 90 minutes, during which each research team member moved around the room, engaging in informal discussions with group members and asking them questions. The relaxed nature of this method meant that the project team were able to successfully capture deep and rich insights from attendees.

LANGUAGE AND TERMINOLOGY

Language use can have powerful implications on perspectives towards disability and identity (Bottema-Beutel et al, 2021), so it is important to provide some context behind this paper's adopted positioning. For example, person-first language emphasises the person before their disability (i.e. 'person with autism' or 'people with spinal cord injuries'). This is often used when describing someone with an illness or disease that can be cured or treated (Botha et al, 2023). Therefore, describing disabled people in this way has been criticised for its stigmatising and ableist connotations which suggest disabled people are 'inferior' to their non-disabled counterparts (Bottema-Beutel et al, 2021). Conversely, identity-first language puts disability first, for example 'disabled person', 'autistic person' or 'blind or visually impaired person' and recognises disability as part of a person's being. This aligns more closely with the social model of disability and acknowledges the disabling impact that an unaccommodating environment can have on a person, when it fails to address their needs (Pellicano and den Houting, 2021).

As language and terminological preferences vary from person to person, this project adopts the personal preferences of both the workshop attendees and community researchers, so that they can be represented in a way they feel most comfortable. Consequently, this article uses identity-first language, except for when sharing the perspectives of attendees who expressed preference for another term.

FINDINGS

On analysis of the data gathered at the workshops, eight themes were identified as contributing to attendees' cancer service experiences. Although some of the concerns and experiences discussed in this paper are not exclusive to disabled people, many of them are specific to their lived experience of accessing healthcare.

I felt inappropriate assumptions made about me affected the quality of my care

Ableist assumptions, judgements, and stereotypes, left attendees feeling that cancer services are 'predicated towards the "normative" body and the restoration of normality' and this led to decisions and oversights which negatively impacted on their quality of care, dignity, and independence.

One attendee shared that a healthcare professional had said to them: 'with your impaired vision, maybe a shorter life would be better', when discussing the increased risk of breast cancer upon taking hormone replacement therapy [HRT]. Other attendees described their experience of age-related stigma; for example, one attendee felt that 'people can't believe someone so young is blind' and another spoke of how their age had limited their access to treatment, being told 'even if we found [cancer], we wouldn't operate due to your age'.

Practitioners were reported to have frequently made assumptions regarding their patient's intelligence and capacity, impacting upon attendees' feelings of autonomy and independence in making informed decisions about their treatment. Furthermore, attendees described their experiences with health care as 'prejudicial', 'cultural', and 'misogynistic', such that one attendee was inappropriately asked during an examination: 'would you like a breast reduction and uplift while I am at it?'. Another felt stereotypes around their gender impacted their quality of care, asking 'if I had been a man, would they have said different?'.

Attendees explored how assumptions and judgements they had experienced made them feel. One attendee questioned 'why should the standards be lowered because I am disabled?' and others described their experiences as 'exhausting', 'traumatic', and 'uncomfortable'. Another held up a blank hand template during the workshop and exclaimed, 'stop touching me doctor!'.

Importantly, attendees discussed the importance of 'the little things', which can help a patient feel 'more human'. This included being supported to carry out self-care tasks and feeling that requests for certain staff to accompany them at appointments were listened to. The attendees shared that their cancer journeys were difficult enough, without the extra layer of feeling like a burden because of their disability.

Some attendees reported that through patience and a lot of self-advocation, they eventually received the care they required. For one attendee 'getting the [lymphoedema] stockings is like a new pair of legs' and provided them with freedom and independence. Another described being able to have their husband accompany them and assist with scans as 'helpful'. One attendee commented that they 'have always been treated very well' and that their overall experience was mostly positive.

I felt unsafe during my cancer journey

Several attendees shared that they had felt physically or emotionally unsafe when accessing cancer services. Many attendees raised concerns regarding access to the correct cancer-related lymphoedema stockings and how 'this needs to improve'. This frustration partially relates to a lack of clear guidance around the correct fitting of these stockings, which left one attendee feeling 'forgotten about', and others wearing stockings that were ill-fitted or inappropriate to their needs. Attendees reported that they were frequently forced to attend to their own health needs, such as administering their own blood thinners without adequate support, or arranging post-discharge hospital transportation, often late at night, leading to them feeling unsafe. Attendees felt that these issues were often due to medical professionals being 'rushed off their feet'.

Additionally, mental health and emotional safety were explored, with one attendee describing cancer services as a 'systemic failure' with 'recurring issues that create a threat to patient safety'. Another shared that their experiences were 'frightening because I do not believe I am safe'. Physical access issues for one attendee resulted in an incomplete scan, leading to their practitioner suggesting that a carer should check for lumps instead.

Fear of the unknown and past trauma in medical settings contributed to anxiety among attendees, in addition to a lack of trust and feeling unable to speak up. One attendee shared 'I wouldn't feel able to say anything or say "stop"'... if their tone is rubbish, I wouldn't dare say anything' when talking about attending a smear test. Similar issues around autonomy and consent were shared by another attendee: 'I would much rather take my chances than go through [a mammogram]'. The fear of being forced into an uncomfortable situation meant that many of the attendees avoided screenings.

Attendees also discussed some positive experiences of cancer services in relation to feeling adequately supported. One spoke of having an 'amazing doctor' who held her hand through the process of an examination, and another received mental health support from Macmillan Cancer Support, which enabled them to share their concerns in a space where 'everyone else understood that I might not feel alright, even if I look alright'.

I could not physically access the service

Many attendees shared difficulties in arranging GP appointments, due to confusing and impersonal answerphone services. One person explained that they had received incomplete scan results through the post and were provided with no instruction regarding what would happen next.

Designated 'accessible parking' was often inaccessible to attendees, due to the expense of car parking tickets and being a long distance from the relevant building. This, combined with the need to access various hospital settings due to specialist facilities being limited to one location, made physical access to appointments and treatment more complicated for disabled people. The need to access various hospital settings acted as a barrier to attendees, as it required more complex planning, potentially higher travel costs and exploring unfamiliarity, alongside navigating their cancer journey. One attendee discussed how the removal of council-funded taxis had made getting to appointments more difficult and expensive.

Other concerns were shared regarding step access to screening rooms, narrow doorways, and being unable to move safely within rooms without guidance, which was rarely offered. One workshop attendee shared that in 'having to rely on other people, we lose our independence'. Others reported that the busyness, smells, and noises of hospitals were overstimulating, and they felt there was nothing they could do about it.

Several attendees spoke of difficulties accessing equipment such as computed tomography [CT] and magnetic resonance imaging [MRI] scans, explaining these experiences as 'challenging', 'exhausting', and 'embarrassing'. One attendee described the dehumanising practice of having their 'face crushed against the glass' and being 'knocked about' as they were unable to fully weight-bear for their mammogram. Another felt that 'the hospital, of all places, is not geared up for disabled people'.

Positive experiences for attendees included hospital-arranged accommodation and transportation, and staff slowing down their walking pace to match the speed of their patients.

I felt that information about my healthcare is not accessible for me

Barriers to accessing information included both verbal and written communication. The consequences of being inadequately informed of their options led to some attendees regretting their healthcare-related decisions; one attendee explained 'if I had known everything, I am not sure I would have made the same decisions'.

Attendees explained that materials are often printed using inappropriate font sizes and are formatted in ways that cannot be read by screen readers, as they 'do not recognise all formats of text'. Some attendees felt there is often a 'misunderstanding of what large print is', as they frequently experienced their documentation being printed on larger paper without an increase in the font size. Similar feelings were shared about online information as many 'accessible' websites are often not actually accessible either.

Feeling ill-informed of the various processes within cancer services led to attendees experiencing anxiety around their care. One expressed worry regarding mammograms and felt that 'it would help if there was information that told you when everything was due'. Inaccessible information also increased the risk of missed appointments and screenings; one attendee suggested that they 'would have the screening, if they didn't make it so hard to arrange'.

One individual at the workshops exemplified a consequence of being ill-informed with regards to a cream they were instructed to use post-radiotherapy. They explained that they were 'not advised how to apply the cream correctly', which resulted in the skin on their neck breaking down. This had long-term repercussions, as this attendee must now keep their neck out of the sun to prevent further damage. Many attendees relied on their support groups for sharing and finding out information, asking 'where else is there for you to get it from?'.

Positive experiences with accessing information were also shared. This included being able to access useful information via the internet, as well as open communication with doctors, who were 'very good in regard to explaining' the process and available options. The charity sector was also credited for its support, specifically the Lymphoedema Network and Macmillan Cancer Support, which was described as 'tip top [for] sending me lots of info' and as doing a 'brilliant job'.

I felt isolated and lonely

Some attendees reflected on the loneliness they felt during and after their cancer care. One felt their treatment was 'like a cloak of being looked after... then on the last day of radiotherapy, it was "bye" and that was it... I was left alone in the wilderness... I had struggled with my disabilities at the best of times, now on top of cancer that felt impossible'. When structured care and support abruptly ended, attendees were left feeling 'alone', with one person sharing 'I have no one, medically'.

This experience was shared across all workshops, and for some, was intertwined with the strain of caring responsibilities. One attendee's lymphoedema was triggered while caring for their sick husband, but they felt unsupported and that 'there was no choice... I have to care and do all the household jobs'. Another attendee with caring responsibilities explained that 'carers or support people need to be spoken to directly and provided emotional support, as they are going through it too, but they are often ignored'.

As a result of the Covid-19 pandemic, attendees also described feeling unable to connect with their loved ones in hospital due to paused visitation and inconsistent internet connection, which resulted in intense anxiety for many. Attendees did discuss some benefits to the use of technology, particularly during the pandemic. However, many also felt that it 'alienates and makes people more vulnerable'; for example, individuals that struggle to navigate online booking systems or remember multiple, complex passwords. Another attendee felt that 'Covid should have made people more caring towards others', but in their experience, it has 'made people less tolerant'.

Fortunately, many attendees found help within their support groups, where they could receive information, resources, advocacy, and understanding, with one describing their peer support to be 'really important for me, like a lifeline'.

I felt like I constantly had to advocate for myself because no one was listening to me

Many attendees discussed feeling that they were not listened to during their experience with cancer services, which left them frustrated, confused, and one individual feeling 'white fury at the way [they] had been treated'. Others explained that they have had to make 'a lot of noise to get [healthcare professionals] to listen', and that their multiple requests for help accessing screenings, due to mobility issues, were ignored.

Reflecting on the consequences of not being listened to, one attendee shared how they had 'developed provoked thrombosis', due to disregarded concerns about a medical tube in their neck that they said 'felt wrong' from the moment it was placed. They had then been asked to self-inject blood thinners, despite being visually impaired and unable to see the needle. Another explained how their grandad 'wasn't listened to' when he repeatedly informed his doctor about his extreme weight loss and severe pain and that he died six months later, leading to anxiety that they may have the same experience in the future.

Self- and group-advocacy became an important topic of discussion, where many workshop attendees specifically addressed how it felt both empowering and exhausting. They explained that, although being assertive is important, it is 'a lot harder when you are not feeling well'. One person questioned whether they would have even received a lymphoedema diagnosis had they not suggested this to their doctor. Those with caring responsibilities discussed being 'made to feel like they are butting in' when advocating for family members on their behalf. In response to a discussion around advocacy, one attendee shared that they 'have to do all the work ourselves to get the treatment and support we need', and that peer support was 'so important'.

More positively, one attendee explored how strong relationships with medical professionals have proved vital in their cancer journey, because it meant that they were able to ask questions about their care and the team were 'happy to answer these fully'.

I felt that there are multiple issues compounding my access to cancer services

Attendees frequently reported feeling that their negative experiences of access to quality cancer services was the result of many compounding issues, and they felt that 'patients are not being taken as a whole person [...] specialists are only looking at one issue at a time'. One attendee explained that 'with a disability, everything crosses over' and another shared how 'difficult' it was 'finding treatment for any one part, including my cancer'. Attendees discussed their difficulty in finding medical professionals who fully understood both their disability and their cancer diagnosis, and how the two may interact or impact one another. One attendee reported feeling that 'all of the issues interact and impact each other, but nobody has a full rounded view of what is going on'.

Many felt that self-image was often overlooked as a factor for disabled people, due to prejudicial assumptions. However, one attendee explained 'losing my hair was the worst thing. It was my crowning glory and defined me over my disability'.

Attendees spoke about the intersectional factors which contributed to their experience, and how these had resulted in anxiety around attending healthcare settings. One addressed 'the added stresses about access, safety, and negative reactions of others', while another explained how 'many autistic people have had multiple traumatic experiences with healthcare professionals, and this is their starting point for the next appointment'. One attendee spoke about the difficulties getting a district nurse because they were not considered 'housebound', but that they also could not get to the GP or get a referral to see a specialist.

A multidisciplinary approach was discussed as important among attendees, to address the 'systematic challenge and failure' whereby 'leadership teams and trust boards need to put their weight behind an inclusive approach' and not consider disabled patients to be 'second-class citizen[s]'.

I felt like there is a resistance to change and adaptation to support me

One attendee described how through their treatment, they felt as though they were on a 'conveyor belt — as if one size fits all' and that there is 'culturally, no tolerance for [disabled] people like me' — a result of the continuation of their unmet need for individualised care and adaptation to support their access to cancer services. Many agreed upon feeling that healthcare settings are 'resistant to change'.

A visually impaired attendee explained that their pharmacy had refused to colour-code their medication, which would have made the contents easily identifiable to them. Other examples included staff disregarding a patient's request to be facing away from a window due to light sensitivity issues, a lack of effort to find dignified ways of completing patients' scans, and staff not helping visually impaired patients navigate rooms and doorways, despite being aware that they could not see.

Resistance to accommodate disabled patients' needs often left attendees facing incomplete scans, poor mental wellbeing, anxiety, and safety concerns. One attendee shared how their experience left them feeling unimportant and othered: 'I don't need to keep hearing I am not standard; that I don't meet the expected standard'.

CONCLUSION

Engaging with attendees and listening to their experiences of cancer services proved invaluable in developing an understanding of the issues and consequences frequently faced by disabled and neurodivergent communities. From these findings, the following recommendations for accessible practice were drawn:

- Compassion and sensitivity matter, such as the importance of using a person-centred and empathetic approach. This can contribute towards mitigating some of the anxiety and isolation felt by disabled communities when navigating cancer services
- Effective communication is key to providing disabled patients with clear and accessible information to support informed decision-making regarding matters of their own cancer care
- Make accessibility a priority through actively supporting and meeting disabled patients' individual access needs to remove barriers to health care and build more inclusive services.

In this regard, changes to practice have already started as a direct result of the clinical nurse specialist being able to take learning from the workshops immediately back to the NHS to share with colleagues. In addition, Help & Care — a charity which promotes dignity and independence for all people, particularly those in later life across the south coast — has been granted further funding to expand this project.

Practice point

Further exploration of the above themes can be found in the full report at: www.helpandcare.org.uk/news-and-media/news/cancer-care-for-everyone/. Accessible versions of the report can be provided by Neil Bolton (neil.bolton-heaton@helpandcare.org.uk). A short film, developed from the findings, can be viewed at: https://youtu.be/HbgEbtyfEI8

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Managing LARS in the community

Jennifer Burch

Rectal cancer is a common diagnosis which is often treated by surgical resection of the cancer. However, cancer treatment can result in changes in bowel function. Faecal incontinence can occur because of cancer treatment, as well as increased defecation. Although these symptoms will improve with time over a few months, making changes, such as dietary ones with nursing support, can help. Having a greater understanding of issues that can occur and ways in which to resolve them can improve both healthcare professional confidence and circumstances for patients with bowel dysfunction.

KEYWORDS:
■ Rectal cancer ■ Surgery ■ Treatment ■ Short- and long-term function ■ Interventions ■ Patient needs

Every year in the UK there are about 12,000 people diagnosed with a rectal cancer (Office for National Statistics [ONS], 2019). The three most common treatments are surgical removal of the cancer, chemotherapy and radiotherapy, and one or all may be used for one patient. Surgery is commonly used in the UK for treatment of rectal cancer (Department of Health [DH], 2023).

RECTAL CANCER

Rectal cancer is commonly grouped under the term colorectal or bowel cancer, and is a cancer within the last part of the large bowel (Bunni and Moran, 2019). Rectal cancer will usually begin as a small growth (adenoma) which forms in the inner lining (mucosa) of the rectum (Smith et al, 2019). The rectal cancer can grow into the bowel lumen, which might cause a bowel obstruction if the cancer blocks the bowel. Rectal cancer can also grow through the bowel wall and may grow into the nearby organs, such as the bladder in men or the uterus in women. It can also spread into nearby lymph nodes or blood vessels and then onto distant organs such as the liver. Rectal cancer can present as bright red rectal bleeding as the cancer invades the blood vessels (Leong and Morton, 2012). Alternatively, the shape of the faeces can be altered as the faeces pass the cancer, which can cause them to flatten.

> **‘Rectal cancer is commonly grouped under the term colorectal or bowel cancer. Rectal cancer is a cancer within the last part of the large bowel.’**

CANCER SURGERY

The most common operation to treat rectal cancer is to remove all or some of the rectum which contains the cancer (Department of Health [DH], 2023). Once the cancer is resected, the two bowel ends are rejoined; termed an anterior resection of the rectum. For cancer low in the rectum, it is common in addition to the rectal resection, to remove the surrounding tissues, the mesorectum. The mesorectum contains the local blood supply and lymph nodes and when these tissues are surgically removed it is termed a mesorectal excision, which can be total (TME) or partial (PME). The reason that this area is removed is to remove any microscopic cancer cells that may be in the blood vessels and/or lymph nodes that surround the rectum. Removing the mesorectum reduces the risk of cancer recurrence but increases the risk of subsequent bowel dysfunction (Bunni and Moran, 2019). It is common for a temporary stoma to be formed when removing the mesorectum and this will require a second operation to reverse the stoma.

CONSEQUENCES OF RECTAL CANCER TREATMENT

There are three main functions that may be altered if there is rectal cancer surgery:

- Bowel (Li et al, 2023)
- Bladder (Karlsson et al, 2019)
- Sexual (Dames et al, 2021).

Changes to urinary function can include urinary urgency and frequency, where the person might need to get to the toilet more quickly and/or more often to pass urine than before the cancer treatment (Keane et al, 2020). Sexual dysfunction for men might include problems with gaining or maintaining an erection. Sexual function for women might include problems with vaginal dryness and/or vaginal pain during sexual intercourse (Thyø et al, 2020).

Practice point

Cancer is cells that are uncontrolled in their growth and can spread into distant organs (Smith et al, 2019).

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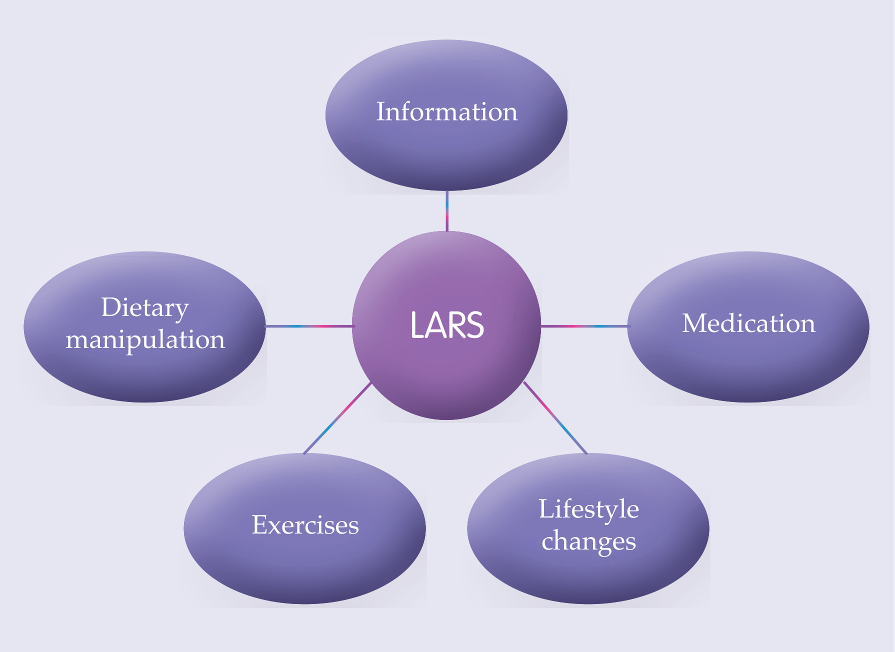

Figure 1.
Conservative management of LARS.

The focus will now be on bowel dysfunction and how nurses can assist patients to improve their symptoms. Bowel dysfunction will occur once the temporary stoma is reversed or, if there is no stoma formation, as soon as the anterior resection is performed, so symptoms often begin in hospital or soon after discharge home (Li et al, 2022).

Changes in bowel function have been termed as low anterior resection syndrome (LARS) (Bryant et al, 2012; Keane et al, 2020). Low anterior resection syndrome is a cluster of usually more than one bowel change that includes unpredictable bowel function as well as bowel urgency and/or bowel frequency (Keane et al, 2020). Having bowel dysfunction can be disruptive of family and social events, which can negatively affect quality of life (Burch et al, 2023a).

RISK FACTORS

There are several factors that make people more at risk of bowel dysfunction after an anterior resection. The two most reported risks are a low rectal cancer and radiotherapy (Varghese et al, 2022).

SHORT-TERM FUNCTION

The first three months following the anterior resection is the time when the bowels are the most challenging to manage. Symptoms are at their most severe and may be in conjunction with postoperative pain (Varghese et al, 2022). Reassuringly, the most improvement in bowel dysfunction occurs in the first three months after surgery as both the bowels and patient adapt to the surgery. In the author's clinical opinion, it is important to provide patients with realistic hope that they will improve, as in the first days and weeks symptoms for some people can be quite severe.

> **'Low anterior resection syndrome is a cluster of usually more than one bowel change that includes unpredictable bowel function as well as bowel urgency and/or bowel frequency.'**

LONG-TERM FUNCTION

After the first three months there is still potential for more improvements in bowel function, with most improvements seen within two years. After this time, improvements are usually very small (Dilke et al, 2022). That said, if management interventions are introduced greater improvements might be seen.

LARS INTERVENTIONS

There are many simple changes that can be suggested to help patients manage their bowel dysfunction. Interventions will be described in relation to the bowel dysfunction and it is likely that one intervention will be effective for more than one bowel problem encountered. There are five main interventions with which healthcare professionals can help, often termed conservative management (Pape et al, 2023) (*Figure 1*).

Loose stool

To manage bowel function it can be useful to think about the Bristol Stool Form Scale (Lewis and Heaton 1997; *Figure 2*). Passage of faeces which are a type 4 stool, soft and formed in a sausage shape, often pose less issues to manage than loose stool. After rectal surgery, loose stool is commonly reported which is better managed if it is a thick consistency. Stool thickening can be achieved by medication such as antidiarrhoeals, most commonly using loperamide (Imodium). Stool can also be thickened by altering the dietary intake by consuming more carbohydrates such as bread, rice and potatoes and reducing spices, fatty foods and some alcohol (Hou et al, 2017; Laursen et al, 2022).

Bowel frequency

It is common to pass more bowel motions each day after rectal cancer surgery. The reason for this is multifactorial, including lack of storage after the rectum has been removed (Garfinkle and Boutros, 2021). For some people, there can be many small faeces passed in a short period, such as over an hour. In this situation, medication to bulk the stool can be useful, such as ispaghula husk, or dietary supplements, such as psyllium husk (Dalsgaard et al, 2021).

Faecal urgency

In the first few weeks after surgery, most patients report having bowel urgency, when they feel the urgent need to get to the toilet or do not have the ability to delay defecation (Christensen et al, 2021). This sensation will usually reduce as time since surgery increases. However, thickening the faeces can help if urgency is also associated with incontinence, as thicker stool is easier to control. It is possible that urgency is due to having a smaller rectum and changes in the nerves that are used for defecation. Thus, to help manage these sensations, patients can be advised to sit on the toilet when they have the urge to pass faeces but try and hold on. This can gradually help new sensations to decrease.

Emptying difficulties

Emptying difficulties are possibly the result of the change in the internal anatomy due to the rectal resection and the subsequent colonic anastomosis. Patients can report the urge to defecate but evacuation of the stool is difficult (Keane et al, 2020). Alternatively, patients might describe this as constipation. Changing the consistency of the stool might be beneficial to make it a type 4 stool, either by thickening or loosening the consistency with medication or diet. Another intervention healthcare professionals can suggest is related to the position that the patient sits on the toilet. The ideal toilet position is with the knees higher than the hips and leaning slightly forward, this can help with the position on the bowel inside the body and its relationship with the pelvic floor. There are images available on the internet to share with patients about toileting positions (www.bladderandbowel.org/help-information/resources/toilet-positions/).

Pain

Some people report pain. This might be perianal skin pain due to frequent defecation and cleaning. In this scenario, skin care is important. To resolve skin damage, healthcare professionals can advise use of barrier creams and gentle cleaning, such as using damp tissues. If the pain is reported as feeling like passing glass, this might be due to an anal fissure. There is information on the NHS website to help resolve an anal fissure, which might include analgesia and dietary modification (NHS, 2023).

Faecal incontinence

Some people might report being unable to control their bowel function. This might be related to urgency, faecal consistency, a pre-existing problem, or damage to the anal sphincters. Some people have faecal soiling, where they clean the perianal skin after defecation, but a small discharge of faeces is subsequently passed onto their pants or a pad. For faecal incontinence or soiling, pelvic floor exercises can help improve anal sphincter tone (Asnong et al, 2022). Using medication to thicken the faeces can also be useful (Asnong et al, 2022).

Unpredictable bowel function

One common issue after rectal cancer surgery is unpredictable bowel function. Patients have described passing no bowel motion for a day and the following day multiple bowel motions (Burch et al, 2023b). Unpredictability of bowel function means that it can be difficult to make plans. Healthcare professionals can advise the patient to be aware of where toilets are located when they are outside their home. Some people choose to take a loperamide before going out for lunch to slow down their bowel motility and reduce the risk of needing to defecate while outside the home (Tsui and Huang, 2021).

Onward referral

It is important for healthcare professionals to recognise that conservative management of bowel symptoms is not effective for all patients. If interventions have been tried for three months without effect, it might be appropriate to make a specialist referral. Referral may be to services such as continence or biofeedback for interventions such as transanal irrigation (TAI). Transanal irrigation has been reported as beneficial for both evacuation difficulties and incontinence by clearing the left colon of faeces (Falletto et al, 2023).

Evidence for conservative management

There is limited evidence about the efficacy of interventions for LARS (Haas et al, 2022). Most evidence is derived from other sources, such as incontinence for reasons other than LARS.

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces Entirely liquid

Figure 2.
Bristol stool chart.

In a recent scoping review of LARS pathways, 12 published pathways were discovered (Pape et al, 2023). All pathways described the use of some or all the interventions shown in *Figure 1*. Most pathways were based on expert opinion and one based on consensus of a small group of LARS experts (Christensen et al, 2021). There were also two studies that looked at nurse-led interventions (Dalsgaard et al, 2021; Harji et al, 2021). These studies were small but useful to guide nursing care. Most patients did not need or want to progress from conservative management options (Dalsgaard et al, 2021; Harji et al, 2021). Interventions such as dietary changes and antidiarrhoeal medication could be commenced at time of surgery (Harji et al, 2021) or soon afterwards (Dalsgaard et al, 2021). If specialist treatment was used, it was most commonly TAI (Dalsgaard et al, 2021; Harji et al, 2021), but other opinions exist, such as a gastroenterologist for specialist medication or a surgeon for a permanent stoma.

PATIENT NEEDS

Patients will often not report bowel dysfunction for reasons including embarrassment (Burch et al, 2023b). Thus, it is important for healthcare professionals to broach the subject sensitively. This could be incorporated by asking about leaving the home, which can be difficult if major bowel dysfunction occurs. Alternatively, the LARS score can be used. This score includes five questions and the results produce a category of bowel problems from no LARS, to minor and major LARS (Emmertsen and Laurberg, 2012; www.escp.eu.com/images/news_and_reports/2018/lars-scoring-tool/English-LARS-Questionnaire.pdf). Patients like to be pointed to useful websites for information about bowel dysfunction and LARS, such as Macmillan Cancer Support and Bowel Cancer UK. Patients can also find peer support useful, which is also available on charity and other websites (see *Useful resources*).

> **'Patients will often not instigate discussions about bowels, so healthcare professionals need to begin these difficult conversations.'**

Useful resources

Macmillan Cancer Support: 'Living well with a stoma reversal or LARS' — https://community.macmillan.org.uk/cancer_experiences/ileostomy-and-colostomy-discussions-forum/f/stoma-reversal-and-lars

Bowel Cancer UK: 'Change in bowel habit after treatment' — www.bowelcanceruk.org.uk/about-bowel-cancer/living-with-and-beyond-bowel-cancer/change-in-bowel-habit-after-treatment/

St Mark's Hospital: 'Bowel changes after rectal cancer treatment' — www.stmarkshospital.nhs.uk/wp-content/uploads/2024/01/patient-LARS-toolkit-pdf.pdf

For healthcare professionals: 'LARS toolkit for clinicians' — www.stmarksacademicinstitute.org.uk/wp-content/uploads/2024/01/HCP-LARS-toolkit-pdf.pdf

CONCLUSION

Rectal cancer is common and survival is increasing, which means that people living with the consequences of cancer are also rising. Patients will often not instigate discussions about bowels, so healthcare professionals need to begin these difficult conversations. If problems exist, nurses are well placed to help patients with bowel changes after their rectal cancer treatment. Use of conservative treatments, such as dietary changes, can enable patients to have some control over and manage their symptoms. However, if symptoms persist with three months of conservative management, it may be necessary to consider onward specialist referral. **JCN**

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Revalidation Alert

Having read this article, reflect on:

- Your knowledge of bowel changes that can occur after rectal surgery
- Factors that might make people more at risk of bowel dysfunction after an anterior resection
- Simple changes that can be suggested to help patients manage their bowel dysfunction
- Why it is important to broach the subject of bowel dysfunction sensitively.

✓ Then, upload the article to the free JCN revalidation e-portfolio as evidence of your continued learning.

KEY POINTS

- Rectal cancer is a common diagnosis which is often treated by surgical resection of the cancer.
- The most common operation to treat rectal cancer is to remove all or some of the rectum which contains the cancer.
- However, cancer treatment can result in changes in bowel function.
- Changes in bowel function have been termed as low anterior resection syndrome.
- Having bowel dysfunction can be disruptive of family and social events, which can negatively affect quality of life.
- The first three months following the anterior resection is the time when the bowels are the most challenging to manage.
- After the first three months there is still potential for more improvements in bowel function, with most improvements seen within two years.
- There are many simple changes that can be suggested to help patients manage their bowel dysfunction.
- If problems exist, nurses are well placed to help patients with bowel changes after their rectal cancer treatment.

Chronic obstructive pulmonary disease and comorbid conditions

Beverley Bostock

For many nurses working in primary care, chronic obstructive pulmonary disease (COPD) is a familiar condition. From carrying out annual reviews to supporting people living with the symptoms of cough, phlegm, breathlessness and managing their effect on day-to-day living, most community nurses will have some experience of supporting people living with COPD. Increasingly, though, community nurses are having to consider comorbidities as part of the review, as for many people living with COPD, this will be just one of the long-term conditions they have already been diagnosed with or of which they will be at risk. In this article, the relationship between COPD and other long-term conditions will be highlighted, along with recommendations about how to identify and manage comorbidities in order to holistically optimise outcomes.

KEYWORDS:
■ COPD ■ Comorbidities ■ Assessment ■ Diagnosis
■ Interventions

The National Institute for Health and Care Excellence (NICE) emphasises the importance of managing comorbidities as one of the foundations of good chronic obstruction pulmonary disease (COPD) care (NICE, 2019). Furthermore, the guideline from the Global Initiative for Obstructive Lung Disease (GOLD) stresses the importance of considering comorbid or new diagnoses as the cause of any symptoms, especially when patients present with what appears to be an exacerbation of COPD (GOLD, 2022). According to GOLD, specific diagnoses to be considered in people with respiratory symptoms such as breathlessness and chest tightness include pneumonia, pulmonary embolism, pneumothorax, pleural effusion and cardiac conditions such as heart failure, atrial fibrillation (AF) or myocardial infarction (MI).

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In this article, the relationship between COPD and other long-term conditions will be highlighted, along with recommendations about how to identify and manage comorbidities in order to holistically optimise outcomes.

By the end of this article, readers will be able to:

- Recognise the importance of the initial assessment and diagnosis of respiratory symptoms
- Consider the shared pathophysiology of cardiopulmonary diseases
- Reflect on the relationship between lifestyle factors and cardiopulmonary disease
- Analyse the links between COPD and other long-term conditions
- Review key interventions which can holistically improve outcomes for people living with COPD and comorbidities.

INITIAL ASSESSMENT AND DIAGNOSIS

Diagnosis of COPD depends upon the presence of key symptoms such as cough, sputum, breathlessness, and a reduced ability to carry out activities of daily living in someone with risk factors for this condition — in the western world, this is smoking (NICE, 2019). If the history is suggestive of COPD, post-bronchodilator spirometry should be carried out to assess lung function. NICE also recommends a chest X-ray at diagnosis to exclude other pathologies and a full blood count (FBC) to identify anaemia or polycythaemia. NICE also advises clinicians to consider serial home peak flow measurements to exclude asthma. Any variability might then lead to spirometry with reversibility testing, as peak flow variability might suggest the presence of asthma.

From a cardiovascular perspective, an electrocardiogram (ECG), serum natriuretic peptides and echocardiography will help to determine the presence of cardiac disease or pulmonary hypertension, especially if there are clinical signs such as tachycardia, oedema or cyanosis. In people with a significant smoking history, the possibility of cardiovascular disease, heart failure and cancer should not be overlooked.

PATHOPHYSIOLOGY OF COPD AND COMORBIDITIES

Although COPD is often viewed as a respiratory condition, it has long been recognised as a multi-system disorder (Kotlyarov, 2023). This is partly down to the pathophysiology of the condition, which includes inflammation, oxidative stress and hypoxia, and partly down to the significant smoking history which is likely to have contributed to the COPD diagnosis but which is also linked to many other conditions (NICE, 2019; Rodrigues et al, 2021). The inflammatory changes that underpin the pathophysiology of COPD are also key drivers of other conditions, such as cardiovascular disease (CVD) (Bays et al, 2021). CVD is also a risk factor for heart failure. People with COPD are already at risk of cor pulmonale as a result of the reduced ability of the heart to oxygenate blood, leading to right-sided failure and pulmonary hypertension (NICE, 2019).

Symptoms of COPD may also lead to people becoming less physically active, with resultant deconditioning, weight gain and an increased risk of developing type 2 diabetes (T2D). It is unsurprising then, that nurses in primary care often find that people with COPD have other conditions which complicate the standard management of the respiratory disease. For example, the role of oral corticosteroids in the person with an acute exacerbation of COPD (AECOPD) who also has T2D may need careful consideration and oral corticosteroids can also increase CVD risk (Aldibbiat and Al-Sharefi, 2020; Pujades-Rodriguez et al, 2020).

COMMON COMORBIDITIES

Bronchiectasis

According to the British Thoracic Society (BTS) guidelines on bronchiectasis, this diagnosis should be considered if a patient describes persistent production of mucopurulent or purulent sputum (Hill et al, 2018). They also recommend that patients with COPD should be investigated for bronchiectasis if they report two or more exacerbations annually, or if they have had a previous positive sputum culture for pathogenic micro-organisms while stable. Although it is common for people with COPD to have a productive cough, the GOLD guidelines recommended computerised tomography (CT) scans when trying to ascertain the cause of symptoms, such as excessive sputum production which might be due to coexisting bronchiectasis (GOLD, 2022; Huang et al, 2022). GOLD specifically recommends CT scans for people with COPD who are having recurrent exacerbations, who have significant hyperinflation and a forced expiratory volume in the first second (FEV1) <45% predicted, or in those with symptoms which are at odds with the level of lung function impairment.

If a diagnosis of bronchiectasis is made, the focus will be on chest clearance using devices and physiotherapy. Reducing the amount of sputum in the lungs will reduce the risk of exacerbations and may also improve drug deposition when using inhaled therapies (Daynes et al, 2021).

Asthma with fixed airways disease

In the author's clinical experience, the thorny issue of asthma/COPD overlap troubles many nurses, so it may be better to consider this presentation as asthma, but where the lungs do not reverse back to normal fully with treatment. This may be as a result of under-treatment of the asthma, leading to airway remodelling, or as a result of smoking (Mekov et al, 2021). Either way, the underlying pathophysiology is still asthma-related, meaning that inhaled corticosteroids should always be prescribed.

The difference with this presentation compared with the usual presentation of asthma is that the persistent airflow obstruction will lead to ongoing symptoms, even though the patient is taking the appropriate dose of inhaled corticosteroids (ICS). As a result, people who have asthma with fixed airways disease will need an ICS combined with a long-acting bronchodilator or even triple therapy to address both the underlying inflammation and the symptom (GOLD, 2022). This is the pragmatic approach to managing asthma with fixed airways disease (GOLD, 2022). However, NICE states that there is a lack of evidence concerning the most clinically and cost-effective treatments for people with asthma/COPD overlap, and that more trials are needed to study this patient group to provide evidence and ensure that the most effective treatments are prescribed (NICE, 2019).

Diabetes

Several studies have linked COPD to metabolic syndrome, which is defined by the presence of prediabetes or T2D with hypertension and dyslipidaemia in people with abdominal obesity (Chan et al, 2019). People with diabetes are at least twice as likely to experience a cardiovascular event and for that event to be fatal compared to those without (Goodarzi and Rotter, 2020). The risk of developing T2D is higher in smokers (Maddatu et al, 2017), and T2D predominantly affects people who are overweight and relatively inactive. The breathlessness on exertion, which is suffered by many people with COPD, may lead them to reduce their activity levels, leading to deconditioning and weight gain, so it is evident why people with COPD may have an increased risk of T2D related to lifestyle.

There are also some interesting links between COPD and both type 1 and type 2 diabetes, relating to genes and to neutrophil activity (Hughes et al, 2020; Park et al, 2022). Productive coughing and the use of inhalers may impair the taste, and breathlessness may make chewing bulky foods like vegetables harder. For those who have not yet developed T2D, advice about healthy eating with COPD and the importance of remaining physically active should be reinforced, both from the perspective of the COPD itself and from the position of holistic wellbeing, in order to reduce the risk of T2D and CVD. For those who already have a diagnosis of T2D, the combination of COPD and T2D will increase their risk of a cardiovascular event, so all the usual interventions should be implemented: glucose, blood pressure and lipid lowering therapies and a sodium glucose cotransporter 2 inhibitor to protect the heart and kidneys (NICE, 2022). It is important to remember that diabetes is a cardiovascular disease with a shared pathophysiology (Hughes et al, 2020).

Cardiovasular disease (CVD)

COPD and CVD are complex disorders that frequently co-exist and when they do, they are associated with worse outcomes than either condition alone (Rabe et al, 2018). The link between COPD and CVD is multifactorial. First, the key cause of COPD in the western world (smoking) will increase the likelihood of cardiovascular risk factors such as hypertension and dyslipidaemia, leading to stroke, ischaemic heart disease and peripheral arterial disease (Kondo et al, 2019). Second, COPD is an inflammatory disease, as is cardiovascular disease. Third, the deconditioning that may occur as a result of breathlessness may also increase the risk of weight gain, diabetes and CVD. It is essential, then, that people with COPD have a CVD risk assessment to determine their risk factors and address this risk through lifestyle interventions and the appropriate use of blood pressure and lipid lowering therapies.

Some research has suggested that people with COPD who take statins, which have an anti-inflammatory as well as a lipid lowering effect, have a lower risk of all-cause mortality, heart disease-related mortality, acute exacerbations of COPD, pulmonary hypertension and C-reactive protein (Lu et al, 2019). However, this finding has not been consistently replicated and in the United Kingdom, statin therapy should only be initiated if CVD risk is 10% or higher (20mg atorvastatin), or if the individual has a previous history of CVD (80mg atorvastatin) (NICE, 2023a).

All-cause mortality

Other interventions have also been shown to be effective in reducing all-cause mortality. Two recent studies, 'Informing the Pathway of COPD Treatment' (IMPACT) and 'Efficacy and Safety of Triple Therapy in Obstructive Lung Disease' (ETHOS), have shown that using triple therapy (an inhaled corticosteroid with a long-acting B2 agonist and a long-acting antimuscarinic antagonist — [ICS/LABA/LAMA]) is associated with a significant reduction in all-cause mortality when compared to a dual bronchodilator (Lipson et al, 2020; Martinez et al, 2021). The GOLD guidelines include a table indicating the evidence from randomised controlled trials, supporting the use of triple therapy and non-pharmacological interventions (smoking cessation, pulmonary rehabilitation, lung volume reduction surgery, non-invasive positive pressure ventilation and long-term oxygen therapy) to reduce mortality in people living with COPD (GOLD, 2022).

Heart failure

The symptoms of heart failure can be quite vague and include fatigue, breathlessness and oedema (NICE, 2018). Heart failure is predominantly divided into two groups:

- Heart failure with reduced ejection fraction (HFrEF), where the ejection fraction is below 40%
- Heart failure with preserved ejection fraction (HFpEF), where it is above 50%

(NICE, 2023b).

People with COPD will be at risk of both types. HFrEF is often the result of CVD risk factors such as hypertension, or events such as a myocardial infarction, while HFpEF is more common in women and people with T2D (NICE, 2018). Cor pulmonale is right-sided heart failure associated with chronic lung disease and pulmonary hypertension. People with cor pulmonale may present with peripheral oedema, a raised jugular venous pressure, a systolic parasternal heave and a loud pulmonary second heart sound (NICE, 2019).

Each type of heart failure requires a different approach to pharmacological management. In HFrEF, the four pillars of pharmacological management include renin angiotensin aldosterone system inhibition with angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs) or an angiotensin receptor-neprilysin inhibitor (ARNI), along with beta blockers, a sodium-glucose cotransporter-2 inhibitor (SGLT2i) and a mineralocorticoid receptor antagonist (MRA) (Docherty et al, 2022). It is important to note that beta blockers are not contraindicated in COPD and NICE made the use of beta blockers in people with COPD a key performance indicator in their heart failure guideline (NICE, 2018). In HFpEF, the only drugs known to have a positive impact are SGLT2i, with dapagliflozin being the only one approved by NICE at the time of writing (NICE, 2023c). However, because cor pulmonale is linked to the underlying chronic lung disease, optimisation of the management of that condition is also essential. This will include reviewing inhaled therapies, consideration of long-term oxygen therapy and assessment for pulmonary hypertension, which, if diagnosed, will require specialist intervention and management (NICE 2019).

All people living with a diagnosis of heart failure will benefit from lifestyle interventions and cardiac rehabilitation (Taylor et al, 2023). However, engagement with both pulmonary and cardiac rehabilitation programmes for people living with heart failure and COPD is low, so nurses in primary care are key in encouraging people to sign up for these programmes.

It is important to recognise that the symptoms of COPD and heart failure overlap considerably. In view of the fact that people with COPD are high risk for heart failure, healthcare professionals should remain alert to this possibility and take note of symptoms which may indicate heart failure rather than COPD. These might include frothy sputum, breathlessness when lying flat (orthopnoea), and lower limb oedema (NICE, 2018).

Atrial fibrillation

Atrial fibrillation is around four times more common in people with COPD (Chen et al, 2015). In one study, 22% of people admitted to hospital with COPD had coexisting AF and all-cause mortality was significantly higher in people with arrhythmias (Desai et al, 2019). People with COPD should be made aware of this risk and taught how to check their own pulse. Arrythmia Alliance has a range of resources to help people to learn this skill: https://heartrhythmalliance.org/programs/know-your-pulse.

Research has shown that, among other things, lack of oral anticoagulation and beta-blockers were predictive factors for all-cause mortality in people with COPD and AF (Rodríguez-Mañero et al, 2019). While there is clear guidance regarding anticoagulation prescribing in AF for people with a CHA2DS2-VASc score of 2 or more (CHA2DS2-VASc score = congestive heart failure, hypertension, age, diabetes mellitus, prior stroke or TIA or thromboembolism, vascular disease, age, sex category), it is important to remember that, as in heart failure, beta blockers are not contraindicated and should be used in line with current guidelines (NICE, 2021).

Depression

The multisystem inflammation that occurs in COPD can also lead to an increased risk of neuropsychiatric disorders (Ouellette and Lavoie, 2017). Depression is a common comorbidity of many long-term conditions but in one study in people with COPD almost 60% reported that low mood and mental health issues impacted on their quality of life and negatively affected their health behaviours (Stellefson et al, 2019). These findings were particularly true for individuals with lower socioeconomic status, indicating a health inequalities issue.

COPD may lead to hypoxia and cognitive impairment, which increases an individual's risk of a mental health condition (Morris et al, 2019). People with COPD who feel depressed or anxious may be less likely to engage in important behaviour change interventions, such as smoking cessation, while adherence to medication is also impaired by co-existing mental health problems (Ouellette and Lavoie, 2017; Sim et al, 2021). Mind-body exercises such as tai chi and yoga, pulmonary rehabilitation and cognitive behavioural therapy (CBT) have all been shown to be effective in managing anxiety and dyspnoea in people with COPD (Yohannes et al, 2017; Gordon et al, 2019; Li et al, 2019).

People with COPD and co-existing mental health conditions are also more likely to suffer recurrent exacerbations of COPD, with an increased risk of loss of lung function and even death (Cardoso et al, 2018; Underner et al, 2018). Healthcare professionals should be mindful of the impact that poor mental health can have on someone living with COPD and should proactively assess for anxiety and depression. The extended health and wellbeing team, including social prescribers, can then offer support, with ongoing referrals being made as required.

SUMMARY

People with COPD are at high risk of other long-term conditions as a result of shared pathophysiology and risk factors. When assessing the individual presenting with suspected COPD, it is essential to recognise the importance of a robust initial assessment in order to make a reliable diagnosis of the cause of their symptoms. The pathophysiology of cardiopulmonary diseases and lifestyle risk factors can overlap, so COPD may occur with a range of other respiratory, cardiovascular and metabolic conditions. Community nurses are well placed to undertake a holistic review of the patient presenting for a diagnosis or review of their COPD and to consider the possibility of comorbid conditions. This will facilitate the implementation of key interventions which can improve outcomes and optimise wellbeing. **JCN**

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Enhancing the care of older people: role of community hospitals

Evelyn Prodger, Sue Greenwood

Community hospitals bridge the gap between primary and secondary care. They are geographically diverse local assets that offer a range of services, although inpatient services often focus on rehabilitation, most commonly for stroke and older people. Community hospitals are person-centred in their approach, nurse-led and work in a multidisciplinary way to support people to achieve their goals, maintain independence, and improve health and wellbeing assets. The model of care, including medical support, has evolved over the 150 years they have been in place, in response to local and systems' needs, including the development of enhanced and advanced roles. Covid-19 demonstrated flexibility, innovation and resilience to support local communities and the wider health and care system. Community hospitals are valued by the people and communities they serve and have a part to play in the future health and care landscape, improving the care of older people.

KEYWORDS:
■ Community hospitals ■ Older people ■ Hub
■ Person-centred care ■ Local ■ Covid-19

A proportion of care for older people is delivered in community hospitals, which bridge a gap between primary and secondary care, providing an essential resource for the wider health and care system and a positive patient experience (Pitchforth et al, 2017).

Frailty, stroke, deterioration due to chronic illness and traumatic fractured neck of femur following a fall are common reasons for older people to be in the hospital system. With an ageing population, conditions such as these are going to continue to challenge both acute and primary care (NHS England, 2023a).

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In the authors' clinical opinion, community hospitals are a unique resource that support care closer to home and their inpatient beds provide holistic services that enhance the care of older people and improve their outcomes.

WHAT IS A COMMUNITY HOSPITAL?

Community hospitals are hospitals which are located within the local community offering a range of services such as community beds, maternity services, outpatient clinics, minor injuries units, X-ray departments, day surgery, rehabilitation and end-of-life care (Gladman et al, 2017).

They vary in size and location and have adapted to the needs of their local populations as well as system requirements. Community hospitals have been part of local health care for over 150 years and offer a strong tradition of care that local populations have known over generations (Davidson et al, 2022).

There are as many as 500 community hospitals throughout the UK at any one time. They were originally established as converted cottages offering inpatient beds and have since evolved to become an essential component of the health and care system that exists today. Local people typically value community hospitals highly (Davidson et al, 2019), as evidenced by their support through volunteering, fundraising and campaigning.

A community hospital can be defined as:

> *A local hospital or unit, providing an appropriate range and format of healthcare facilities and resources. These will include in-patients, out-patients, diagnostics, day care, primary care and outreach services for patients provided by multidisciplinary teams.*
>
> (Ritchie, 1996).

This definition remains true, although community hospitals are known by an ever increasing number of names, including community hospital hubs, intermediate care units, rehabilitation units, community wards and community hubs. Names are often related to core function and support local diversity of services. Audit work completed by NHS Benchmarking Network showed that the number of beds in community hospitals and their uses have remained static over the past few years (Community Hospitals Association, 2022a).

WHAT DO COMMUNITY HOSPITALS DO?

Community hospitals offer services along a range of pathways. Minor injuries units, urgent treatment centres and community assessment and treatment units all provide diagnostic services and treatment to local populations, reducing the burden on A&E departments. Care delivered by nurses with enhanced clinical skills are often core to this. Routes to 'step up' beds within community hospital inpatients form part of these pathways to reduce unnecessary acute admissions (Charles, 2019).

Rehabilitation is a core service delivered in all types of community hospitals. Inpatient 'step down' rehabilitation post elective or traumatic surgery or a prolonged period of illness is often accessed by older patients who require 24-hour care to support them to be able to discharge home and continue with community-based input.

Specialist rehabilitation following stroke or neurological surgery frequently takes place in community hospitals, with programmes tailored to the needs of the individual in line with evidence-based practice (NHS England, 2022). Sentinel Stroke National Audit Data (2023) shows the rise in combined early supported discharge and community rehabilitation teams, many of which will be co-located on a community hospital site to support in-reach and collaborative, patient-centred multidisciplinary team working.

Inpatient services offered by community hospitals are open to all adults, but are generally accessed more by older people. For some older people, this will be a straightforward stay post-surgery for a fractured neck of femur, while for others with frailty and multiple health needs, it may involve support from the wider multidisciplinary team and complex discharge planning (Young et al, 2007).

This multidisciplinary team is supported by a range of local community service providers, including health, adult social care, charities and voluntary services; all focused on working collaboratively to support individuals to reach their goals and maintain independence.

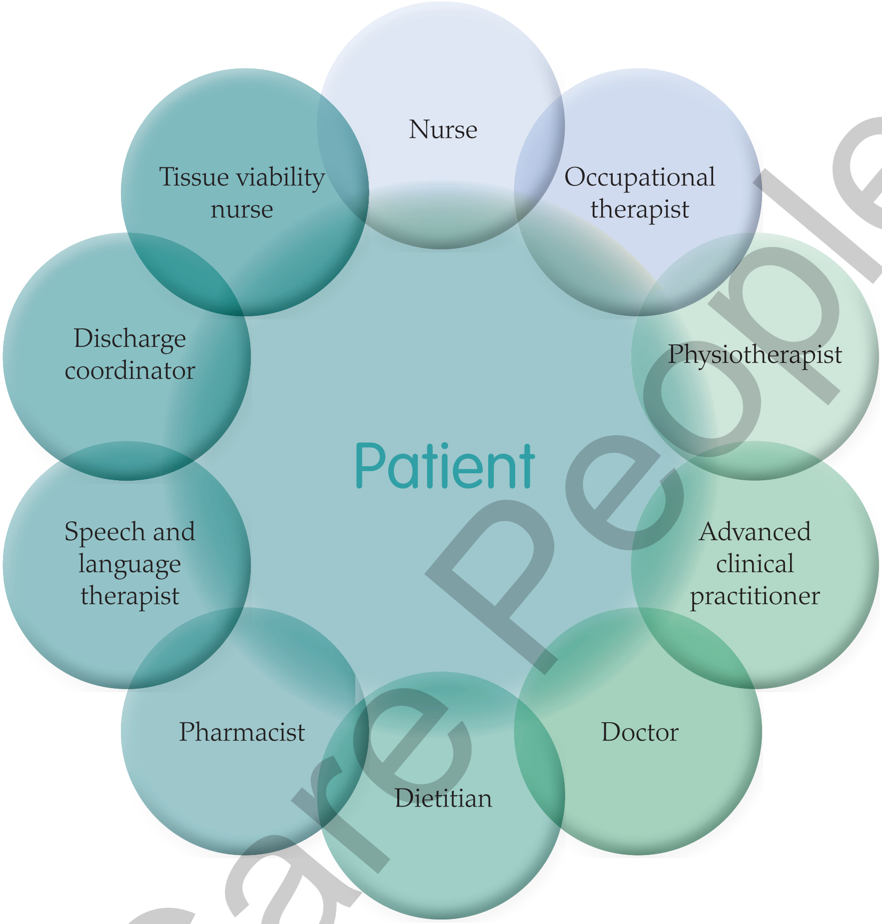

Figure 1.
Multidisciplinary team members who may be involved in a patient's care in a community hospital.

'Rehabilitation is a core service delivered in all types of community hospitals.'

In some areas, particularly where there is no hospice nearby, local residents may choose a community hospital as their preferred place of death. The ability to remain connected to known surroundings and people who matter to them is especially important — a role community hospital teams embrace. Some community hospitals have become accredited Gold Standards Framework sites (Gold Standards Framework, 2021). The Gold Standards Framework is a programme designed to enhance service quality by transforming the way clinical practices operate, particularly in relation to the early detection of patients in their final year of life.

Frailty is a key and increasing reason for older people to access healthcare. The British Geriatrics Society (BGS, 2017) recognised that community hospitals and intermediate care units have a role to play in managing frailty. Frailty, along with falls, is an area of focus to keep older people out of acute hospitals (Department of Health and Social Care, 2023; Gov.UK, 2023).

WHAT MAKES COMMUNITY HOSPITALS DIFFERENT?

Community hospitals rarely have 24-hour medical cover. This is important when considering the model of care being delivered. Over time, the medical model has moved from being completely GP-led (Seamark et al, 2019) to a mixed model.

Mixed models have evolved as a result of changes to primary care, local service configuration and in response to availability of resources. Some community hospitals will be attached to a GP practice for medical input Monday to Friday. Some will have a hospital consultant in-reach regularly, usually a geriatrician or ortho-geriatrician. Others will employ doctors directly. Increasingly, given the growing acuity and complexity of patients in community hospitals, others will employ doctors directly (Davidson et al, 2019).

This change in medical model has encouraged the development of advanced and enhanced practice clinician roles (NHS Employers, 2022), broadening roles accessible to a range of clinicians.

Out-of-hours support is likely to be provided by the same GP service supporting the local population

The shift in the model of medical care has led to a rise in nurse-led care in community hospitals where complex and specialist care is delivered without the infrastructure of an acute hospital site. Sitting in the interface between primary and secondary care means that they offer a level of care that cannot yet be recreated in primary or community care in someone's own home.

Some of the bigger community hospitals may have a night sister post, but for many, the nurse in charge becomes the decision-maker out of hours. In the authors' clinical experience, this means that staff working in community hospitals have highly evolved clinical decision-making skills based on knowledge, competence, problem-solving and evidence-based practice. They work autonomously in a way secondary care colleagues cannot. Their range of skills and knowledge need to cover a wide variety of practice areas, providing opportunities for growth and development as practitioners.

The whole multidisciplinary team inputs into person-centred assessment, planning, intervention and evaluation of care, as shown by *Figure 1*.

Table 1: Community hospitals: embedding Covid-19 positive impact changes through shared learning. Report September 2022, reproduced with permission from the Community Hospitals Association

To make the most of our community hospitals we need to be:
Making decisions locally ▶ Making decisions locally through local autonomy ▶ Playing a full part in the local health and care system
Benefiting from excellent leadership ▶ Being led by bold and compassionate leaders ▶ Being truly person-centred in all that we do
Recognising community hospitals as a community asset ▶ Providing care, treatment and support ▶ Supporting the wider community as a community asset ▶ Investing in community hospitals ▶ Making the most of digital options
Looking after our staff ▶ Attending to staff health and wellbeing ▶ Providing staff with opportunities for development and growth

> **'The shift in the model of medical care has led to a rise in nurse-led care in community hospitals where complex and specialist care is delivered without the infrastructure of an acute hospital site.'**

The breadth of practice can be challenging but also exciting in terms of leadership and being innovative. The culture, leadership and innovation within community hospitals (Seamark et al, 2022) also lends itself to delivering components of the *NHS Long Term Workforce Plan* (NHS England, 2023b) across a range of professions.

A study undertaken by the Community Hospitals Association (2022b) found that to be ready for the future, community hospitals have several requirements, as highlighted in *Table 1*.

PERSON-CENTRED CARE

Person-centred care is not only a key priority for those receiving care, but also for those providing it to ensure that patients are equal partners in their care (Social Care Institute for Excellence, 2023).

Where community hospitals sit within community hubs provides the opportunity for joint working across teams and organisations (NHS England, 2021). Indeed, the value of collaborative working at a local level is becoming better understood (Alderwick et al, 2021), offering the chance to be truly person-centred in the approach to care as demonstrated by the patient story here.

LOCAL ENGAGEMENT

Patients and carers supported by community hospitals value the hospital's proximity to their homes, the personalised and holistic care they provide, and their support during difficult psychological transitions (Davidson et al, 2019).

In the authors' experience, communities support their hospitals and this engagement can contribute to hospital utilisation and sustainability, patient experience, staff morale, and volunteer well-being. Engagement varies between and within communities over time.

Community hospitals have, and will continue to experience reduction in beds, closure of beds and changes in function (King's Fund, 2021). However, recent campaigns to prevent closures or reinstate previous services make clear the value local people place on them (Save Rothbury Hospital, 2022).

Community hospitals are also important community assets that represent direct and indirect value in terms of health care, employment, skills development, networks, identity and belonging, vitality, and security (Davidson et al, 2019). Leagues of Friends remain highly visible supporters of local community hospitals providing volunteers and services as well as funding.

COVID-19

Community hospitals have a history of innovation as they respond to local needs against a backdrop of national policy and guidance (Community Hospitals Association, 2023).

Covid-19 presented them with a range of challenges. However, true to the definition of community hospitals they adapted, flexed, reshaped and supported the needs of local health and care systems (Seamark et al, 2022).

A study by Seamark et al (2022) demonstrated this flexibility, adaptability and contribution during Covid-19. The pandemic prompted community hospitals to respond in a rapid and flexible manner, with enhanced integrated working and individual innovation. This study highlights the strengths of smaller, mainly rural hospitals which are embedded in the community, including resilience and creativity.

Examples of quality improvements, innovative practice, and enhanced integrated working to meet local needs were evident. This ranged from learning how to communicate differently with remote families, using technology to support teams and delivery of care, focusing on staff wellbeing, using ice lollies to hydrate patients post Covid-19, implementing new models of care using furloughed staff to provide enhanced care, through to relocating cancer services to a community hospital site.

The study showed that community hospital services were shown to be resilient, flexible, responsive, creative, compassionate, and integrated (Seamark et al, 2022).

Jack's story

Jack is an 87-year-old gentleman who has lived alone since leaving the navy. He is very independent and has always been involved in his local community and church activities.

Two years ago he developed a leg ulcer. This impacted on his mobility and he became more isolated. The leg ulcer clinic at the community hospital supported him and helped heal his ulcer. Nine months ago Jack's ulcer broke down. He returned to the leg ulcer clinic and started treatment again. Improvement was slower this time and Jack developed an infection.

Jack was seen in the local community assessment and treatment unit. Point of care (POC) testing, usually only available on an acute site, was being piloted, meaning that Jack avoided a trip to Accident and Emergency. He was started on intravenous (IV) antibiotics and admitted to the community hospital.

During his inpatient stay his leg ulcer dressing change was due. The leg ulcer team are part of a national research programme and so the ward team consulted with them regarding the dressing change. Being co-located meant that the leg ulcer team could visit the ward, ensure Jack's treatment continued and provide education for the ward team. This also gave them an opportunity to talk to Jack about his needs at home and contribute to his holistic assessment.

With input from the physiotherapist, occupational therapist, dietitian and social worker a discharge plan was created for Jack to enable him to return home within a few days. The leg ulcer team functioned as care coordinators, as they had the most consistent contact with Jack. With Jack's permission, his local church became involved with volunteers supporting shopping and meal provision and assistance to attend services.

This continuity of care meant that Jack did not miss a required dressing change, he received a holistic assessment based on his needs and a safe discharge home.

Jack said :'I can't believe what a difference this time in hospital has made. The team were so kind and really wanted what was best for me. It was lovely seeing the nurses when they came to do my dressing, I was worried it would be forgotten.

I have so enjoyed being back at church, I didn't realise how lonely I was or how much people would be willing to help.

I am so grateful my community hospital was able to take care of me — life feels so much better.'

THE FUTURE

As local needs change due to chronic disease trajectories, local commissioning intentions, national guidance and local population requirements (NHS England, 2019), community hospitals will continue to flex and adapt to meet those needs. Many of the services required to support the delivery of the *NHS Long Term Plan* lend themselves to delivery from community hospital sites.

Community hospitals have been viewed as 'traditional' or 'old fashioned' by some healthcare professionals. However, in the authors' clinical opinion, you do not have to dig too deep before seeing how far from the truth this is. The longevity of this model of care demonstrates its importance and value. Community hospitals have served many generations of local people and will continue to do so as they evolve to meet changing needs.

Community hospitals will continue to support older people and the communities they live in, being an integrated, effective and efficient way that positively impacts on health and wellbeing outcomes for local people who value locally accessible, person-centred services. **JCN**

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New parents share feeding worries at virtual allergy group

A virtual cow's milk allergy group has been helping families in Kent get faster access to advice and support. As parents and carers can be seen together, rather than waiting for individual appointments, the initiative has reduced waiting times, meaning quicker access to vital feeding and weaning advice during a baby's first few months. This also means that parents spend less time worrying. As well as increasing capacity in the clinical nutrition and dietetics team at Kent Community Health NHS Foundation Trust (KCHFT), the virtual group has won national recognition — winning the sustainability award in the Clinical Nutrition Magazine Awards 2023, as families do not have to travel for appointments and fewer letters need to be sent out, making healthcare more sustainable and reducing its impact on the environment. Here, highly specialist paediatric dietitian and team leader, Elaine Greenman, shares how and why the group was set up, what the group sessions involve, and the challenges the team has found along the way.

In September 2021, the paediatric dietetic team at Kent Community Health NHS Foundation Trust (KCHFT) set up virtual group sessions for parents of infants and children with suspected or diagnosed cow's milk allergy (CMA).

The year leading up to this quality improvement (QI) initiative, was a time of much change for the team. In March 2020, the author became the team leader and started her new role, just as the first Covid-19 lockdown was announced. The team were in the early days of upskilling and cementing a paediatric dietetic team, largely made up of existing KCHFT dietitians already working in the adult team. The trust had not long rolled out a new electronic patient record system, which the team were still getting used to and the newly formed team had also taken on enterally-fed children and young people, which had until that point sat with the home enteral nutrition (HEN) team.

These changes affected capacity during a period of low staffing levels, longer waiting times and new ways of working due to the pandemic. This meant the ever-increasing stream of referrals coming in had to be addressed with a new, innovative approach to spread the dietetic time available to children and families living in Kent, who needed support.

It was not difficult to establish the patient groups which took the largest proportion of the team's time; infants and young children with suspected or diagnosed CMA and children and young people with restrictive eating patterns. Together, these groups made up about a third of the caseload.

Unlike restrictive eaters, whose advice and treatment is often more specific and tailored, patients presenting with CMA were usually provided with the same relatively prescriptive and generic advice during their one-to-one clinic consultations. Dietitians would find themselves repeating what a cow's milk allergy is, how it differs to lactose intolerance, what specialist infant formulas and alternative plant-based milks are available, how to provide supplementary feeding (weaning) which is calcium rich, how to have a cow's milk free diet and how and when dairy could be re-introduced.

This process of assessment and advice would routinely be delivered across one 40-minute initial consultation and between one and three further 20-minute reviews. This and the knowledge that CMA referrals make up about a quarter of the team's caseload, provided enough incentive to develop group sessions for these families, where the most up-to-date evidence-based information could be given to the parents or carers of up to 15 patients via MS Teams. The aim was to cover all of the advice previously provided in consultations in one presentation and then provide up to 45 minutes to chat with attendees, followed by 60 minutes of written chat, if parents had further questions.

KCHFT dietitian team.

At the time of referral into the team, particular care was taken to give additional support to families who had increasing concerns or if there were immunoglobulin E (IgE) mediated symptoms. These families were not booked into groups, but instead were offered one-to-one consultations. These were also offered to some families who attended group sessions, when needed.

There is a certain degree of operational/technical management that comes with holding virtual group sessions, which is why the dietetic team worked closely with its administration team to develop a model which was always supported by an administrator. The registration process, ironing out of any technical issues and management of the question and answer session would be difficult if the session was run by a dietitian alone. In the author's experience, having both a dietitian and administrator provides a professional and seamless delivery and they continue to work together to further improve and build on these sessions, as well as consider other potential group delivery opportunities.

There is now more capacity in the team by doing things this way. By holding group sessions, individual patient contact time has reduced by 75%. This figure was reached by comparing the total number of contact hours with an administrator and a dietitian over a six-month period, before and after introducing the virtual group sessions. A 79% cost saving has also been seen.

87% of parents were discharged compared to only 26% in an equivalent time period post and pre-CMA groups. Discharging is only a positive thing if the team are sure that the needs of the patient and families have been met, with this being confirmed by families completing surveys.

With regards to sustainability, the virtual cow's milk allergy group encourages digital letters and resources, so fewer letters need to be sent out. In addition, families do not have to travel to appointments, but can attend virtually from home instead.

Parent's comment

Jessica Lewis, 32 from Maidstone, Kent, was invited to attend a virtual cow's milk allergy group, when her five-month-old daughter Lacie-Jane was having feeding and digestion issues. The group gave her the chance not only to hear from the experts and to ask them questions, but also to chat with other families.

> *It was reassuring to hear that other mums were experiencing similar things and that I wasn't alone.*
>
> *Lacie was always crying and I know babies cry, but it was very different to what I'd experienced with my son. Initially I was breastfeeding and I wondered if it was something I was eating. Also, she was always hungry, so I switched to bottle-feeding, but she was screaming after every bottle and her symptoms remained.*
>
> *With the virtual group, I was dubious at first. I thought it won't be like having a one-to-one with someone. But I actually found it really helpful. Everything was explained and then there was the chance to ask questions. With some questions, other parents would respond with help and say what was working for them, it wasn't always the experts.*
>
> *Other parents had similar issues to me and understood what I'd been going through with Lacie. It was so nice to talk with other people who were on the same page as me.*
>
> *I also had all of my questions answered and was given individual advice by the dietitian leading the session.*

Cow's allergy group mum, Jessica Lewis, with children Lacie-Jane (right) and Alfie (left).

The resulting increased capacity and reduction of referral to treatment time from over 12 weeks to between four and eight has improved outcomes, with quicker access to help resulting in quicker symptom management, which is paramount for this patient group who rely on appropriate formula and weaning advice in the first few months of life. This group setting also provides a comfortable peer environment for parents and carers to chat, share advice and learn from each other.

The CMA virtual group sessions not only won a silver award at the KCHFT 2022 QI conference, but were also winners at the 2023 Clinical Nutrition Magazine Awards, in the sustainability initiative category. **JCN**

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