Prevention of Malnutrition and Sarcopenia in Liver Disease;

An All Wales Dietary Education Universal Offer

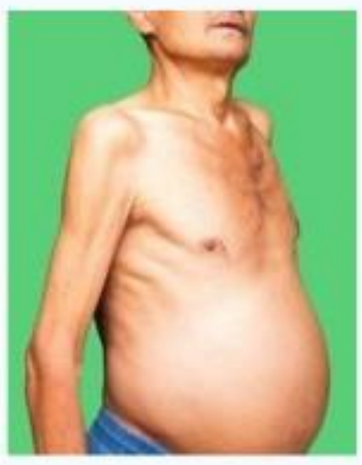
Rhwydwaith Gweithredu Clefyd yr Afu
Liver Disease Implementation Network

Authors

Claire Constantinou, Rhian Booth, Elena Stamp, Lloyd Roberts, Ailish Bourke, Nicholas Willilams, Andrea Pace, Mia Donovan

Aim

To produce evidence-based bilingual resources accessible to every person living with liver disease in Wales, empowering people to self-manage earlier in the disease pathway and delay/minimise malnutrition and the associated avoidable harm.



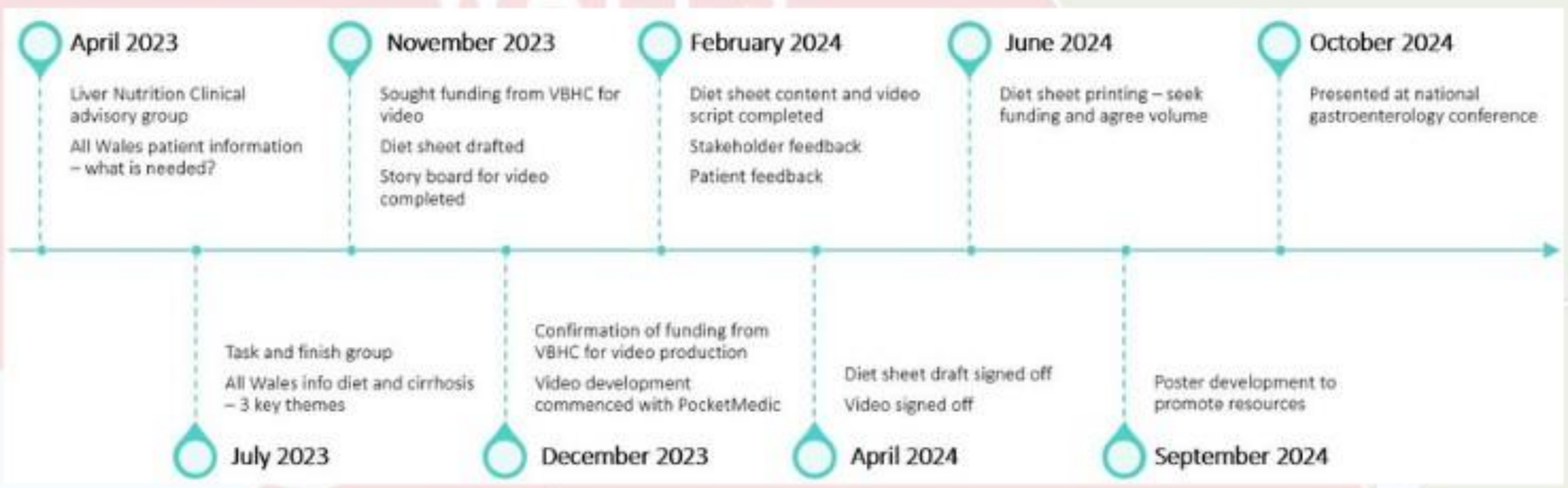
Introduction

Deaths in Wales from liver disease have more than doubled over twenty years with incidence continuing to rise [1]. Malnutrition is the most prevalent complication and an independent predictor of survival [2,3,4]. Across Wales dietetic services are inadequately resourced, and only able to treat those with advanced liver disease who are already malnourished. There is a paucity of quality online resources for this condition. Earlier intervention is essential to improve outcomes and save lives [4,5,6].

Method

Resources were developed through a series of PDSA cycles. The written literature key themes and messages were developed prior to creating a video story board. Stakeholders from liver MDTs across Wales were invited to ensure broad representation. There was engagement from 6 NHS Wales organisations. Funding was secured from Value Based Health Care to produce the video. The resources were co-produced with people who had lived experience of liver disease.Final versions of resources were translated into Welsh before uploading to online locations including Pocket Medic, YouTube and the NHS executive website.

Business cards and posters with QR codes are in production to advertise the resources and third sector organisations have been offered the resources for free to further widen the reach.



Impact

Through national collaboration of stakeholders, people in Wales can be empowered to live healthier lives through self-management. People with liver disease can access evidence-based advice immediately, dramatically reducing the time, and physical deterioration they would experience, waiting for specialist dietetic advice. The possibility of improving outcomes through reducing malnutrition and improving survival is real. This is a prudent approach for conditions where AHP investment is insufficient to meet demand. A budget of less than £10k, has enabled development of dietetic resources for a population of more than 50,000 people with liver disease in Wales. In two months, the resource has received 118 views in English, 20 views in Welsh. This is more than the current dietetic outpatient capacity for liver disease from all Health Boards combined in the same period, and before the resource has been fully publicised.

Learning

This project demonstrates how the NHS executive and Network structure can achieve its objective of delivering more equitable care to people living with chronic diseases. By engaging the right stakeholders we ensured a balance of clinical expertise, lived experience and media skills to produce a high-quality resource. Each stakeholder's input was invaluable and ensured the right people were developing the right 'bits' of the resource. The video production company developed a friendly 'easy to understand' manner, whilst those with lived experience 'sense checked' that the information resonated and was valuable. One patient fed back 'I wish I had received this information before my liver transplant'. Such resources enable a huge 'reach' to empower people to self-manage with a relatively small investment.

Scan the QR code for resources

References

1. NHS Executive. Liver Disease Dashboard. 2024. Data available here: https://app.powerbi.com/groups/me/apps/5bf163a0-9c47-48d8-ae1a-1eb0755c8073/reports/a4dfa5fd-4b80-43da-960a-083d7ff3b66b?ctid=bb5628b8-e328-4082-a856-433c9edc8fae&experience=power-bi
2. Sinclair M, Gow PJ, Grossmann M, Angus PW. sarcopenia in cirrhosis–aetiology, implications and potential therapeutic interventions. Alimentary pharmacology & therapeutics. 2016 Apr;43(7):765-77.
3. Maharshi S, Sharma BC, Srivastava S. Malnutrition in cirrhosis increases morbidity and mortality. Journal of gastroenterology and hepatology. 2015 Oct;30(10):1507-13.
4. Borhofen SM, Gerner C, Lehmann J, Fimmers R, Görtzen J, Hey B, Geiser F, Strassburg CP, Trebicka J. The royal free hospital-nutritional prioritizing tool is an independent predictor of deterioration of liver function and survival in cirrhosis. Digestive diseases and sciences. 2016 Jun; 61:1735-43.
5. Maharshi S, Sharma BC, Sachdeva S, Srivastava S, Sharma P. Efficacy of nutritional therapy for patients with cirrhosis and minimal hepatic encephalopathy in a randomized trial. Clinical Gastroenterology and Hepatology. 2016 Mar 1;14(3):454-60.
6. Merli M, Berzigotti A, Zelber-Sagi S, Dasarathy S, Montagnese S, Genton L, Plauth M, Parés A. EASL Clinical Practice Guidelines on nutrition in chronic liver disease. Journal of hepatology. 2019 Jan 1;70(1):172-93.

DEVELOPMENT OF THE PROLONGED DISORDER OF CONSCIOUSNESS (PDOC) SPECIALIST SERVICE IN WALES

Georgina Jones (AHP lead for PDOC) and MDT
Llandough Centre for Specialist Spinal and Neuro Rehabilitation, University Hospital Llandough

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

BACKGROUND

Individuals with PDOC present with complex clinical and ethical challenges to those who care for them across the pathway. There was inequity in patients and their families accessing timely PDOC services, with no MDT follow-up of those in PDOC in the community across the region as recommended in the Royal College of Physicians PDOC National Clinical Guidelines 2020. Service improvement project highlighted extended hospital length of stay, lack of timely PDOC diagnosis and best interests decision-making around life sustaining treatment, and lack of specialist family support. Associated risk to patient and psychological impact for family members highlighted through patient stories.

AIM

Implement Phase 1 PDOC outreach to provide timely access to PDOC services across the care pathway - from the acute (UHW) in Cardiff to long-term community follow-up, and to those discharged in the last 5 years across South, West and Mid Wales.

METHODOLOGY

Phase 1 involved early identification and engagement with key stakeholders across the regional pathway, from acute services to continuing health care (CHC) teams, GP and community neuro teams. Working groups formed to establish care pathways. Early identification of staff training needs.

Pilot of PDOC outreach in UHW with regular review meetings set up to plan, evaluate and overcome barriers. Pilot of community outreach for historical patients - MDT evaluated case-by-case.

THE TEAM

The PDOC service comprises AHP lead, clinical nurse specialist and clinical psychologist, with access to consultant neurologist, occupational therapists, speech and language therapists and small amounts of physiotherapy and dietician embedded within the Neuro Rehab Unit (NRU).

TRAINING AND EDUCATION PHASE 1 KEY OUTCOMES:

- Provided extensive training sessions for MDT staff in the acute. Developed education partnerships with CDOC (third sector).
- Delivered community stakeholder training, including CHC, community neuro teams and specialist care homes across region.
- All-Wales 'MDT Management of PDOC' study day, attended by 65 NHS staff from across the pathway representing all Welsh health boards.
- **Impact:** upskilling local teams in PDOC management – significant increase in confidence ratings scores; more appropriate and timely referrals; more even spread of referrals across the region.

ACUTE PHASE 1 KEY OUTCOMES:

All UHW PDOC referrals get early access to MDT specialist assessment and management and family support. All patients now have a clear treatment escalation plan prior to transfer to NRU. Outreach has enabled some patients who would have waited a significant length of time for an NRU bed to receive PDOC diagnosis in the acute setting, enabling robust best interests discussions regarding life sustaining treatment, and appropriate flow through pathway. **Impact**: increased readiness for assessment on NRU; earlier PDOC diagnosis; reduced specialist in-patient length of stay (LOS).

LOS (DAYS) FOR PDOC PTS AT NRU OVER 5 YEARS

The data above includes three patients not admitted to NRU due to tracheostomy preventing timely transfer*, but who received assessment and management in UHW as part of acute PDOC outreach. LOS reflects number of days from PDOC service's initial contact to discharge from UHW. This model would not be in all patients' best interests.

Cost savings associated with PDOC Outreach in absence of timely transfer to NRU

	Hospital LOS (days) with PDOC outreach	Estimated hospital LOS (days) No outreach	Estimated bed day saving with PDOC outreach in UHW
Pt 1	166	339	£72,949
Pt 2	193	416	£94,893
Pt 3	211	311	£66,239

*Lack of hyperacute unit/ tracheostomy beds continues to impact acute and NRU patient flow and outcome.

COMMUNITY PHASE 1 KEY OUTCOMES:

All PDOC patients discharged from NRU: have robust decisions around medical treatment and clear PDOC outreach pathway; have long-term access to specialist MDT services.

Developed community outreach service model in line with RCP PDOC guidelines.

Identified 9 PDOC patients in the community discharged from NRU between 2017-2022. Reviewed PDOC status, specialist care needs and management of 7 out of 9 patients to date.

- No previous PDOC outreach. No previous CANH best interests discussions in the community. Families' emotional burden of diagnosis often as high as when left NRU due to lack of ongoing specialist support (informational, emotional and psychological).
- PDOC team has supported best interests discussions regarding life-sustaining treatment alongside local team/GP following permanent diagnosis or when indicated.
- Historical cases have been challenging and labour-intensive due to time elapsed without appropriate specialist review.

WHAT HAVE WE LEARNT? / NEXT STEPS

- Implementation has informed successful phase 2 PDOC business case to expand pathway services for equitable service provision - model will be rolled out to all acute referring hospitals.
- All Wales training and education has ensured those in PDOC are identified and referred to specialist services, and management outside of specialist settings is optimised.
- Yearly virtual MDT study days are indicated with identification of regional 'PDOC champions'. Develop e-learning training for staff across the pathway.
- Historical community outreach has informed Phase 2 with planned development of PDOC community outreach referral pathway, empowering community stakeholders to refer for specialist support.

Palliative Rehabilitation & Quality:- leadership,actions and impact of Allied Health Professionals (AHPs)

J. Pottle (NHS Wales Executive, Cardiff, UK), L. Wooler (NHS Wales Executive, Cardiff, UK)

Safe · Timely · Effective · Efficient · Equitable · Person Centred

Background

AHPs work has been guided by the Quality Statement for Palliative and End of Life Care, Wales, 2022[1] implementing its principles and maximising impact for patients, families and HCPs.

The creation of a network of leads via advisory and open network AHP groups and subsequent dedicated multi-professional task and finish workstreams pan-Wales has resulted in palliative rehabilitiation and quality at end of life care being prioritised and ensured impact is maximised.

Gov.Wales (2022)[1]

Actions

The use of surveys, engagement events and collaborative workshops has led to AHP input to the all Wales Palliative Care Service Specification; collaboration on AHPs' core competency skills and development of education resources.

Impact

Extensive engagement with multi professional teams and patient collaboration (Dementia; Respiratory Care; Primary and community settings) has increased and inspired knowledge and impact of palliative rehabilitative approaches across broad settings with an **increase** in :-

- Planning & developing education programmes and self- management resources for carers & HCPs(knowledge and confidence:- pre and post survey scores; numbers of education sessions attended)
- Upskilling AHPs to work to the top of their license e.g. use of advance future care planning/ DNACPR

Increased understanding and use AHPs' skills with clearer pathways:- such as

- Non-medicalised management of breathlessness & increased safety and independence of Activities of Daily Living, reducing inappropriate hospital admissions
- Use of 'Just in case medication', timely discussions reducing medication costs and increased patients remaining in preferred place of care

Other countries can replicate the Wales approach of dedicated leadership, collaboration and demonstration of impact to improve patient care.
Adopting the STEEEP principles of the quality statement to support patients to live fully and in comfort at end of life.

Contact us

nhswe.nationalpeolcprogramme@wales.nhs.uk
https://executive.nhs.wales/PEoLC
@PallCareCymru

References

1. Gov.Wales, Quality statement for palliative and end of life care for Wales, Oct 2022. Available at: https://www.gov.wales/quality-statement-palliative-and-end-life-care-wales-html.

GIG CYMRU NHS WALES | Y Weithrediaeth Executive

GIG CYMRU NHS WALES | Rhaglen Genedlaethol Gofal Lliniarol a Diwedd Oes
National Palliative and End of Life Care Programme

Investigation into the potential reasons why gastrostomy balloon validations are missed. Creation of an intervention to increase compliance.

Lilly Ross, RD

Singleton Hospital, Swansea, UK

Background:

A balloon gastrostomy tube (BGT) is a feeding tube that is placed directly through the abdomen into the stomach and held in place by an inflatable balloon. Feeding tubes are placed when a patient is unable to manage adequate nutrition orally (NICE, 2017) so nutritionally complete feed is delivered via the gastrointestinal tract. This can be for a number of reasons including disorders effecting swallow, head and neck malignancies and upper gastrointestinal diseases.

BGT require a weekly balloon water change. This is done to check the patency of the tube and to make sure the balloon is inflated to keep the tube in place. If the total volume falls by more than 20% this could indicate damage to the balloon and potential risk of displacement. A meta-analysis (Farrugia et al., 2023) found that 1 in 10 will experience a complication including hyper-granulation, infection or dislodgement. Complications can lead to longer hospital stays and increased costs to the health service (Ojo, O., 2013)

Figure 1: Image of balloon gastrostomy tube

Aims / Objectives:

The aim of this project was to prevent missed balloon validations leading to less tube displacement. The study took place on the oncology ward as this ward always has a high number of enterally fed patients with balloon gastrostomy tubes.

Method:

The current process was audited using a questionnaire. Patients that were admitted with a BGT to the oncology ward were audited in a three-month period.

The questionnaire asked staff nurses their knowledge surrounding BGT. Data showed the most common issue was remembering when the balloon validation was due. Knowledge also played a factor; it showed that some staff nurses did not know how to perform or even some were not aware that it needed to be done. During this three-month period two tubes became displaced and only 10% of balloon validations were completed.

The method was to create a 'dummy drug' on the online drug chart 'HEPMA' to be able to prescribed when the balloon validation is due and the specific number of millilitres that the balloon holds was able to be added. This intervention was put in place for a three-month period and a questionnaire was used to audit the intervention.

Results:

The audit results showed the percentage of balloon validations increased to a completion rate of 90%.

The data showed that even if the staff nurse lacked knowledge they would be alerted by the online prescription system that this was due. This prompted the nurse to request an experienced staff member to perform the balloon validation or contact the nutrition nurses.

During the three-month period no tubes became displaced.

Discussion / Conclusion:

Short falls of this intervention where found to be if a patient is admitted late in the day or on a weekend the dietitian will not be available to add the balloon validation prescription onto the online HEPMA system and/or the dietitian is not made aware that a patient is admitted with a BGT. More thought is needed into this, to consider educating the doctors to be able to prescribe this onto the system. Additionally, pharmacy could be considered to add it onto the system as they already add on patient's usual medication when they are first admitted. However, at present the responsibility lies with the dietitian.

It is recommended that the ward should have training on BGT, specifically looking at balloon validations, this could be supported by the nutrition nurses.

Another suggestion is to add a 'note' onto the prescribed balloon validation on the online system to include where to find the balloon validation guidelines. To consider if this could be done automatically when the balloon validation is prescribed to save clinician time.

It was agreed that the intervention had a positive effect and it is now going to be rolled out on all the wards and across the health board to the other two hospital sites. Additionally, investigations will be needed regarding staff not using the balloon validation paper forms in light of the project results.

References

1000 Lives Improvement 2014. The Quality Improvement Guide. First Edition. Cardiff: 1000 Lives Improvement.

Enteral feeding tubes & accessories: Avanos medical (2022) Avanos. Available at: https://avanos.co.uk/solutions/digestive-health/enteral-feeding/ (Accessed: 01 February 2024).

Farrugia E, Semciw AI, Bailey S, Cooke Z, Tuck C. Proportion of unplanned tube replacements and complications following gastrostomy: A systematic review and meta-analysis. Nutrition & Dietetics. 2023; 1-16. doi:10.1111/1747-0080.12839

Good Practice Guideline – Changing of a Balloon Gastrostomy Tube (BGT) into the Stomach for Adults and Children National Nurses Nutrition Group (June 2016)

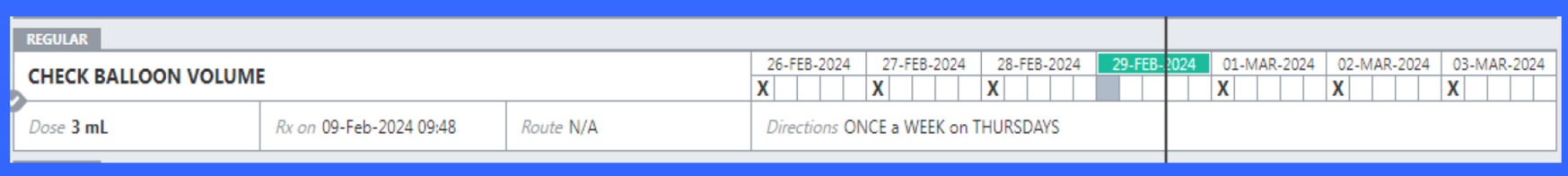
Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition. London: National Institute for Health and Care Excellence (NICE); 2017 Aug. (NICE Clinical Guidelines, No. 32.) Available from:https://www.ncbi.nlm.nih.gov/books/NBK553310/

Ojo, O. (2013) 'Balloon gastrostomy tubes for long-term feeding in the community', British Journal of Nursing, 20(1), pp. 34–38. doi:10.12968/bjon.2011.20.1.34.

Routine Change of Water in a Balloon retained feeding tube. Clinical procedure. SBUHB. 2019

WHO Patient Safety. Geneva, Switzerland: World Health Organization; October 2011. ISBN: 9789241501958.

Figure 2. HEPMA prescribed balloon validation check



Contact: lilly.ross@wales.nhs.uk

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg University Health Board

IMPROVING THE SPEECH AND LANGUAGE THERAPY (SLT) REHABILITATION PATHWAY FOR PATIENTS WITH LATE EFFECTS SWALLOWING DIFFICULTIES (DYSPHAGIA) RESULTING FROM HEAD AND NECK CANCER TREATMENT.

Kerry Davies Macmillan Speech and Language Therapist
Menna Payne Macmillan Clinical Lead Speech and Language Therapist
Lindsey Jose Macmillan Associate Practitioner Head and Neck(SLT/Dietetics)

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Cwm Taf Morgannwg University Health Board

MACMILLAN CANCER SUPPORT

BACKGROUND

The project was initiated due to increased survival rates in Head and Neck Cancer patients, leading to a growing number experiencing late effects, particularly dysphagia. Many returned to SLT services years post-discharge with worsening symptoms, highlighting the need for a structured approach to manage these cases effectively.

Following insights from the 2023 national Head and Neck SLT Cancer Clinical Excellence Network and a 2022 literature review, it became clear that patients often lacked knowledge on how to access support services. This prompted the development of a prototype 'late effects dysphagia clinic' at the Royal Glamorgan Hospital to enhance the SLT rehabilitation pathway

AIM

The study focused on a cohort of patients experiencing late effects from head and neck cancer treatments. It aimed to evaluate the feasibility, acceptability, and impact of a targeted therapy intervention.

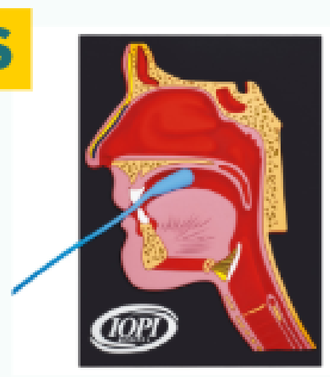
METHOD

Selected 10 patients from existing caseloads and new referrals.

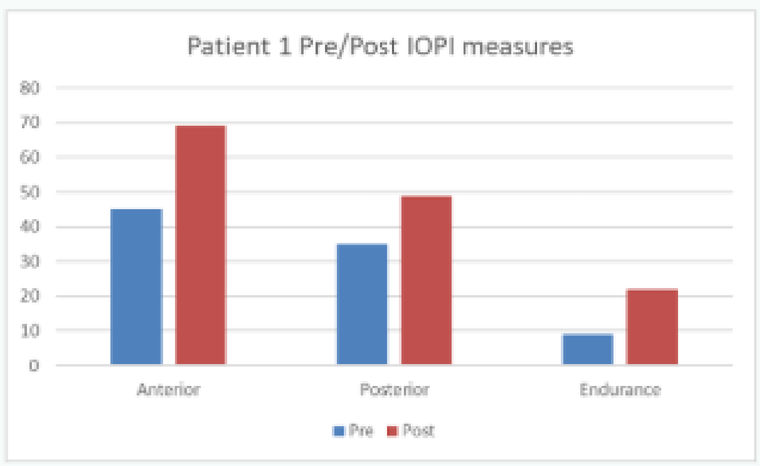
- Conducted initial assessments using patient-reported outcomes (PROMs), videofluoroscopy (VFSS) if needed, and provided education on dysphagia and treatment goals.
  - Outcome Measures Used:
  - PSS H&N Normalcy of Diet
  - PSS H&N Eating In Public
  - TOMS Wellbeing Scale
- Provided weekly therapy, including personalized programs and tools like the IOWA Oral Performance Instrument (IOPI) for biofeedback. Adjustments were made based on progress.
- Conducted a final assessment, including repeat VFSS and outcome measures to evaluate improvement.

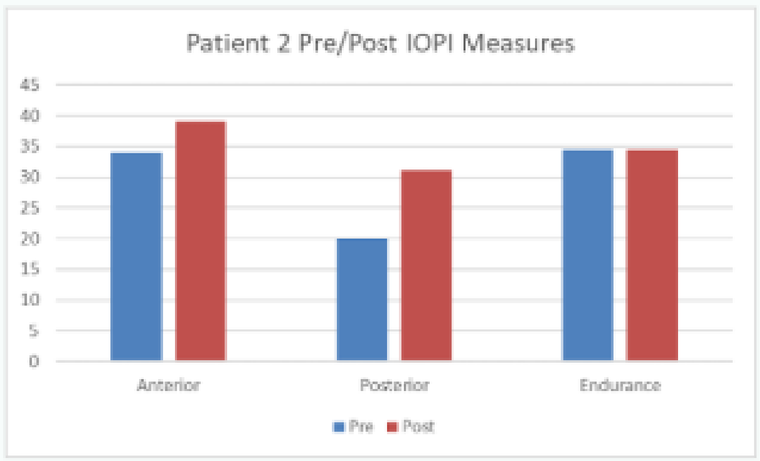
OUTCOMES

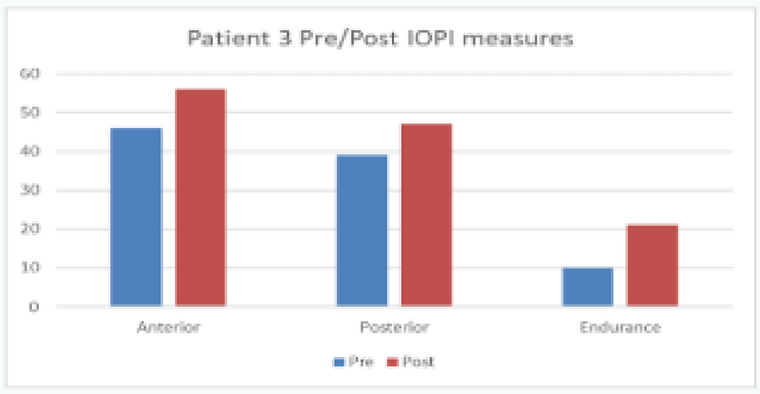
QUANTITIVE RESULTS



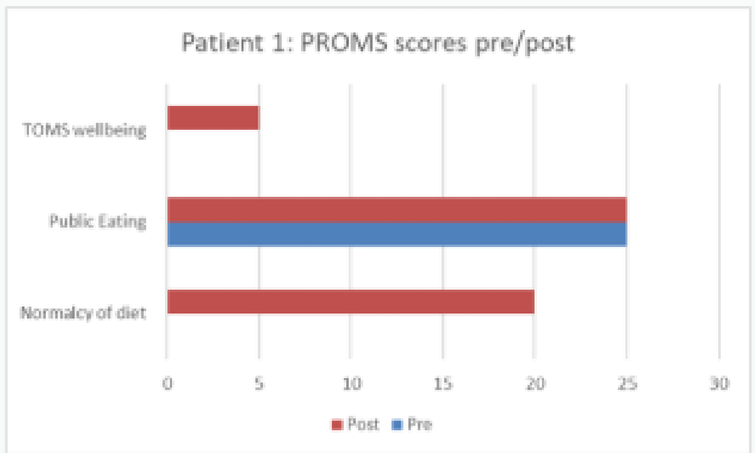
Improvements were seen in IOPI measures of tongue strength and endurance.

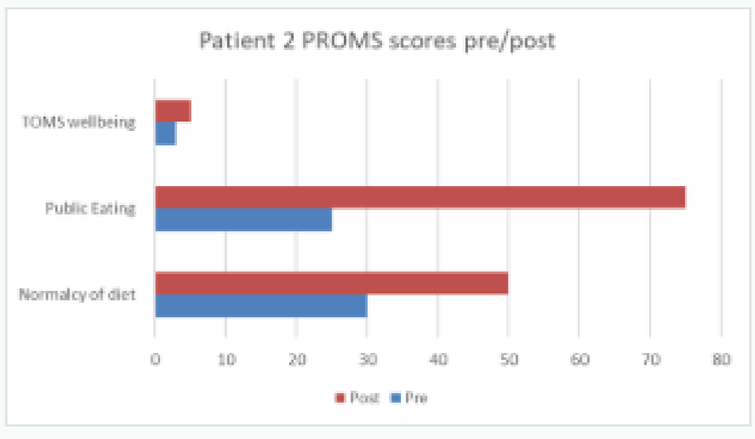


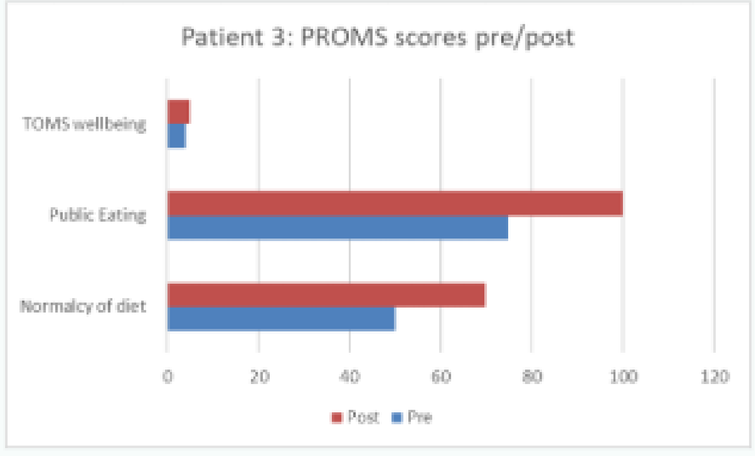




Enhancements were seen in PROMs and TOMS Wellbeing Scores.







" I finish a meal more quickly"

" I have a wider choice of meals now and less repetition"

" My tongue moves more now – I think my speech is clearer too"

" I cough less now and bring up less phlegm"

"I was suicidal now I don't want to die"

QUALITIVE RESULTS

Patients reported a variety of benefits, including quicker meal completion, wider meal choices, clearer speech, and reduced coughing. One patient specifically noted a significant positive change in quality of life.

ADDITIONAL BENEFITS

- Development of a formalised late effects pathway.
- Early identification and management of recurrent disease became possible through a structured assessment process.
- Increased patient empowerment through education and self-management resources.
- VFSS helped 2 patients to make decisions regarding enteral feeding following support in understanding the issues around swallow efficiency and safety.

CONCLUSIONS

The study showed positive results in terms of feasibility and patient outcomes, despite some patients not completing the full therapy block. The therapy led to improvements in tongue strength and endurance, as well as enhancements in patient-reported quality of life measures.

Those who did not complete the full format of the clinic and opted for support and advice also showed improvements in QOL via TOMS.

The development of a full discharge package with self management advice and maintenance exercises means that patients are now empowered and armed with information with the hope that those presenting with late effects may be less in the future.

Motivational Interviewing Training – Delivery, Implementation and Sustainability

Orla Adams, RD, MINT Certified MI Trainer[1] & Huw Davies, Strategic AHP Lead Livewell[2]

1 Dietetic Lead for Maternal Weight Management, Motivational Interviewing Network of Trainers (MINT) and Member of MINT , Department of Nutrition and Dietetics, Riverside Heatlh Centre, Wellington Street, Cardiff. orla.adams@wales.nhs.uk

2 Woodland House, Maes y Coed Road, Cardiff. Huw.davies11@wales.nhs.uk

Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board
Cyfarwyddiaeth Therapïau
Therapies Directorate

Background

- The Rehabilitation Model in Cardiff and Vale UHB, is a person-centred approach that empowers people to make choices in their own recovery that promotes wellbeing.
- The model focuses on shared-decision making and meaningful conversations to build self-care and health.
- The Rehabilitation model delivers care closer to home, enabling greater access at the right time for people in their community.
- Staff delivering this care can often find the conversations challenging as people feel ambivalent about making lifestyle changes.
- It was recognised that staff needed to build their confidence and skills in having these conversations and Motivational Interviewing (MI) is an approach that has been shown to enhance intrinsic motivation to change by helping people to resolve their ambivalence in an engaging and non-judgemental way.

Definition of Motivational Interviewing:

'Motivational Interviewing is a particular way of talking with people about change and growth to strengthen their own motivation and commitment.'

Miller & Rollnick, 2023

What is Motivational Interviewing?

In the approach of Motivational Interviewing, the practitioner helps a person to resolve their ambivalence about change and they evoke a person's own motivation to change and strengthens these reasons.

The spirit of Motivational Interviewing incorporates compassion, acceptance, collaboration and empowerment.

The practitioner holds back from telling people what to do and trying to persuade people to change and views people for their strengths, skills and abilities. The person feels empowered and more confident about making changes that are sustainable.

Training delivery

262 staff trained at introductory level
62 staff currently undergoing training
6 further courses booked

A total of 450 staff will have been trained by April 2025

Six MI Champions have been recruited and the aim is to have at least two Champions in each AHP service.
Each Champion is supported by a MINT Certified MI Trainer to improve their MI proficiency level, to be able to deliver MI taster sessions to their teams and departments, and offer support for staff developing MI.

The MINT (Motivational Interviewing Network of Trainers) Certified Trainer and one of the MI Champions deliver the Monthly MI Refresher sessions with both in-person and on-line options available. These have been part of the Dietetic service historically and are now opened across all AHPs.

28 staff completed an Advancing practice day which involved a more in-depth focus on MI skills and approach with further practice and feedback. Any staff who wish to become an MI Champion will need to have completed this advanced training.

25 staff completed MI in Groups training which supports the group interventions in the Rehabilitation Model.

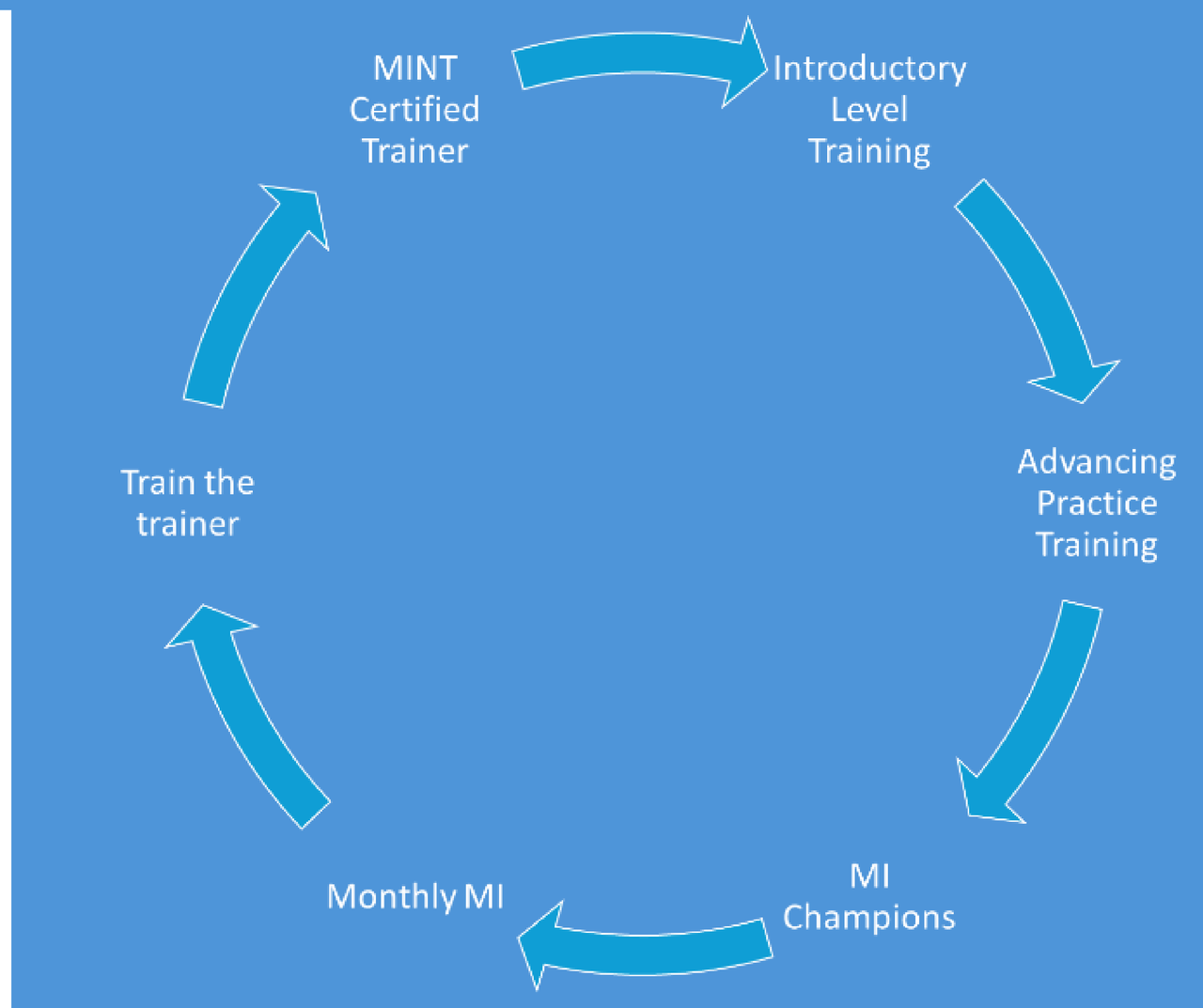


Figure 1 Model of Sustainable MI Training

Sustainability of Motivational Interviewing

The research has shown that to develop Motivational Interviewing skills, people need to have feedback and coaching on observed practice.[2,3] The MINT Certified Trainer is providing this to each of the MI Champions.

Figure 1 shows the model of sustaining Motivational Interviewing in Cardiff and Vale UHB. The goal is to create a workforce where MI is at the centre of it's culture.

The aim is to guide an MI Champion to successfully become a Member of MINT and thereby have another trainer within the health board to sustain the training. MINT is a global organisation that aims to promote good practice in the use, research and training of Motivational Interviewing. MINT offers certification of trainers through a validated, peer-reviewed process.

Feedback from staff

The training has been evaluated at every stage of delivery with plans to capture impact evaluation when the training has been completed and staff have had time to embed the skills.

Staff have commented on the impact of learning MI on their work with service users:

"It's already having an impact on the way that I conduct my assessments and clinic appointments. I feel it's a huge help in building rapport as the patient feels that they're being listened to, and it helps them to set goals and next steps."

"Massive impact as it has really developed my communication skills to motivate my patients to reach their goals and make positive changes."

"I have become more open in my practice. I am aware that I was placing a certain amount of a personal agenda onto sessions with what I felt was needed. I feel that I am developing a more collaborative approach through active listening to the patient and relatives to address their needs and wishes."

Staff also provided feedback on the impact of learning MI within teams and in leadership positions:

"Really useful. I think I can use it within my team and supervision to improve team wellbeing and relations and to get the best out of each other. Also, with my patients to improve outcomes, engagement which will ultimately improve patient flow."

References
1 Miller, W. R. and Rollnick, S. (2023) Motivational Interviewing: Helping People Change and Grow. Fourth Edition. Guilford Press.
2 Schwalbe, C. S., Oh, H. Y., & Zweben, A. (2014) Sustaining motivational interviewing: A met-analysis of training studies. *Addiction*, 109(8), 1287-1294
3 Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004) A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, 72,(6), 1050-1062.

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Ward Based Nutrition Support Workers (WBNSW) improve the detection, monitoring & treatment of malnutrition for patients on the Trauma & Orthopaedic (T&O) wards

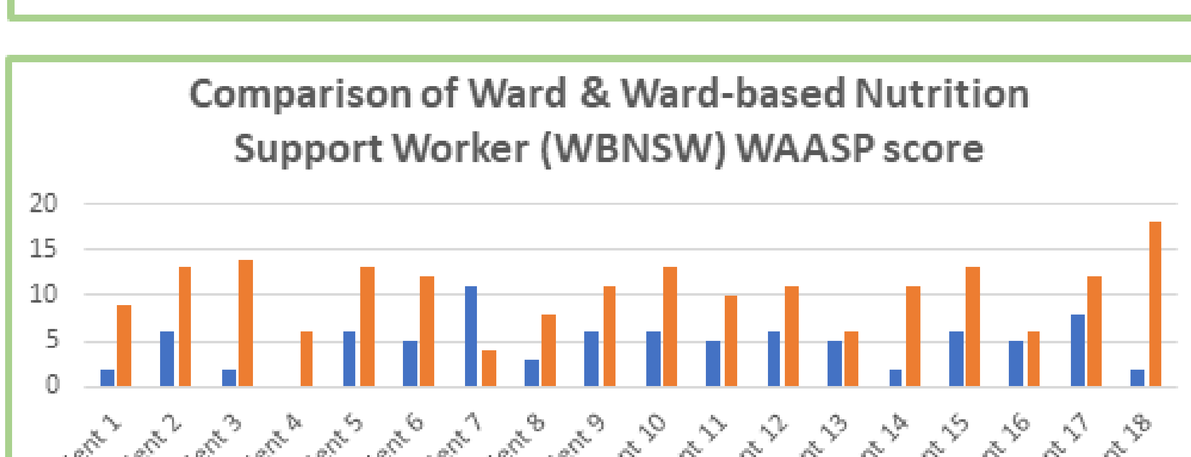
Stephenie Hubbard & Emma Pugh

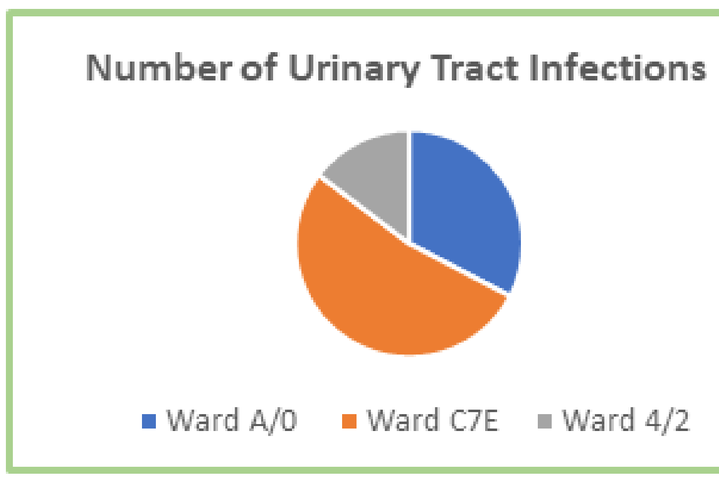
Introduction

Our WBNSW posts were introduced to improve National Hip Fracture statistics for Aneurin Bevan University Health Board (ABUHB) by enhancing nutritional care. Evidence shows poor nutrition and hydration is associated with poorer clinical outcomes, such as increased rates of infection, impaired wound healing and mortality; it also poses significant cost to the NHS (BAPEN, 2018). Studies have also suggested that over 50% of patients admitted to hospital with a fractured Neck of Femur (NOF) are at risk of malnutrition, that this is likely to worsen throughout their stay and that nutritional requirements are difficult to meet in this group (Nematy et al., 2006). Timely and accurate screening is fundamental in ensuring procedures can be implemented to prevent or treat malnutrition (Serón-Arbeloa et al., 2022). Poor oral intake in inpatients can also lead to dehydration which in turn can be associated with conditions such as Urinary Tract Infections (UTIs) and constipation (Manz & Wentz, 2005). WAASP is a nutritional risk screening tool which is used across Wales to identify malnutrition in adult inpatients.

Method

Retrospective and observational analysis of data from nutritional audits was carried out to identify the benefits of the WBNSW role. Nutritional risk audits over a 6-month period were used to show the difference in identification of malnutrition between ward staff and WBNSWs. Data was excluded if the clinical condition of the patient had changed, as this can alter the nutritional risk score. Comparison of the prevalence of Urinary Tract Infections (UTIs) was looked at across wards with and without WBNSWs. Data was input into excel and charts have been generated to visualise outcomes. Additionally, feedback on the role and its perceived impacts was obtained from nursing teams, catering staff and doctors.





Findings

Following validation of the ward's WAASP score by the WBNSW, it was identified that an additional 67% of patients were highlighted to be at risk of malnutrition, which would have been missed opportunities to implement nutritional care plans.

Findings

The audit also highlighted that, for some patients where appropriate, the WBNSW also:

- Implemented food charts
- Discussed likes and dislikes with the patient
- Suggested high energy high protein (HEHP) snacks be given by catering staff
- Explained the importance of nutrition to the patient
- Obtained an accurate weight

Data from the past year also shows that the prevalence of UTIs is between 37% and 72% higher on the T&O ward where there is no WBNSW in post (C7E), compared to the wards that they cover. Qualitative feedback provided by the multidisciplinary team on the WBNSW role and its perceived impacts has also been included in the findings.

> The work of a WBNSW is invaluable and makes a significant impact on all of our patients, in particular a severely malnourished patient, directly extending and improving quality of life through nutrition

> Having a WBNSW on the ward enables the patient to receive additional care that the catering staff are unable to give at mealtimes

> The WBNSWs have been of tremendous help to the staff nurses on A/0. [They emphasise] the importance of nutrition and hydration from a pre- and post-operative perspective

Conclusions

Findings showed that having Ward Based Nutrition Support Workers improved the detection of nutritional risk in adult inpatients. They additionally implemented plans and identified information valuable for effective dietetic assessment. The presence of WBNSWs correlates with decreased prevalence of UTIs, potentially associated with improved hydration. Feedback highlights the value of this role within the wider Multidisciplinary Team (MDT). Sharing data and extrapolating it to evidence other parameters including reduced length of stay, reduction in the incidence of delirium and 30-day mortality rates could support introduction of similar roles across Health Boards.

References

- BAPEN (2018) *Managing malnutrition to improve lives and save money*. rep. Available at: https://www.bapen.org.uk/pdfs/reports/mag/managing-malnutrition.pdf (Accessed: 23 August 2024).
- Nematy, M. *et al.* (2006) 'Vulnerable patients with a fractured neck of femur: Nutritional status and support in hospital', *Journal of Human Nutrition and Dietetics*, 19(3), pp. 209–218. doi:10.1111/j.1365-277x.2006.00692.x.
- Manz, F. and Wentz, A. (2005) 'The importance of good hydration for the prevention of chronic diseases', *Nutrition Reviews*, 63. doi:10.1111/j.1753-4887.2005.tb00150.x.
- Serón-Arbeloa, C. *et al.* (2022) 'Malnutrition screening and assessment', *Nutrients*, 14(12), p. 2392. doi:10.3390/nu14122392.

GIG CYMRU NHS WALES

Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Podiatry and Orthotics Co-production to Improve Pathway and Outcomes for Chronic Foot Ulceration

Tanja Scherrer, Podiatry and Orthotics Department ABUHB

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

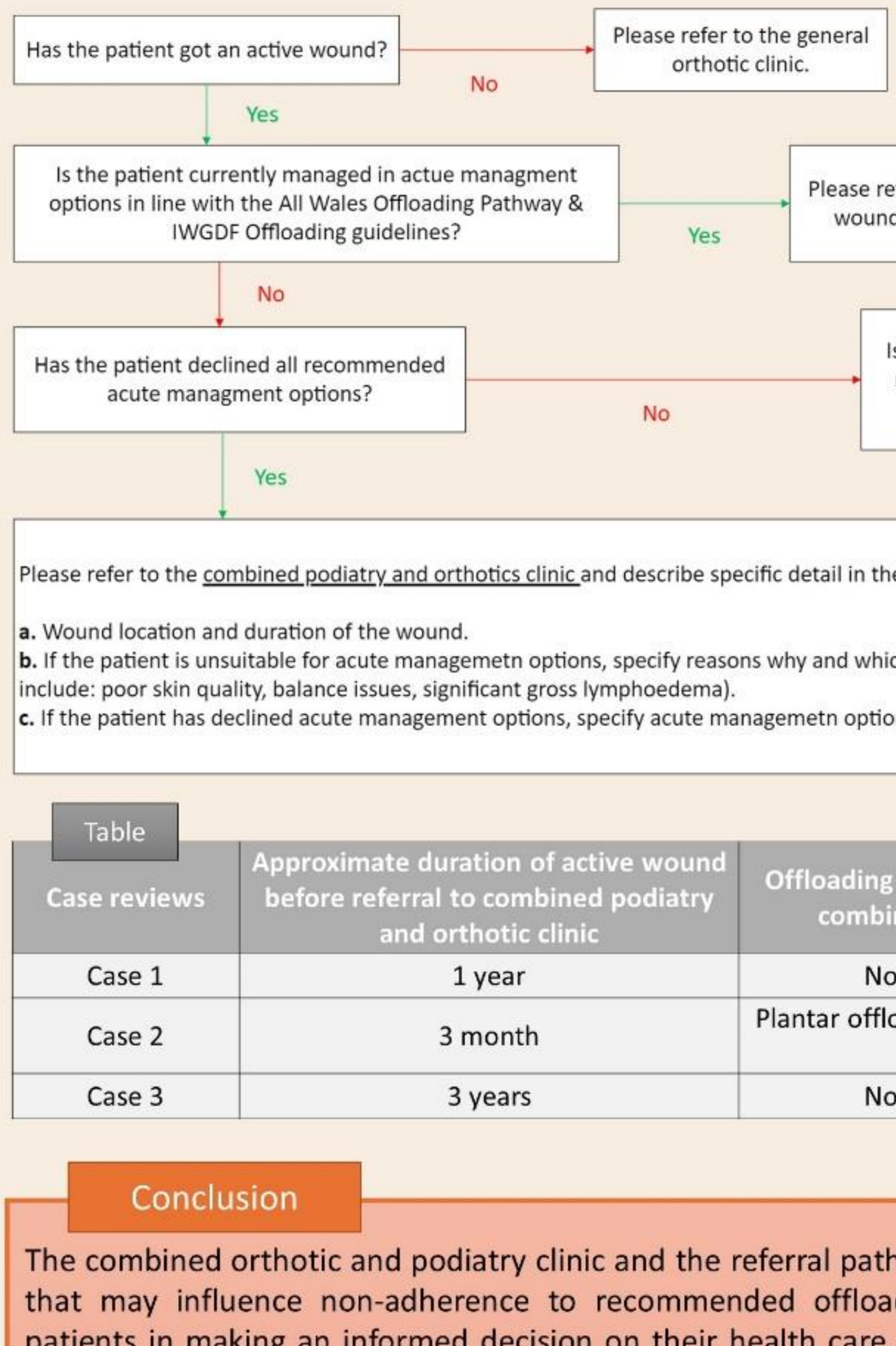
Introduction

Offloading is arguably the most important of multiple interventions needed to heal a neuropathic plantar foot ulcer in a person with diabetes (1). But offloading is only effective if the device is worn by the patient. Non-adherence to offloading has shown to be a central issue (2) with psychosocial factors including lack of motivation, stigma, and embarrassment being the most often reported factors for non-adherence when it comes to wearing foot offloading devices in public (3). A root cause analysis performed by SBUHB in 2015 (4) of preventable amputations indicated that 50% are attributed to patient factors (e.g. multiple Did Not Attend (DNAs), refusing intervention, poor compliance) even with clinical factors perfected. Non-adherence to offloading not only results in a waste of NHS resources and products that are supplied but unused by the patient, but also in less effective health outcomes. All patients have the right to be involved in decisions about their treatment and care and to be supported to make informed decisions, if they are able. Therefore, pathways need to be implemented and existing pathways need to be analysed to ensure factors that influence non-adherence are addressed and where modifiable targeted in assessing treatment adherence and determining the treatment plan to improve adherence.

Methods

The combined podiatry and orthotic clinic was established in 2021 to assess offloading for chronic foot ulcerations and tailor a treatment plan collaboratively with the patient and plan for long-term orthotic management. This clinic was analysed in 2023 as it experienced high DNA rates (20.7%) and a lack of details on referrals resulting in not seeing the right patient at the right time. A pathway was created to aid AHPs in referring to the clinic (see pathway illustrated below) aiming to address the short-comings identified.

Referral Pathway to the Combined Podiatry & Orthotic Clinic



Results

Following the implementation of the pathway, clinical activity was reviewed in 2024, and results indicated a DNA rate reduction to 15%. Referrals were reviewed and the majority demonstrated sufficient information which aided seeing urgent cases within a more appropriate timeframe. Case reviews (see table below) demonstrated that the right patients are seen, and offloading is tailored collaboratively with the patients, addressing factors that influenced previous non-adherence and therefore assisting wound healing. However, the timeframes of wound duration prior to referring as demonstrated in Case 1 and 3 indicated that although the right patients are seen, they may not always be seen at the right time. Reasons for delay in referring will need to be further investigated to ensure patients are referred at the soonest opportunity to assess treatment adherence and tailor an offloading treatment plan collaboratively with the patient.

Table

Case reviews	Approximate duration of active wound before referral to combined podiatry and orthotic clinic	Offloading modality in place before referral to combined podiatry and orthotic clinic	Time from assessment in the combined podiatry and orthotic clinic to wound healing with tailored offloading
Case 1	1 year	None - Declined any offloading	**4 months**
Case 2	3 month	Plantar offloading shoe – wound static no sign of healing	**5 months**
Case 3	3 years	None - Declined any offloading	**2 months**

Conclusion

The combined orthotic and podiatry clinic and the referral pathway aims to address factors that may influence non-adherence to recommended offloading modalities and aiding patients in making an informed decision on their health care. These principles are in line with the guidelines as outlined in 'Prudent Healthcare - Securing Health and Well-being for Future Generations' by the Welsh Government (5).

The implementation, review and analysis of the referral pathway for the combined podiatry & orthotic clinic has:

- Reduced DNA rates.
- Improved details on referrals enabling to see the right patients in clinic.
- Identified that the clinic offers a person-centred approach enabling collaborative and informed decision making with the patient.
- Established good interdisciplinary working relationship between orthotists and podiatrists which can positively impact on the clinical, humanistic, and economic outcomes of patients.

Future Work

Further review is necessary to investigate reasons for delay in referring patients to the clinic. The results of the analysis will be shared with departments that commonly refer these patients to discuss potential factors. DNA rates will be reviewed to identify any other potential reasons which have resulted in missed appointments and resultant missed opportunities. The implementation of patient reported outcome measures or a validated activation measure tool to identify, measure and support low activated patients could assist in supporting the prudent health care model approach within this pathway.

References

1. Bus, Sicco A., et al. "Guidelines on offloading foot ulcers in persons with diabetes (IWGDF 2023 update)." Diabetes/metabolism research and reviews 40.3 (2024): e3647.
2. Lazzarini PA, Armstrong DG, Crews RT, et al. Effectiveness of offloading interventions for people with diabetes-related foot ulcers: a systematic review and meta-analysis. Diabetes Metab Res Rev. 2023:e3650. https://doi.org/10.1002/dmrr.3650
3. Racaru, S., Saghdaoui, L. B., Choudhury, J. R., Wells, M., & Davies, A. H. (2022). Offloading treatment in people with diabetic foot disease: A systematic scoping review on adherence to foot offloading. Diabetes & Metabolic Syndrome: Clinical Research & Reviews, , 102493.
4. Contributable Factors to preventable Lower Limb Crisis, 2015. David Hughes, Podiatry Department, Swansea Bay University Health Board.
5. Prudent Healthcare – Securing Health and Well-being for Future Generations', Welsh Government 2016. Available at https://www.gov.wales/sites/default/files/publications/2019-04/securing-health-and-well-being-for-future-generations.pdf

An observational study of nutritional screening for frail patients referred to an Intermediate Care Team.

Tom Cooze, ICT Dietitian (Sept 2024)

GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

BDA The Association of UK Dietitians

Introduction:

- A community-facing Intermediate Care Team (ICT), receive 70 referrals/month.
- These are triaged following acute hospital discharge, using a gateway form (GF).
- Recovering hospital and community patients are at a higher risk of malnutrition, and its associated deconditioning.
- Identifying them accurately will hold patient and system-wide benefits and outcomes.

Aim:

This study aimed to investigate a suspected referral deficit, for higher nutritional risk patients. 17% of ICT patients had a Dietitians referral, with 44%[1], of inpatients at risk of malnutrition.

Method:

- This study was an observational, service evaluation study (SES).
- Over three subsequent months, patients whose GF had a Clinical Frailty Score[2] (CFS) of 4, 5 and 6 were noted by the ICT Dietitian. They separately screened the patients' nutritional risk and compared results with the GF.

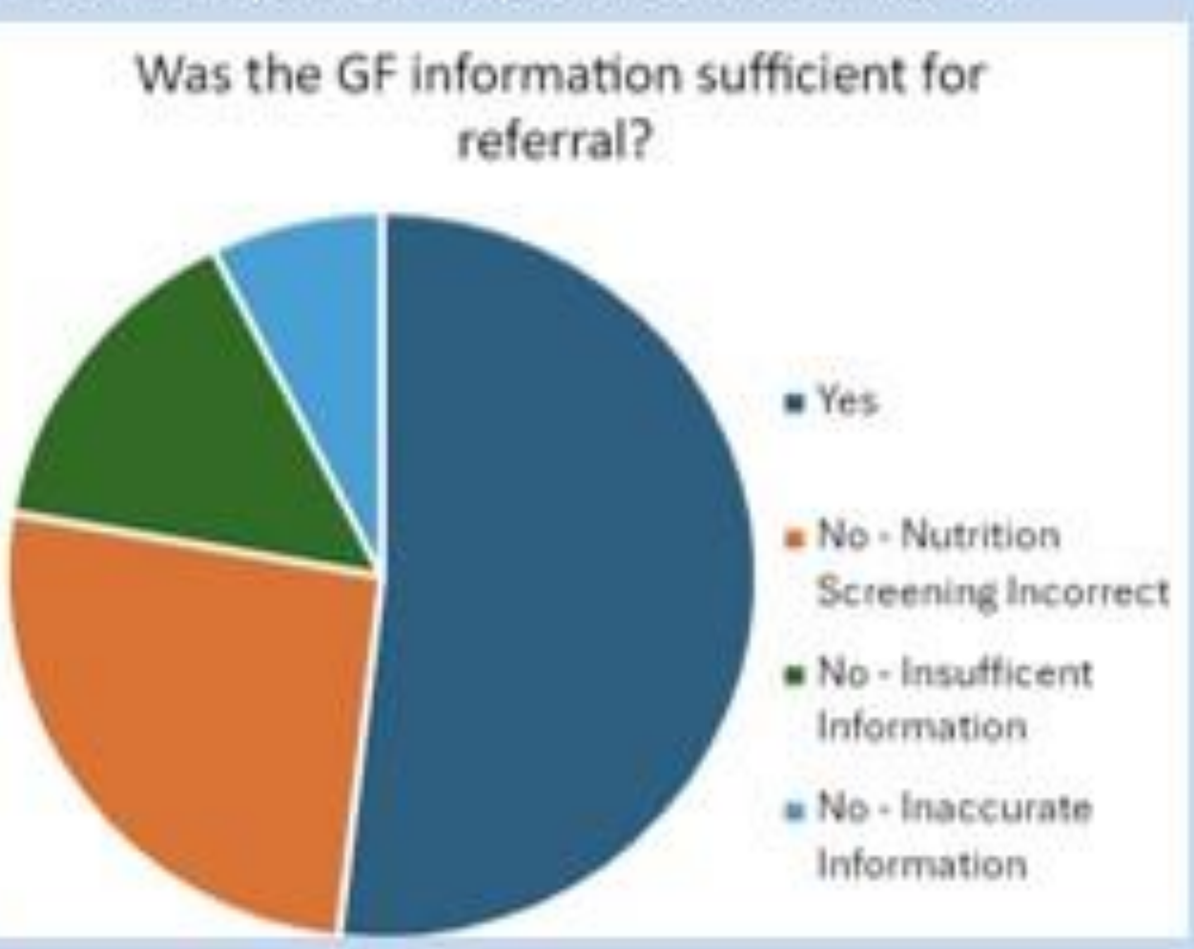
	MUST Score			% Eligible patients not eferred to RD
	0	1	2+	
CFS 4	0%	29%	71%	40%
CFS 5	25%	25%	50%	66%
CFS 6	24%	13%	63%	60%

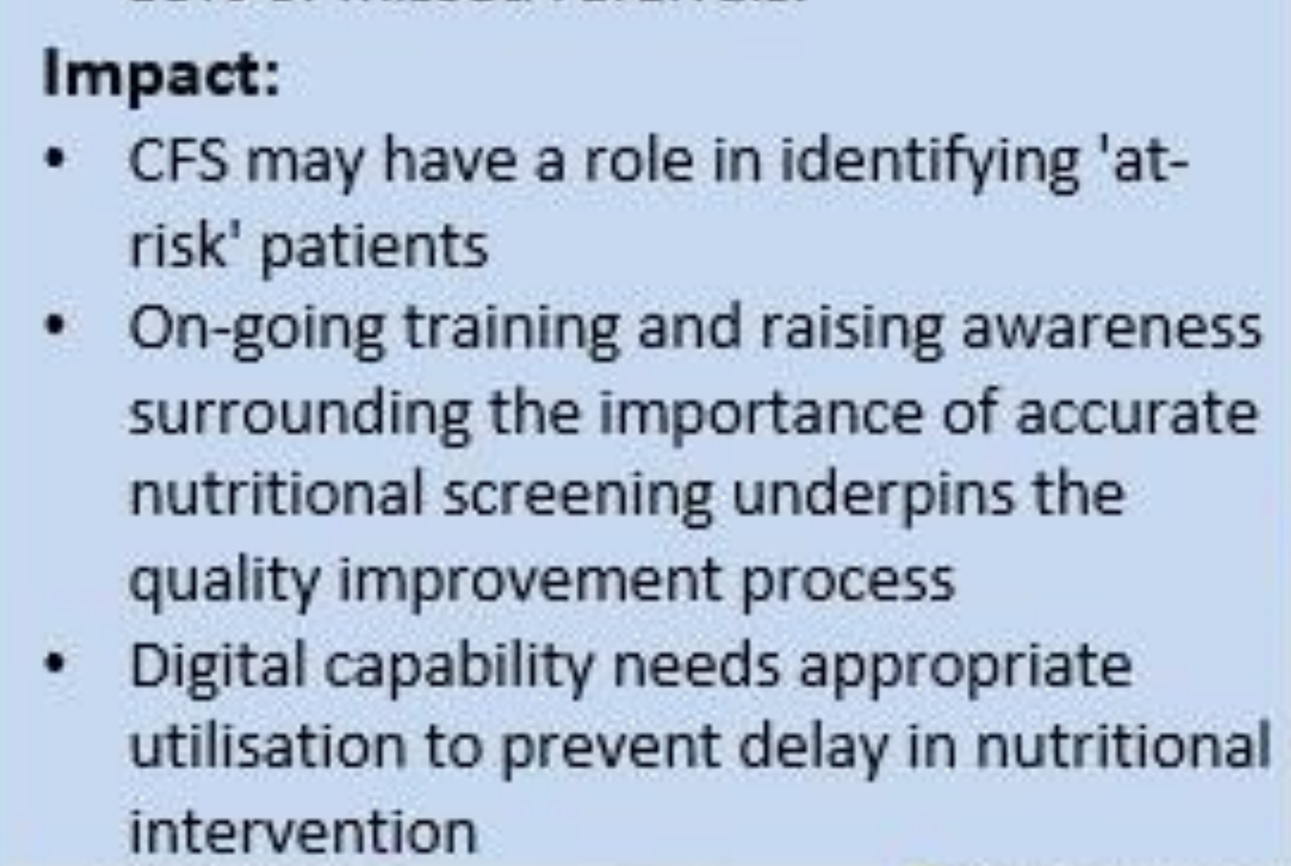
Results:

- 100%, 75% and 76% of patients with a CFS 4, 5 and 6 respectively were at risk of malnutrition.
- 55% of malnourished patients were not referred to a dietitian. Incorrect screening by nursing staff and insufficient information on the GF accounted for 85% of missed referrals.

Impact:

- CFS may have a role in identifying 'at-risk' patients
- On-going training and raising awareness surrounding the importance of accurate nutritional screening underpins the quality improvement process
- Digital capability needs appropriate utilisation to prevent delay in nutritional intervention





Welsh learning points: The Six Goals for Urgent and Emergency care[3] (2021) take a whole-system approach with health and social care systems, and its service users. The timely identification and prudent treatment of malnutrition have a key role to play supporting this.

References:

1. BAPEN. Malnutrition and Nutritional Care Survey in Adults. [Internet] Letchworth 2023 [Cited July 2024.]
2. Rockwood, K. et al. (2005) *A global clinical measure of fitness and frailty in elderly people* Canadian Medical Association Journal.
3. Welsh Government 2021 Six goals for urgent and emergency care: policy handbook for 202 to 2026 Welsh Government;