

CHCR Showcase Conference

1 July 2024

CHCR Conference 1st July 2024

Venue: EP1, Frenchay Campus

1030-1100	Registration and Poster Viewing	Coffee, tea, water, biscuits & fruit available
1100-1110	Welcome from CHCR Director	Prof Fiona Cramp
1110-1120	Welcome from Prof Olena Doran	Dean in Research & Enterprise, College of Health, Science and Society
1120-1230	Theme Showcase 1, including introduction to the ACTIoN & SPACE themes	*see below for details Chairs: Professor Rik Cheston & Dr Alison Llewellyn
1230-1345	Poster viewing/judging, networking and lunch	
1345-1430	Introduction to the EC theme and Keynote Lecture:- Professor Rob Crouch ' <i>What if? Two words that can impact your career.</i> '***	Chair: Professor Jonathan Bengner
1430-1500	Clinical Academic Careers	Dr Mary Cramp & Katie Williams
1500-1530	Coffee break	Tea & Coffee
1530-1645	Theme Showcase 2, including intro to the MAMBO, KME & CYPF themes	**see below for details Chairs: Professor Emma Dures & Professor Nicola Walsh
1645-1655	Poster Prizes	Dr Julie Armoogum & Dr Alison Diaper
1655-1700	Closing Remarks	Dr Adele Drew-Hill, Dean and Head of School of Health and Social Wellbeing

* **Theme Showcase 1 (1120-1230)**

1130 Knowledge Mobilisation & Evaluation (KME): Dr Ilhem Berrou: Community-based Health Screening

1140 Supportive, Palliative and End of Life Care (SPACE): Dr Julie Armoogum: Chronic pain after cancer treatment: the development of clinical recommendations

1150 Children, Young People and Families Health (CYPF): Dr Julie Menzies - UK Paediatric Critical Care Society (PCCS) members research priorities revisited following the COVID-19 pandemic

1200 Assessment, Care, Treatment In Neurology (ACTIoN): Dr Praveen Kumar - CPD Ecosystems: Wearable Robotics For Frailty

1210 Emergency Care: Dr Behnaz Schofield - Public health in urgent and emergency care settings

1220 Musculoskeletal Management, Measurement, Behaviour Change and Outcomes (MAMBO): Dr Caroline Flurey - Playing politics: lessons learnt on getting research into policy from a government task force for men's health

** **Theme Showcase 2 (1530-1645)**

1540 CYPF: Kelly Spurlock: Introduction to the theme & Parental information needs regarding introducing solids - a qualitative study in the South West of England

1555 MAMBO: Charlie Gerlis - Can digital technology promoting physical activity be optimised for people with rheumatoid arthritis?

1605 Emergency Care: Dr Kim Kirby - Our experience of using a multiple criteria decision analysis to establish the most promising "use cases" for a trial of prehospital in vitro point of care tests

1615 ACTIoN: Dr Sunny Chan - Mind-body intervention and sleep

1625 SPACE: Dr Pauline Humphrey: Development of recommendations to improve patient experiences of brachytherapy for locally advanced cervical cancer

1635 KME: Dr Zoe Anchors: Implementing the Nursing Associate Role

*** **Keynote Speaker**

Professor Rob Crouch, OBE is Consultant Nurse and Visiting Professor at UWE. As a clinical academic he has an interest in clinically focused research, advanced practice development and innovative roles and technologies. Rob's talk will focus on how it is important to keep asking questions. He will illustrate how two big questions that he started asking over 30 years ago, are still relevant today, and how they have led to different answers and more questions. The challenge is to find your 'What if' question.

Abstracts

1

Use of emergency department care for home enteral tube feeding related complications: a retrospective review

Julie Barker¹, Amabel Owen², Suzy Cole², Rebecca Capener²

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² Nutricia UK Ltd, Trowbridge, United Kingdom

Objectives

Feeding tubes may be the only route to administer nutrition, hydration and medications, therefore emergency department (ED) attendances are sometimes necessary for patients receiving home enteral tube feeding (HEF). However, ED is not perceived as the setting to manage complications which are rarely life threatening. The aim of this review was to better understand the nature and extent of ED service utilisation by patients receiving HEF.

Methods

This was a retrospective, observational review undertaken within a Southwest England Trust serving a population of >500,000 and providing regional specialist children's services. Tube feeding related attendances at EDs between 2015-2022 were included. Patients were classified as children if they attended the children's hospital ED. Data on date, day, time, ED attended and presenting complaint were analysed.

Results

In total, 1175 ED visits were recorded as tube feeding related equating to n=147 visits/year (SD30, range 102-180). Total ED attendances associated with tube feeding declined by 35% between 2018 (n=180) and 2022 (n=107). Most tube feeding related attendances at ED were for children (n=1079, 92%). An estimated one third attended from out of area. The most common complication was a displaced feeding tube requiring replacement (n=835, 71%), followed by problems with feeding tubes (n=242, 21%). Out of hours visits accounted for 77% of attendances (n=904), and 66% (n=774) were attendances by patients attending the ED on ≥ 2 occasions in a calendar year. Thirteen percent of attendances resulted in admission (n=150) with 61% (n=92) occurring following out of hours attendance.

Conclusions

Most tube feeding related ED attendances are for children with displaced feeding tubes and occur outside standard working hours for dietetic and company homecare services. This review showed a decline in tube related ED visits; however, additional research is needed to develop initiatives and evaluate strategies to further reduce ED attendances and costs.

Statement of ethical approval: This study is a retrospective analysis of routinely collected data by members of the clinical care team who have access to the data as part of their clinical role. This type of descriptive analysis is not classed as research under the UK Policy Framework for Health and Social Care Research, and therefore did not require HRA (Health Research authority) and/or NHS REC (Research Ethics Committee) approvals. The storage, analysis and presentation of data conform to local information governance policies.

Funder: No funding.

2

Chest pain incidence, triage and Emergency Medical Service outcomes

Kirby K. ^{1,2}, **Black S.** ², **Lynde J.** ², **Voss S.** ¹, **Benger J.** ¹

¹ **University of the West of England**

² **South Western Ambulance Service NHS Foundation Trust**

Background

Chest pain is a common presentation to Emergency Medical Services¹. Patients triaged by Emergency Medical Services as suffering with chest pain are a large and disparate group of patients². As chest pain is associated with life threatening conditions such as myocardial infarction and pulmonary embolism most patients presenting with chest pain are triaged to receive a Category 2 response with a target to respond to patients in average time of 18 minutes³. However, only 15% of Emergency Medical Service patients with chest pain have a life threatening condition with suggestions that the majority could be managed outside of hospital.

More accurate telephone triage of chest pain patients will enable Emergency Medical Services to respond in a more optimal way to those presenting with high-risk conditions with the potential to provide lifesaving treatment. In addition, more appropriate triage of those patients presenting with chest pain that is low risk will allow more efficient resource.

Aim

This study aims to review all patients attended by South Western Ambulance Service NHS Foundation Trust who were triaged as presenting with chest pain over a two year period to understand the pathway from the emergency 999 call to discharge from ambulance service.

Methods

This is a retrospective observational study of patients who were attended by ambulance staff after being triaged as complaining of chest pain during the Emergency Medical Services call.

Descriptive statistics to include percentages and chi square analysis for associations will be used to help interpret the data. Data will be analysed to examine conveyance decision-making, triage at the time of the call compared to ambulance staff provisional diagnosis, incidence of out-of-hospital cardiac arrest, response time, patient demographics, timings of calls, recontact rate.

Results and Conclusion

This work is in progress and will be completed in time to present at the CHCR conference.

References

1. Wibring K, Lingman M, Herlitz J, Amin S, Bång A. Prehospital stratification in acute chest pain patient into high risk and low risk by emergency medical service: a prospective cohort study. *BMJ Open*. 2021;11(4):e044938. doi:10.1136/bmjopen-2020-044938
2. Pedersen CK, Stengaard C, Friesgaard K, et al. Chest pain in the ambulance; prevalence, causes and outcome - a retrospective cohort study. *Scand J Trauma Resusc Emerg Med*. 2019;27(1):84. doi:10.1186/s13049-019-0659-6
3. NHS England. new-ambulance-standards-easy-read.pdf. Published 2017. Accessed July 14, 2023. <https://www.england.nhs.uk/wp-content/uploads/2017/07/new-ambulance-standards-easy-read.pdf>

Statement of ethical approval: This study has HRA approval 23/HRA/4749, UWE ethical approval CHSS.23.12.086 and South Western Ambulance Service NHS R&D Approval.

Funder: Unfunded.

3

Benefits, barriers and facilitators for out-of-hospital point of care testing: a qualitative study

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Background

Heightened pressures on hospitals and Emergency Medical Services (EMS) due to growing demand and staff shortages have led to prolonged ambulance response times and delays in handing over the care of EMS patients on arrival at an Emergency Department(1). These delays jeopardise patient safety and staff wellbeing. Point of care (POC) tests in EMS have been proposed to facilitate more effective on-scene decision-making, reduced conveyance, improved clinical outcomes, enhanced system efficiency and patient experience(2,3). Despite an acceleration in POC testing during the Covid-19 pandemic, limited evidence exists for integrating POC tests into routine EMS practice. The aim of this research was to explore the impact, benefits, barriers, and facilitators of POC testing in United Kingdom (UK) EMS, alongside factors influencing future research on POC testing implementation.

Methods

Convenience and snowballing sample techniques were used to recruit a diverse stakeholder group, including patient and public participants, for online semi-structured interviews between June and July 2023. Interviews were recorded, transcribed verbatim and thematically analysed using the framework method. The codes were pre-selected using the outcomes of a prior stakeholder event and double coded by the research team.

Results

A total of 25 participants took part in semi-structured interviews. Whilst most participants identified clear potential benefits associated with the implementation of further POC tests within UK EMS, barriers that need to be considered in future research were also highlighted. Three themes were identified: enhancing patient care and system efficiency through POC testing; navigating implementation challenges: balancing barriers and facilitators for successful implementation; building the foundations: key considerations for future research.

Conclusion

Our study indicates that although the adoption of further POC testing was viewed positively, with substantial potential for impact, it will be essential to carefully address the barriers identified, along with insights from prior research, to overcome the associated challenges effectively.

References

1 Mahase E. Covid-19: Hospital and ambulance services struggle with huge demand and staff illness. *BMJ*. 2022 Apr 11;377.

2 Heaney K, Whiting K, Petley L, Fry I, Newton A. Point-of-care testing by paramedics using a portable laboratory: an evaluation. *Journal of Paramedic Practice*. 2020 Mar 2;12(3).

3 Nichols JH. Utilizing point-of-care testing to optimize patient care. *The Journal of the International Federation of Clinical Chemistry and Laboratory Medicine*. 2021;32(2):140–4.

Statement of ethical approval: Ethics committee approval was received from the University of the West of England, Bristol, Faculty Research Ethics Committee (UWE FREC Ref: HAS.23.04.101) on 2nd June 2023.

Funder: This work was supported by the National Institute for Health and Care Research (NIHR) under its acceleration award for platform studies in areas of strategic importance (Grant Reference Number: NIHR156550). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

4* Shortlisted

Co-designing resources on Patient Initiated Follow Up for use in UK Rheumatology Departments

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⁴ National Axial Spondyloarthritis Society (NASS)

⁵ Bath Institute for Rheumatic Diseases

⁶ University Hospitals Plymouth NHS Trust

Background

Rheumatology teams treat patients with long-term rheumatic conditions, such as rheumatoid arthritis and psoriatic arthritis. Usually, rheumatology teams arrange follow-up appointments on a regular basis.[1] Patient Initiated Follow Up (PIFU) is a different way of organising care where the patient decides when they need an appointment, based on their health and support needs.[2] PIFU has the potential to empower patients and support self-management. However, moving from regular, set appointments to PIFU is a shared decision between rheumatology patients and rheumatology health professionals.[3]

Aims

To co-design PIFU resources with rheumatology patients and rheumatology clinicians.

Objectives

- Create an animation to explain PIFU to patients, including the rationale and process.
- Create a Frequently Asked Questions (FAQ) template that UK rheumatology teams can adapt with information about how PIFU works in their department.

Methods

Rheumatology patients and rheumatology health professionals were recruited via three national patient charities. We held four online workshops with 55 rheumatology patients to identify informational needs and animation design; two online workshops with 10 rheumatology patients to consider the list of FAQs and potential responses; and three online workshops with 9 rheumatology health professionals to discuss their views and experiences of PIFU. A final FAQ refinement workshop will be held with 8-10 rheumatology patients. Workshop summaries were fed back to a steering group comprising rheumatology patients, rheumatology health professionals, researchers and an animation producer.

Findings

Workshops lasted from 50 to 85 minutes. They generated insights into patients' beliefs, concerns, experiences and informational needs on PIFU. They also highlighted the variation in approaches to PIFU across Rheumatology Departments and different models of service delivery. Based on the findings, we have produced an animation for patients explaining the PIFU approach in rheumatology and drafted an FAQ template for final review.

Conclusion

The co-design has informed novel resources on PIFU in rheumatology.

References

1. Reed, S. and N. Crellin, *Patient-initiated follow-up: will it free up capacity in outpatient care?* 2022, the Nuffield Trust: London, UK.
2. National Rheumatoid Arthritis Society. *What is patient initiated follow up (PIFU)?* 2022; Available from: <https://www.facebook.com/nationalrheumatoidarthritissociety/live>
3. NHS England and NHS Improvement, *Implementing Patient Initiated Follow-Up (PIFU) in adult rheumatology services*. 2021: London.

Statement of ethical approval: We did not require ethical approval because this work was Patient and Public Involvement.

Funder: The British Society for Rheumatology.

5

Co-development of a community-based music and movement programme for people with musculoskeletal pain

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³ **Julia Thorneycroft Dance Theatre**

⁴ **Bristol Health Partners Academic Health Science Centre**

⁵ **University of Bristol**

⁶ **University Hospitals Bristol and Weston NHS Trust**

Musculoskeletal (MSK) conditions affect the joints, bones, muscles and spine. A needs assessment for Bristol City Council cited MSK conditions as the biggest cause of disability in Bristol, North Somerset and South Gloucestershire.¹ MSK conditions are more common in people living in more deprived areas.²

Physical activity is beneficial for people with MSK conditions, but levels of physical inactivity are high. Reasons include a lack of confidence and anxiety that movement will make pain worse and cause damage.³ People with MSK conditions are often excluded from, or cannot access, existing community activities because they do not meet their needs and levels of physical disability.

We addressed this through co-developing a programme with seven people with MSK conditions who were physically inactive, socially isolated, and not accessing existing services. As a group, they collaborated with an experienced dance practitioner and physiotherapist to create a music and movement programme that is safe, supportive and tailored to their health needs. Co-development was at an inner-city community venue, to facilitate the involvement of people from under-served groups.

Over eight weeks, the group were invited to move in any way they wished under the guidance of the dance practitioner. They could ask the physiotherapist for advice about pain and stiffness. Sessions involved co-creating movement routines, learning to 'scan' the body, stretching and moving different muscle groups.

Feedback from the group was that this format was revelatory for them, knowing they could safely move through stiffness, and becoming more confident to talk about their pain with the support of each other, and have fun together. The psychological benefits for some were "life-changing", especially for those who felt socially isolated.

"I started getting up and getting out and doing more and getting well. I felt mentally and physically well. It's been amazing for me."

References

¹ MSK Needs Assessment: epidemiological report for Bristol, North Somerset & South Gloucestershire (BNSSG), Bristol City Council 2017

² The State of Musculoskeletal Health, Versus Arthritis 2021

³ Treatments for kinesiophobia in people with chronic pain: a scoping review, Bordeleau et al., 2022

Statement of ethical approval: We did not require ethical approval as this was Patient and Public Involvement and Engagement (PPIE) work. However, we obtained signed consent to take photographs and video during the final session.

Funder: Bristol Health Partners.

6

Workshops with children and young people to inform a scoping review of non-pharmacological fatigue interventions for musculoskeletal conditions across the lifespan

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Background

Fatigue is an important and distressing symptom for many people living with chronic musculoskeletal (MSK) conditions across the lifespan¹. Many non-pharmacological interventions have been researched, with some shown to be effective in reducing fatigue and fatigue impact. However, little is known about how existing interventions work, how to tailor and deliver them to optimise outcomes and address gaps in the evidence base.

Aim

To conduct a scoping review to understand and map evidence in relation to non-pharmacological interventions for MSK condition-related fatigue across the lifespan.

Objectives

- Identify existing interventions and explore their theoretical basis.
- Explore the clinical and demographic characteristics of study participants.
- Identify clinical competencies required to deliver effective fatigue support.

Methods

A scoping review using the Joanna Briggs Institute (JBI) guidance and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-SC).²

Stakeholder workshops with people who have lived experience of MSK fatigue, including workshops with children and young people (CYP), where evidence and interventions are particularly scarce.³

Workshops

Online workshops focused on developing the review protocol were held, one attended by adult patients (N=9) and the other by CYP (N=12). Differences between the groups were noted when discussing support systems, preferences, and barriers to engaging with interventions.

An in-person workshop with CYP (N=7) shared the preliminary findings of the scoping review, explored opinions of the data and discussed priorities for reporting results. This revealed issues with the data extraction, leading to a revision of the review protocol. It also highlighted that CYP are interested in types of intervention that have only been tested in adult populations, further demonstrating gaps in the current evidence around provision for this age group.

Conclusions

Collaborations with CYP have led to protocol changes and will shape the scoping review findings, reporting structure and dissemination plans.

References

1. Versus Arthritis. The State of Musculoskeletal Health. Available from: <https://www.versusarthritis.org/about-arthritis/data-and-statistics/the-state-of-musculoskeletal-health/>
2. Peters MDJ, Godfrey C, McInerney P, Tricco AC, Khalil H. Chapter 11: Scoping reviews. In: JBI Manual for Evidence Synthesis. JBI; 2020. Available from: <https://synthesismanual.jbi.global>
3. Kant-Smits K, Van Brussel M, Nijhof S, Van der Net J. Reducing fatigue in pediatric rheumatic conditions: a systematic review. *Pediatr Rheumatol*. 2021 Jul 8;19(1):111.

Statement of ethical approval: Ethical approval was not required for this review.

Funder: This review is part of the METRICS project which is jointly funded by Versus Arthritis and The Kennedy Fund.

7* Shortlisted

A qualitative study into the availability of fatigue therapies for patients with inflammatory arthritis

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¹ School of Health and Social Wellbeing, University of the West of England

² Academic Rheumatology, Bristol Royal Infirmary, Bristol

Background

Fatigue is a challenging symptom for patients with inflammatory arthritis (IA) due to its pervasive and unpredictable nature (1) and is an important outcome domain in defining disease remission (2). Despite evidence for the success of fatigue interventions, rheumatology departments do not routinely offer support to patients (3).

Aim

To explore rheumatology health professionals' (RHPs) views on current provision of fatigue interventions for patients with IA, and thoughts on improving availability, including barriers and enablers.

Methods

Qualitative data collected via telephone and online semi-structured interviews and analysed using qualitative content analysis.

Findings

Twenty-one interviews were conducted with RHPs from around the UK. Four themes represent the data:

1. Importance of fatigue – patients need help with their fatigue, but it is not currently a priority for NHS managers.
2. The approach to fatigue interventions – psychological input would be valuable, but it is rarely available. Specialist '*fatigue clinics*', or an '*accredited fatigue management facilitator*', could improve support. It's important to offer one-to-one and group interventions and to raise patient awareness of fatigue as a symptom of IRD.
3. The use of technology – there is variation in patients' digital literacy and access. Services need a greater investment in technology e.g. some RHPs can access smartphone apps with their patients, while others cannot.
4. The COVID pandemic: effects from the pandemic are still being felt, including changes to rheumatology services (e.g. loss of face-to-face groups and spaces in which to deliver them) and ongoing anxiety, vulnerability and deconditioning in patients.

Conclusion

Despite confidence in the value of fatigue support, many RHPs felt unable to ask patients about fatigue, or to raise awareness of fatigue as a symptom of IA, due to a lack of available support. The interviews identified common issues across service providers and highlighted variation in the availability of interventions.

References

1. Dures E, Cramp F, Hackett K, Primdahl J. Fatigue in inflammatory arthritis 2020. <https://doi.org/10.1016/j.berh.2020.101526>.
2. van Tuyl LHD, Sadlonova M, Hewlett S, Davis B, Flurey C, Goel N, et al. The patient perspective on absence of disease activity in rheumatoid arthritis: a survey to identify key domains of patient-perceived remission. *Annals of the Rheumatic Diseases* 2017;76:855–61. <https://doi.org/10.1136/annrheumdis-2016-209835>.
3. Roodenrijs NMT, de Hair MJH, van der Goes MC, Jacobs JWG, Welsing PMJ, van der Heijde D, et al. Characteristics of difficult-to-treat rheumatoid arthritis: results of an international survey. *Annals of the Rheumatic Diseases* 2018;77:1705–9. <https://doi.org/10.1136/annrheumdis-2018-213687>

Statement of ethical approval: the study was approved by the Health and Applied Sciences Faculty Research Ethics Committee of the University of the West of England (reference: HAS.23.04.099).

Funder: NIHR Programme Development Grant (award NIHR204581).

8

Evaluation of the Bath, North East Somerset, Swindon and Wiltshire Long COVID-19 assessment and rehabilitation service

Alison Diaper¹, Jane Clarke², Carol Langley-Johnson², Jen Pearson¹

¹ **University of the West of England (UWE Bristol)**

² **Wiltshire Health and Care (WHC)**

Introduction

The Bath, North East Somerset, Swindon and Wiltshire (BSW) Long COVID-19 (LC) service was rapidly developed in December 2020 in response to the NHS England requirement for a regional Post-COVID-19 assessment clinic. A seven-week virtual group-based LC-specific self-management programme was evaluated, which was designed to improve symptoms such as breathlessness and fatigue, alongside delivering occupational support.

Methods

The clinical team collected data between March 2022 and April 2023. Questionnaires (Modified COVID-19 Yorkshire Rehabilitation Scale, C19-YRSm; EuroQol, EQ-5D-5L; Patient Health Questionnaire-9, PHQ-9; Generalised Anxiety Disorder 7-item scale, GAD-7; and Symptom Self-Efficacy Questionnaire, SSEQ) were administered at baseline and repeated after six months.

Results

Baseline data were collected on 1011 patients, with a retention rate at six months of approximately a third. Most patients were female (68%), white (95%), with a mean BMI of 27.6 (sd 7.3), and had never smoked (61%), with a mean age of 49.6 years (sd 14.6) years.

Most patients (61%) reported having LC for up to 12 months, with 16% reporting over two years duration. Half (49%) had more than one pre-existing health condition, with 20% reporting pre-existing heart conditions, 61% pre-existing breathing conditions, 7% pre-existing diabetes, and 43% pre-existing mental health difficulties.

Paired two-tailed t-tests showed significantly improved scores at six months compared with baseline for C19-YRSm Symptom Severity ($t(1,236)=4.19$, $p<0.001$), C19-YRSm Functional Ability ($t(1,236)=3.66$, $p<0.001$), C19-YRSm Other Symptoms ($t(1,167)=3.05$, $p=0.003$), C19-YRSm Overall Health ($t(1,236)=-3.84$, $p<0.001$), EQ-5D-5L Overall Health ($t(1,229)=-4.03$, $p<0.001$), PHQ-9 ($t(1,160)=3.10$, $p=0.002$), and SSEQ ($t(1,176)=-2.93$, $p=0.004$). EQ-5D-5L Index and GAD-7 scores showed no significant difference between time points.

Conclusions

Patients showed improvements in measures of COVID-19 symptom severity and other symptoms, functional ability, overall health, depression, and self-efficacy during the six-month intervention period. Findings suggest the BSW LC service may benefit from providing additional support to improve quality of life and anxiety outcomes.

Statement of ethical approval: Ethical approval not required for service evaluation.

Funder: Wiltshire Health and Care.

9

Patient experiences of the Bath, North East Somerset, Swindon and Wiltshire Long-COVID-19 assessment and rehabilitation service

Jen Pearson¹, **Alison Diaper**¹, **Carol Langley-Johnson**², **Jane Clarke**²

¹ University of the West of England

² Wiltshire Health and Care

Background

The Bath, North East Somerset, Swindon and Wiltshire (BSW) Long COVID service was rapidly developed in December 2020 in response to the NHS England requirement for a regional Post Covid assessment clinic¹. Long COVID (post-acute) sequelae of SARS-CoV-2 (PASC) is the persistence of symptoms in people who have had COVID-19, including fatigue, breathlessness, and cognitive dysfunction². Current estimates suggest that approximately 2.0 million people living in private UK households are experiencing self-reported Long COVID symptoms³. To support the recovery of those living with Long COVID, the clinical team implemented breathlessness, managing fatigue, vocational rehab and a seven-week virtual group-based Long COVID self-management programme. This service evaluation project aimed to understand the patient experiences of the Long COVID service.

Method

The clinical team conducted qualitative telephone interviews with patients after discharge from the Long COVID service. The data were thematically analysed⁴ to understand treatment experiences and identify areas for service improvement.

Results

Twelve telephone interviews were conducted. All participants reported COVID-19 infections between January 2020 and October 2022. The Long COVID service was perceived positively, with participants suggesting that it helped their recovery, provided reassurance and emotional support, and enhanced their understanding of the condition. Participants valued learning new skills, such as pacing and breathing techniques. Suggestions for improvements to the service included a reduction in session length, evening sessions, breathing exercises at the start of the programme, bitesize information, more audio information, reduced reading material, reduced paperwork, ongoing mental health support and education for GPs on Long COVID.

Conclusion

This evaluation provides an understanding of the challenges of those individuals experiencing symptoms of Long COVID and the importance of providing comprehensive support services. Ongoing education for healthcare professionals, especially GPs, to ensure early diagnosis and referral. Further research is needed to understand the continuing long-term impact of COVID-19.

References

1. Shah W, Hillman T, Playford ED, Hishmeh L. Managing the long term effects of covid-19: summary of NICE, SIGN, and RCGP rapid guideline. *bmj*. 2021 22nd January;372.

2. Proal AD, VanElzakker MB. Long COVID or post-acute sequelae of COVID-19 (PASC): an overview of biological factors that may contribute to persistent symptoms. *Frontiers in microbiology*. 2021 Jun 23;12:1494.
3. Office for National Statistics (ONS), released 2 February 2023. ONS website, statistical bulletin: Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK: 2 February 2023.
4. Braun, V. and Clarke, V. (2022) *Thematic Analysis: A Practical Guide*. London: Sage.

Statement of ethical approval: This was a service evaluation, and ethical approval was not required. Information governance processes were aligned with the University of the West of England (UWE) guidelines (UWE 2022).

Funder: Wiltshire Health and Care.

10

Technology Enhanced Care (TEC) to facilitate discharges for patients with no criteria to reside

Kathleen James¹, Samuel Jeynes²

¹ UHBW Adult Therapy Services

² BNSSG Integrated Care Board

Introduction: Technology Enabled Care (TEC) has been identified to support safety and independence in people's own homes. TEC includes pendant alarms, falls sensors and memory aids which can raise the alarm in an emergency. TEC can increase confidence and reassurance allowing people to remain at home¹. TEC is often underutilised due to a lack of awareness in acute settings². The pilot aims to evaluate the impact of TEC referrals on formal support on discharge, length of stay and readmission rates.

Method: A 9-month pilot with the Sirona TEC team offering a TEC assessment within 48 hours of discharge from 4 wards at the Bristol Royal Infirmary (BRI). TEC was provided for 8 weeks post discharge to allow patients to see the benefit of TEC. For patients who wanted TEC to continue, the Sirona TEC team would liaise with the Bristol City Council TEC team for their longer-term needs.

Results: 183 patients were issued with TEC. A 40% change in patients needing formal to informal support once home. A reduction in length of hospital stay was observed, although this was not statistically significant and anecdotally patients and families feel more confident regarding discharge home with TEC. 84% of TEC recipients decided to keep TEC and pay for it after the 8 weeks.

Discussion: A collaborative approach between an acute hospital and community TEC provider, offering TEC assessment within 48 hours of hospital discharge. TEC has potential to reduce the need for care visits and further exploration of its impact on hospital length of stay due to increased confidence in TEC is required. There is increased awareness and knowledge within the acute setting on the benefits of TEC and how it can facilitate hospital discharges. Future considerations should consider the impact of TEC on hospital readmissions.

References

1. Stewart, L.S. and McKinstry, B. (2012) Fear of Falling and the use of telecare by older people, *British Journal of Occupational Therapy*, 75(7), pp. 304-312.
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Statement of ethical approval: BNSSG Integrated Care Board (ICB) led project as part of the Discharge to Assess (D2A) programme for NHS England Digitising Social Care (DiSC).

Funder: BNSSG Integrated Care Board (ICB) as part of NHS England Digitising Social Care (DiSC) 3-year funding.

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A non-randomised clinical investigation of the Freehab wearable device for improving sit to stand performance of patients with hemiparesis from stroke or brain injury [A work in progress abstract]

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Background

Current exoskeletons for patient lower limb rehabilitation have had limited adoption. Preliminary findings from Freehab study 1 and a state-of-the-art-review highlighted how future assistive devices could be improved, including key functions to facilitate physiotherapy with stroke patients. These findings, in addition to a co-participatory approach with expert physiotherapists, informed the development of the Freehab device. The device is a soft wearable that provides some physical assistance to help patients move quickly from sitting to standing (STS).

Objective

1. To establish the effect of the Freehab STS device on patients' performance within a single session. 2. To establish the acceptability and safety of the device and what features should be changed for its use as rehabilitative device.

Methods

This is a non-randomised investigation of the effects of a wearable device for assisting hemiparetic patients in moving from STS in a single test session. 24 patients will be recruited from three acute and community physiotherapy providers. To participate, patients must have hemiparesis due to cerebral stroke or acquired brain injury, and be able to STS independently. STS performance with the device switched off and on in two different assistance modes that are graded to suit each participant will be tested in pseudo-random order. Biomechanical STS performance will be collected using a Qualysis camera-based movement system. Weight distribution will be recorded using a pressure mat. The data under this design is amenable to analysis using Repeated Measures Analysis of Variance with pre-planned contrasts. Assessment of participants' perceptions of the acceptability and usefulness of the device will be collected via a quantitative questionnaire with a Likert scale, which has been piloted by a Patient Research Partner. The questionnaire data will be analysed descriptively.

Findings: Data collection is ongoing and early findings will be reported.

Statement of ethical approval: The study has full ethical approvals in place. MHRA approval was granted on 04/10/2023 – reference CI/2023/0058/GB. HRA approval was granted on 05/10/2023 – REC reference 23/WS/0111. UWE ethical approval was granted on 05/01/2024 – reference CHSS.23.12.076.

Funder: Engineering and Physical Sciences Research Council EP/S026096/1.

The impact of visual feedback on tremor amplitude in Essential Tremor

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Essential tremor (ET) refers to a pathophysiological disorder that causes involuntary rhythmic shaking (or tremors), largely affecting the hands and upper limbs. ET is the most prevalent movement disorder, affecting 4.6% of also those aged 65 years and above (Louis & Ferreira, 2010). Historically, research suggests ET arises from pathophysiological oscillations occurring within the motor network. Recent research has also suggested that neural networks underlying ET may extend to visual areas of the brain, and that visual feedback of tremors can influence tremor amplitude (Archer *et al.*, 2018). The aim of this study was to examine the effect of visual feedback of tremors (watching tremor in hands vs. hands hidden) on tremor amplitude. To clarify the mechanisms of this effect we explored relationships between neural activity in visual brain areas during visual feedback (measured using scalp electroencephalography, EEG) and tremor amplitude. ET patients with an active upper limb tremor were recruited to take part in this study ($n = 14$). Tremor was recorded using a tri-axial accelerometer fixed to the index finger of their tremor dominant hand and neural activity was simultaneously recorded using a 64-channel EEG. A one-sample t-test revealed a significant increase in mean percentage change of tremor amplitude during visual vs. no visual feedback ($p=0.01$). Dynamic imaging of coherent sources analysis revealed that neural activity within sensorimotor regions of the cerebral cortex were significantly coherent with tremor frequency recorded via the accelerometer ($p<0.01$). A regional source model was constructed to examine changes in neural visuomotor coherence across visual feedback conditions. This revealed a trend towards reduced visuomotor coherence for visual vs no feedback ($p=.052$). These findings may be indicative of impaired visuomotor communication in ET, which supports previous research that ET maybe associated with grey and white matter changes in occipital lobes (Tuleasca *et al.*, 2018).

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Statement of ethical approval: This research study was approved by the HRA and the Southwest – Central Bristol NHS REC (REC ref: 19/SC/0200) and the University of Bath psychology research ethics committee.

Funder: GW4 MRC Doctoral training partnership.

13

Care Companions: Co-design and adoption of the HUG soft therapeutic comforter across a health board

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HUG by LAUGH is a specialized therapeutic comforter that was co-designed for individuals with dementia, featuring weighted limbs, soft body, simulated heartbeat and built-in music player programmed with favourite songs. Extensive research and development at Cardiff Metropolitan University (Treadaway, Pool & Johnson 2020, Treadaway et al. 2023) transformed HUG to a market-ready product, launched in 2021.

HUGs were introduced in 2022-23 in the Gwent region (community, care homes, and hospitals), to support a variety of health conditions including dementia, mental health, learning disabilities, autism, and children with anxiety. An implementation group was set up to raise awareness and ensure equitable distribution. A service evaluation within 2 care homes, led by Tec Cymru, involved observations with HUG dolls in use (n=13) and post-intervention qualitative informal interviews with people using HUG, carers and family to assess effectiveness and address implementation challenges. In community and day centre settings, dementia care mapping was used. All carers supporting people using the HUG were invited to share anecdotal evidence via impact case studies (n=14). Results from these studies were used to create exemplar case studies across five settings: day centre, social housing, school, care home, and hospital ward.

This evaluation indicated that HUG positively impacted mood and served as a tool for self-soothing and comfort, even when verbal reassurance was ineffective (Fennell & Lloyd 2023). Dementia care mapping scores increased within several weeks, tension reduced, and water intake increased among care home residents. In schools, 15 young carers benefitted from the HUGs when feeling anxious. HUG was also comforting for an adult with mental health problems and reduced self-harm.

The evaluation highlighted challenges and positive outcomes in implementing HUG at scale. The case studies provided valuable insights into the future of assistive technology, especially in care settings, where products like HUG can significantly enhance care strategies.

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Treadaway C., Pool, J., and Johnson, A. (2020), Sometimes a hug is all you need, *Journal of Dementia Care*, Vol. 28:6 pp 32-34.

Statement of ethical approval: Research was conducted independently by Aneurin Bevan University Health Board and was approved via their R&D Office as a Service Improvement Evaluation. UWE ethics were sought and approved for an engagement event at Senedd Welsh Parliament in 2023, UWE REC REF No: FET-2122-174.

Funder: Welsh Government via the Gwent Regional Partnership Board (external to UWE). Findings were disseminated via engagement event The Power of a HUG, funded by a UWE led AHRC Impact Accelerator Award (2023).

14

An assessment and trial run of a transfer training programme in a 46-bed intensive care unit to guarantee adherence, proficiency, viability, and acceptance

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Introduction:

The Guidelines for the Provision of Intensive Care Services (GPICS) emphasise the necessity of formal training for all staff involved in patient transfers within critical care settings to mitigate risks and enhance skills for managing adverse events (1). This quality improvement (QI) project aimed to train 215 critical care nurses within an 18-month period to meet GPICS standards (2). The project assesses the acceptability, feasibility, and impact of the training on competency in alignment with national guidance.

Methods:

Employing a Plan-Do-Study-Act (PDSA) methodology, a transfer training group comprising key stakeholders reviewed current evidence and guidelines related to intensive care unit (ICU) transfers. Regional discussions ensured training parity, and the Southwest Training in Intensive Care (STRICT) pre-course and simulation training were adapted to local context needs. A trial of simulation training, including workshops and simulations, was conducted with 12 nurses trained in one-day sessions, held monthly. Pre- and post-course knowledge questionnaires and feedback forms evaluated the training's effectiveness.

Results:

The trial training was well received and demonstrated feasibility in delivery. All trainees reported increased confidence in performing intra- and inter-hospital transfers. Course questionnaires indicated knowledge improvement, although feedback suggested pre-learning videos were excessively lengthy. Concerns regarding resource access and staff availability during winter pressures were raised, along with the need for training flexibility to accommodate various working arrangements. To address these challenges, future training will be offered at different times and dates, potentially spanning over two days to mitigate staffing issues.

Conclusions:

Utilising the PDSA model facilitated ongoing evaluation of the transfer training program, ensuring adaptability and alignment with national guidance. The methodology allowed for refinement of the program, ensuring its acceptability, feasibility, and enhanced compliance with national standards.

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Statement of ethical approval: No ethical approval required for scoping review.

Funder: No funding to declare.

A scoping review to explore if extubation and withdrawal of mechanical ventilation at the end of life can lead to a dignified death at home

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Introduction: The Department of Health End of Life Care (EoLC) strategy emphasises the need to provide individualised EoLC for patients and families (1). An element identified in this document included consideration of the location of death (2,3). This scoping review explores, extubation and withdrawal of a mechanical ventilation (MV) at home for patients at end of life.

Methods: This review follows the PRISMA guidelines for Scoping reviews, and the Joanna Briggs Institute, Population, Concept and Context (PCC) model (4). The main search criteria was patients and families who had experienced extubation at home for their EoL care. Seven databases and 4 grey literature sources were searched on 22/11/23. Ninety-seven references were retrieved and reviewed by two authors. Included articles involved both adults and children who had undergone withdrawal of MV in their home environment and how this impacted the care they received.

Results: Five articles were retained and only qualitative data was extracted. Four of these articles were case reports and one was a piece of qualitative research that utilised 1:1 interviews; over the 5 studies 14 patients care was explored, all data extracted was qualitative in nature. Themes were developed through a standardised thematic analysis process (5). 6 themes were developed and included: honouring last wishes, time to make memories in home environment and allow whole family to be present, promote normality, preserve cultural and spiritual beliefs, preserve caregiver role and comfort/symptom control.

Conclusions: Qualitative data provided in the retained articles highlights how extubation at end of life can possibly lead to a dignified death at home. However, evidence included was mostly undertaken in a paediatric population. There is a gap in the evidence and further research is required to ensure all ages receive the same individualised choice in EoLC.

References

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Statement of ethical approval: No ethical approval required for scoping review.

Funder: No funding to declare.

16

A Journal Club Led by Nurses: Beyond merely discussing a fascinating research piece

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Introduction:

Aligned with the NHS Long Term Plan, the Intensive Care Unit (ICU) at a major acute hospital trust in the west of England has been recruiting Internationally Educated Nurses (IENs) since 2019 (1). Mainly sourced from India, where academic critical appraisal skills are not part of the pre-registration curriculum, it was speculated that this led to limited career progression opportunities for IENs within the trust. This quality improvement (QI) project aimed to introduce a journal club in the ICU to foster critical appraisal skills among nurses, thereby boosting their confidence to pursue the ICU course and advance their careers. The ICU course is two 30 credit module courses, exploring fundamental components of critical care. This ICU course is a requirement for career progression.

Methods:

Employing a plan-do-study-act (PDSA) methodology, two ICU Practice Educators explored current literature and guidance to establish a journal club. Clear advertisements were circulated, article and appraisal checklists distributed to all nurses, physical spaces booked, and invitations extended to teams. Monthly sessions (except height of pandemic) have been conducted since 2019. Feedback regarding session content and future desires was solicited and incorporated into sessions.

Results:

On average, five nurses attend each monthly session, representing a range from newly qualified to band 7 nurses. Among the attendees, 14 IENs have participated, with five successfully completing the ICU course. Feedback from IENs indicated increased confidence in seeking promotions. Modifications based on feedback, including incorporating teaching sessions prior to critical appraisal, resulted in greater IEN participation in ongoing professional development opportunities and increased retention.

Conclusions:

The nurse-led journal club has been lauded as an inclusive environment, facilitating increased participation of IENs in the ICU course and their eligibility for more senior nursing roles within the trust.

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Statement of ethical approval: No ethical approval required.

Funder: No funding to declare.

17* Shortlisted

UK Paediatric Critical Care Society (PCCS) members research priorities revisited following the COVID-19 pandemic

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Background

Paediatric critical care (PCC) is a high-cost, resource-intensive environment with a sparse evidence base. Reaching consensus on research priorities is therefore vital. In 2018 a research prioritisation exercise was undertaken by the UK Paediatric Critical Care Society (PCCS), which included multi-disciplinary Health Care Professionals and parent/carer perspectives¹. Since then, several multi-centre studies have been funded and conducted and the COVID-19 pandemic occurred which challenged traditional PCC service provision and staffing. We aimed to determine how research priorities had changed in this five-year period.

Methods:

A modified three-round e-Delphi study was conducted (April-June 2022), with surveys sent to all multi-disciplinary members of PCCS (n=1500). Participants were asked to list up to three research topics/questions they deemed as key priorities for the specialty over the next five years. Simple content analysis was undertaken to classify responses from round one into topic domains. Following the three rounds, the top 20 topics were ranked and voted on using the Hanlon prioritisation method² in an online consensus webinar (November 2022).

Results:

In round one, 247 research topics were submitted (n=85 respondents). 135 were categorised into twelve domains and put forward into round two (n=112 respondents). Round three included 45 highest scoring topics (n=67 participants). The top 20 topics were then voted on to generate a top 10 list of priority research topics for PCCS (n=21 participants). These included complex decision-making associated with withdrawing/withholding critical care, antimicrobial therapy and rapid diagnostics, intravenous fluid restriction, long-term outcomes, staffing and retention. New priorities included implementation science and the role of artificial intelligence.

Conclusion:

Encouragingly, several research topics prioritised in 2018 have been, or are being, addressed in current studies/trials. Despite this, many questions still require investigation. With similar priorities identified internationally, there is potential for multi-national collaborations to address these key areas.

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Statement of ethical approval: Not applicable.

Funded: Unfunded. Work undertaken on behalf of the Paediatric Critical Care Society Study Group.

18

Demonstration of departmental research engagement: development of the EVIDENCE tool

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Background:

Research active organisations offer improved patient outcomes¹ and benefit from increased staff satisfaction and retention². Operationalisation of the Chief Nursing Officer (CNO) for England research strategy³ includes the launch of the Self-Assessment Organisational Readiness Tool (SORT) to evaluate research engagement at Trust-wide level. Gathering evidence from across organisations to facilitate evaluation is currently challenging as metrics to capture research engagement/activity are lacking.

Aim:

To develop a tool to support Matrons/Health Social Care (HSC) leaders to capture evidence of departmental research engagement/activity and facilitate objective setting for future growth.

Method:

Building on an impact assessment framework, we developed a seven-domain tool (clinical academic, research culture, knowledge exchange, staff recruitment/retention, service provision/workforce, patients, economic), with an accompanying guidance document. Key elements were the ability to set objectives, assess baseline status and track longitudinal changes with visual Red-Amber-Green (RAG)-rating. The tool and guidance were piloted by a working group within the Matron/HSC Leader Research Toolkit (April-July 2023). Feedback was gathered through an anonymised e-survey, composed of Likert scales, with additional free-text, collating views on ease of completion, tool utility, challenges, and valuable features.

Results:

Seven Matrons/HSC leaders working across acute/community NHS health care settings completed the pilot and survey. All respondents rated the tool 'Excellent', with 100% agreement on the clarity of tool purpose and layout. Further benefits included the ability to set locally prioritised objectives, track changes and inspire growth. Improvements reflected additional guidance on completion, relevant information signposting, inclusive approach to achievement/success and changes to tool functionality.

Conclusion:

To date the EVIDENCE tool has evaluated positively, with the potential to offer a structured approach for Matrons/HSC leaders to evaluate research activity/engagement across departments and strive towards achieving the CNO research strategy. Further work is required to review how the tool can support the SORT tool implementation and organisational evidence-gathering.

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Statement of ethical approval: Not required. Work classified as service evaluation.

Funder: No funding for the tool development or evaluation. Dr Menzies was supported by an NIHR CRN WoE Research Scholars award.

Advancing Research Careers for Under-recognised Allied Health Professionals (AHPs) across the South West

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Background: AHP research engagement leads to new skills, increased research activity and improved patient care¹. Despite policy strategies aimed at encouraging equitable access for AHPs to pursue research careers, many AHPs feel that this is unattainable². This project aimed to identify under-recognised AHPs, establish a clear definition for this group in the context of research career development, and identify the barriers and facilitators affecting their progression in research careers.

Methods: Participatory online focus groups were conducted with the South West AHP workforce and recorded using Microsoft Teams. The automated transcripts were reviewed for accuracy, anonymised and uploaded to NVivo. The qualitative data were thematically analysed³.

Results: A total of 190 AHPs expressed an interest in participating. Nine focus groups were conducted in November 2023, with 63 participants attending. One participant opted for a 1:1 interview, and two provided responses by email. All 14 AHPs across the seven systems in the South West were represented. Participants collectively defined 'under-recognised in research' as feeling misunderstood, underutilised, and excluded from research career opportunities. Commonly reported barriers included a lack of clarity and fear of research, absence of AHP leadership, few clinical-academic role models, inadequate job security, weak relationships between clinical practice and academia, and poorly defined research career pathways. Enablers included chief AHPs and AHP role models advocating for visibility and representation, operational/service leads having the confidence in supporting AHPs, providing protected time, active research networks and clinical-academic posts.

Conclusion: In the South West, AHP clinicians face challenges in developing a research career due to undefined career pathways and fear of research. All participants felt AHPs require resilience and determination to pursue a research career. One limitation is the sample did not fully represent those with protected characteristics. Further work is ongoing to ensure we hear a diverse narrative when creating project recommendations.

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Statement of ethical approval: No ethical permissions were required as this was a service evaluation project. The EOI survey was developed using Microsoft Forms and information governance was aligned with the University of the West of England (UWE) guidelines (UWE 2022).

Funder: NHS England.

Exploring Intimacy at End of Life: A Qualitative Study

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Introduction: Intimacy includes emotional and cognitive aspects as well as physical components ranging from closeness to sexual intercourse¹. Intimacy is an essential component of human existence, and combined with strong emotional relationships, can support peace and happiness at end-of-life². However, evidence suggests intimacy needs in palliative care may be overlooked during initial assessment or provision of services³, and anecdotal reports indicate that healthcare professionals (HCPs) find intimacy a difficult and sensitive topic to discuss.

Aim: The aim of the research is to understand the intimacy needs of patients and their partners at end-of-life and how HCPs can best support these needs. Our long-term aim is to develop an educational intervention to inform and train HCPs and wider healthcare community to feel more confident to discuss intimacy needs with patients and their partners towards the end-of-life. This research will enable hospices to improve the effectiveness of services benefitting the health and wellbeing of patients and their partners.

Methods: In May 2023, we consulted with patient and public representatives of a hospice user group (n=7) to inform the qualitative interview guide for patients, partners, and bereaved partners. The interview guide for HCPs was pilot tested with Dorothy House Hospice Care (DHHC staff) (n=2) in September 2023. Data collection is on-going with DHHC patients, their partners, bereaved partners (n=6), and HCPs (n=8). Verbatim interview transcripts data will be thematically analysed.

Results: Preliminary data indicates intimacy has a kaleidoscope of definitions which can change towards end-of-life. Barriers to intimacy for patients, partners, bereaved partners, include: physical and emotional. Barriers for HCPs include: lacking confidence, overburdening patients, intimacy missing from medical paperwork. Both groups felt more support and information was necessary to address intimacy needs.

Conclusion: Data collection with patients, partners, and bereaved partners is on-going. Results will be reported at the conference.

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Statement of ethical approval: This study has been approved by the West Midlands – Coventry & Warwickshire Research Ethics Committee, REC reference: 23/WM/0093, IRAS project ID: 325231.

Funder: Dorothy House Hospice Care.

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Quality of life and needs of people with common neurological conditions towards the end of life

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Background and aims

The NHS England updated framework for Palliative and End of Life Care (PEOLC) states that high quality PEOLC care should be provided to all, irrespective of diagnosis or condition¹. Despite acknowledging that PEOLC services should be extended beyond cancer, this is not commonly seen in practice. Inequalities and inequities in PEOLC services for people with non-malignant conditions still exist and patients may not be aware of available services and support^{2,3}. Compared to dementia, there is limited research available about quality of life and individuals' needs, as reported by people with other neurological conditions, such as multiple sclerosis, Parkinson's disease, and stroke towards the end of life.

This scoping review aims to explore and identify primary evidence focusing on quality of life and needs assessment as reported by people with multiple sclerosis, Parkinson's disease or stroke requiring palliative or end of life care in the last 18 months of life. We will report any inequities and inequalities as well as any gaps in the evidence.

Methods

To date, we have searched the MEDLINE, Embase, CINAHL and AMED databases to identify relevant qualitative and quantitative primary research studies. We limited our search to include references from 2015 to date as this coincided with the framework Ambitions for Palliative and End of Life Care¹. Title and abstract screening is underway with full text review of retained studies to follow. Data will be extracted according to JBI scoping review methodology⁴.

Results

After removal of duplicates the search yielded 1942 unique studies. We will finalise the included studies and will extract data, with findings to be presented at the CHCR conference.

Conclusion

This review will inform future work, including a large-scale funding bid to support a study aimed at enhancing the inclusion of people with neurological conditions in PEOLC services.

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Statement of ethical approval: Ethical approval was not required for this study.

Funder: Research Investment Scheme and Internal QR, UWE Bristol.

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Understanding the complexity of care provision during and post veno-venous extra-corporeal membrane oxygenation support

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Introduction

Veno-venous extra-corporeal membrane oxygenation (VV-ECMO) supports patients with severe respiratory failure who have a high mortality risk(1). During ECMO, families of patients also suffer from significant rates of traumatic stress, anxiety, and depression(2). As such it is important to deliver a service that focusses on the experience of both the patient and their relatives.

Objective

To understand the complexity of care provision during and post ECMO and to highlight ongoing service requirements to deliver quality care to patients and their families.

Method

Patients initiated on VV-ECMO in the first six months of service initiation were contacted for participation. Written information was provided to patients and their families and consent gained.

A semi-structured interview was conducted by the trust's Patient/Public Involvement and Engagement (PPIE) lead. Two Intensive Care Unit (ICU) clinicians (TL and JB) reviewed transcripts to complete coding using thematic analysis.

Results

Four patients and their families attended the PPIE sessions. Separate interviews completed per patient group. The patient demographics are as followed: 2 females, median age 36 (range 20-49), duration on ECMO median 16 days (range 5-21).

Review of transcripts identified 75 topics important to patients and their relatives. Topics were grouped into 6 key themes: altered memory; psychological recovery; safety and reassurance; physical dysfunction; changes in care during ICU stepdown; and follow up safety netting.

Data relating to ongoing service requirements included the appropriate timing of psychological status review; the importance of supporting transition of care; and improved information delivery strategies.

Conclusion

The use of PPIE has highlighted the multi-dimensional complexity of care required for ECMO patients and families. We have highlighted key topics that require consideration when delivering an ECMO service. Findings have emphasised the importance of information provision, and the need to support patients and families when transitioning from critical care to the ward.

References

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Statement of ethical approval: No ethical approval required as deemed service evaluation by UHBW.

Funder: Nil to note.

Exploring adult extra-corporeal membrane oxygenation (ECMO) survivors' functional abilities: a service evaluation

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Introduction

Veno-venous extra-corporeal membrane oxygenation (VV-ECMO) supports patients with severe respiratory failure. This severity often leads to psychological dysfunction and reduced quality of life (1,2). There is no literature that includes a functional outcome measure to track recovery post ECMO.

Aims

To describe the physical and non-physical impairment of patients after ECMO.

Methods

All patients admitted to the Bristol ECMO service were screened and classified as having rehabilitation needs.

The FIM+FAM+E tracks recovery of patients with neurological diagnosis (3). The functional independence measure (FIM) extended functional assessment measure (FAM+E) scores 36 functional activities of daily living (ADLs). Scores are clinician assessed and set on a scale of completion between 1, not able/not completed to 7, fully independent.

FIM+FAM+E scores were measured and compared from preadmission baseline, ICU discharge and follow up (3 months post hospital discharge).

Results

Nine patients were included in descriptive analysis.

Total FIM+FAM+E score shows a reduction in functional ability at ICU discharge from the subjective baseline. At 3 months post discharge patients are not back to their preadmission baseline (pre-admission total score, mean 202.66 (sd 60.8), ICU discharge total score, mean 80.7 (sd 39.9), 3mth follow up clinic mean 190 (sd 60.3)).

The 'extended ADL' score shows a considerable impact (median 26 [9-38]) of performance to complete instrumental activities of daily living (e.g. housework, paid work, budgeting) at 3 months post hospital discharge follow up (pre-admission EADL score, mean 39.3 (sd 12.7), 3mth EADL follow up score mean 26.7 (sd 12.56)).

Conclusion

A wide variability in functional recovery is observed during the hospital admission, with functional deficit remaining at hospital discharge. This may show the importance of on-going rehabilitation in the outpatient setting and the socio-economic impact of recovery between ICU discharge and follow up. More data is required to make robust conclusions.

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Statement of ethical approval: Ethical approval was not required as this was deemed a service evaluation by UHBW.

Funder: Nil to note.

Feasibility of Mechanical Insufflation-Exsufflation in promoting extubation success in invasively ventilated, critically ill adults

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Introduction

One cause of extubation failure is secretion retention, resulting from an inability to cough¹. Airway clearance strategies including Mechanical Insufflation-Exsufflation (MI-E) are used to aid secretion clearance.

Aim

To determine the feasibility of a randomised controlled trial (RCT) examining MI-E use to promote extubation success in intubated, ventilated adults in ICU.

Methods

A single centre, randomised, feasibility RCT with economic scoping, nested exploratory physiology and qualitative studies².

1. Feasibility trial compared standard care to a MI-E protocol. Clinical data were collected before/after MI-E or routine physiotherapy sessions. Equipment and staffing resources were calculated each 24-hour period. Electrical Impedance Tomography (EIT) explored lung recruitment/de-recruitment during MI-E.
2. Semi-structured online interviews (patients and clinicians) informed by Theoretical Framework of Acceptability explored intervention and study process acceptability.

Feasibility outcomes comprised: proportion of eligible patients consented/randomised; dataset completeness; intervention. Interviews used thematic analysis based on Theoretical Framework of Acceptability³ domains.

Results

47 participants (84% of those eligible) were consented and randomised to standard care (n=25) or MI-E intervention arm (n=22). Good protocol fidelity (99%) was demonstrated with two missed MI-E sessions. There was good (>75%) data completeness except for lung ultrasound score (LUS), airway resistance, lung compliance (<50%) and EQ-5D-5L (23%). High acceptability scores were reported.

Clinician interviews (n=6) highlighted challenges regarding intervention timing. Patient interviews (n=4) described benefit from MI-E regarding ease of sputum clearance and work of breathing, despite experiencing discomfort during MI-E delivery.

EIT data (n=5) demonstrated lung recruitment during insufflation, often preferentially to existing recruited lung units. Ventilation distribution remained static across lung regions during MI-E treatments. Exsufflation caused mass de-recruitment.

Conclusion

Our RCT protocol was feasible and acceptable to clinicians and patients. EIT provided valuable insight into the physiological impact of MI-E on ventilation distribution, which warrants further exploration. These findings will inform a future fully powered RCT.

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Statement of ethical approval: Yorkshire and the Humber-Leeds East Research Ethics Committee. Ref 22/TH/0042 obtained 11/04/2022; UWE Faculty of Health and Applied Sciences Ethics Committee HAS.22.06.123 (24/6/22) Trial registration: ISRCTN 24603037.

Funder: NIHR Clinical Doctoral Research Fellowship awarded to ES (NIHR 300504).

The roles and experiences of informal caregivers providing care to a person with non-malignant respiratory disease at the end of life. A qualitative evidence synthesis

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Introduction

As populations age, people are living longer with chronic conditions such as Non-Malignant Respiratory Disease (NMRD), creating increasing reliance on informal caregivers. The roles and experience of caregivers during the end of life (EoL) stage of NMRD are of particular interest as inequalities in palliative and EoL care exist for this patient group (Butler *et al.*, 2020).

Aims

To locate and synthesise qualitative data relating to roles and experiences of informal caregivers supporting people with NMRD at EoL. NMRD includes Interstitial Lung Disease (ILD), Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis.

Methods

Electronic databases (British Nursing Database, CINAHLPlus, Medline, PsycInfo, ProQuest Sociology, AMED) were systematically searched for relevant studies.

Inclusion criteria:

- primary research reporting perspectives of adult caregivers of a person with NMRD and/or of adult recipients of care for NMRD
- patients diagnosed with ILD, COPD or Bronchiectasis and considered to be at EoL
- qualitative or mixed methods design
- peer-reviewed with full English text available

Quality assessment was undertaken using the JBI critical appraisal tool (2020). Data were analysed using thematic synthesis (Thomas and Harden, 2008).

Results

Database searches returned 1117 records, following screening 22 articles (published 2001-2022) were included in the review. COPD was the most represented condition (16 articles).

Five themes were generated: Caregivers experience shifting identity, and new, additional roles; Adaptation is necessary to cope with loss and change; Caregivers need more information and coordinated care services; Emotional effects of caregiving; Future uncertainty and facing death.

Conclusion

Informal caregivers play numerous essential roles when caring for relatives with NMRD at EoL. Caregiving experiences are characterised by changes in relationships which can cause negative psychological burden. The unpredictable nature of NMRD makes future planning difficult. Caregivers require more information, and support for their needs, to sustain this role. Qualitative interviews are planned to explore these themes further.

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Statement of ethical approval: Not applicable.

Funder: UWE Bristol Doctoral Capacity Building Programme.

Rehabilitation interventions for adults with Complex Regional Pain Syndrome: A scoping review

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Background: CRPS is a painful condition that often develops following trauma or surgery to a limb¹. Although rehabilitation interventions are often recommended for CRPS treatment, the neurophysiological basis of these interventions remains unclear, and the outcomes used to explore their effectiveness are inconsistent.

Aims: A scoping literature review was conducted using the Joanna Briggs Institute methodology² to explore the rehabilitation interventions used for the treatment of adults living with CRPS, describing their neurophysiological bases, and examining the outcomes used to test their effectiveness.

Methods: Relevant databases and sources of grey literature were searched for studies in English published between 2007 and 2023. Studies were included if they described any form of rehabilitation delivered by a healthcare professional for adults with CRPS. Three independent reviewers in pairs of two screened the titles, abstracts, and full texts of the selected studies.

Results: 65 studies met the inclusion criteria. Rehabilitation interventions³ for adults with CRPS were grouped into: educational interventions (e.g., pain neuroscience education), physical exercise interventions (e.g., range of movement), psychological/brain interventions (e.g., mirror therapy), exposure-based therapies (e.g., pain exposure therapy), and passive therapies (e.g., transcutaneous electrical nerve stimulation). There was a limited reporting regarding the neurophysiological bases of these interventions. Pain and disability were the most common outcomes used to assess the effectiveness of CRPS rehabilitation interventions, although other outcome measures such as body perception disturbances, pain-related fear, or pain acceptance were used.

Conclusions: This review provides the current state of the art in rehabilitation interventions used in adults with CRPS. We found a large heterogeneity in the rehabilitation strategies used in adult CRPS rehabilitation, and a broad range of outcome measures, which complicates comparisons among studies. Mechanisms of CRPS rehabilitation interventions are often insufficiently described.

References

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Statement of ethical approval: No ethical approval was required.

Funder: Royal United Hospital Bath and University of the West of England.

Prevalence and impact of chronic pain in ethnic minority groups within the UK - A Systematic Review

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Background

Chronic pain persists or recurs for three months or more, affecting peoples' health and wellbeing^{1,3}. UK government data reveals differences in prevalence by ethnicity, stating that "prevalence of chronic pain was reported to be the same among all ethnic groups (34%) except the black ethnic group (44%)"^{1,3}. Having robust estimates on the prevalence and impact of chronic pain are important in determining ethnic disparities for chronic pain in the UK accurately. Thus, this review aimed to answer, what is the prevalence and impact of chronic pain in ethnic minority groups within the UK?

Methods

Systematic literature review. Population based observational studies that reported chronic pain prevalence of a percentage of identified ethnic minority groups were included. The databases and platforms searched were CINAHL, SCOPUS, EMBASE, MEDLINE, Cochrane Library and Campbell Collaboration. Risk of bias was assessed using The JBI Critical Appraisal tools². A narrative summary of the prevalence and impact of chronic pain among UK minority ethnic populations was produced.

Results

Of the 108 identified records, six studies were included in the review (participant numbers ranged from 145 to 503,325). The ethnic groups reported were White British/Irish, mixed ethnicity, Black, Asian, and Minority ethnicities (BAME), British Bangladeshi, Bangladeshi, other ethnic groups and South Asian ethnic groups. On average, the risk of bias was moderate in the included studies. Prevalence estimates of chronic pain in UK minority ethnic populations varied widely (1.4%-72%) across the included studies. Four studies reported disability, while one study reported depression and one study reported lower quality of life associated with chronic pain among minority ethnic groups.

Conclusion

The clinical heterogeneity in the prevalence estimates identify the need to conduct rigorous research that accurately estimates the prevalence and impact of chronic pain in UK minority ethnic groups, to allocate the resources required to reduce the burden.

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Statement of ethical approval: Not required.

Funder: UWE Bristol.

28* Shortlisted

Parental engagement with complementary feeding information and their information-seeking behaviours in the United Kingdom

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Background - Complementary feeding describes the transition from milk to family foods from around six months until two years of age (SACN, 2023). Parents often seek information about complementary feeding to guide their feeding behaviours (Spyreli, McKinley and Dean, 2021; Harrison, Brodribb and Hepworth, 2017).

Methods - An evidence synthesis on UK parents' engagement with complementary feeding information was conducted, followed by dyadic interviews with parents of infants aged four to twenty-four months in southwest England to explore their information needs. Subsequently, interviews were held with service providers in the same region. The methodology, informed by information behaviour theories and critical realism, utilised qualitative methods.

Findings – Findings from each study were synthesised to provide insight into how parents engage with sources of information about complementary feeding. There were three main findings:

1. Parents seek information on complementary feeding from diverse sources such as the NHS, healthcare practitioners, the internet, books, family, friends, and social media. They gauge credibility through cognitive heuristics but may feel overwhelmed by the abundance of information.
2. Parents found NHS services insufficient for their information needs, leading them to explore alternatives like private information, social media, or commercial baby food sources. Service providers faced challenges in guiding parents to appropriate services, promoting healthy eating in the early years, and offering emotional support.
3. Parents conformed to their perceptions of best practices for their infants, aligning with societal norms on infant feeding and their ideas of good parenting, which initiated information-seeking behaviours. Complementary feeding exhibits gendered patterns, with mothers predominantly shouldering the responsibility of information-seeking while fathers play a supportive role.

Recommendations – Policymakers and practitioners should address the impact of social media and commercial baby food companies, considering parental emotional well-being and ensuring information accessibility regardless of gender.

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Statement of ethical approval: UWE ethical approval was granted for this study - HAS.22.08.010.

Funder: University of the West of England and the South-West Doctoral Training Partnership.

Impact of physical impairments on the wellbeing of older people - A scoping review

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Background

Physical inactivity is common among older people with physical impairments. Mobility limitations, risk of fall, visual and hearing loss, anxiety, and depression are associated in older people with physical impairments (Gao et al, 2021). Social isolation and loneliness are common features among older people contributing to increased disability and overall poor quality of life (Gale et al, 2018).

Method

A scoping review will be conducted to identify the physical impairments among older people. Articles reporting on effects of physical impairment on older people will be included. Articles reporting on atypical and severe impairment associated with intellectual, psychological, developmental, sensory will be excluded. Articles describing chronic health, disability will be excluded. A search strategy protocol with keywords identification and relevant databases will be developed. Cochrane Revman software will be used for assisting the data extraction and charting. PRISMA-ScR will be used for critically appraising the evidence. PICO framework will be used for guiding the search for relevant evidence (Richardson et al, 1995).

Results

Work in Progress. Preliminary data are expected before 1 July. We are in process of developing a search strategy protocol with the assistance from the librarian at UWE.

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Statement of ethical approval: Ethical approval is not required.

Funder: PhD studentship in partnership between UWE Bristol and ExtraCare Charitable trust.

Exploring methods to monitor the physiological and biomechanical impacts of compression garments: Systematic review

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Aim

To systematically review the literature to explore the methods for monitoring the physiological and biomechanical effects of compression garments.

Background

Compression garments are designed to apply mechanical pressure to the body surface, which can offer various physiological, biomechanical, and performance benefits to athletes (MacRae, Cotter and Laing, 2011). In numerous studies, researchers have investigated the impact of compression garments on EMG (electromyography), physiological variables like temperature and heart rate (Perrey, 2008), and biomechanical variables such as ROM (range of motion) and joint angles in different sports (Weakley et al., 2022). In this study, we aim to investigate the methods of measuring physiological and biomechanical variables during the use of compression garments.

Methods

The search strategy will be written according to the PICO. The search terms will be measurement, physiology, biomechanics, and compression garments. Electronic databases Scopus, MEDLINE, SPORT Discus, Cochrane, and Google Scholar will be used, and articles published from 1993 until 1st June 2024 will be searched. The PRISMA checklist will be used for quality assessment of selected papers. Initial title and abstract screening will be completed, and the reviewer will then read and select the full text articles and apply inclusion/exclusion criteria to include the studies. At least one supervisor will review the process to confirm the selected articles. The studies that used other types of intervention such as braces will be excluded. Reference lists of selected articles will be manually searched for other potentially eligible papers.

Results

The most important data such as the measurement method, reliability, and validity of the measuring device will be extracted from articles and sorted. A data extraction table will be developed based on the guidelines. The review's findings will contribute to the development of a smart e-textile-based monitoring system for measuring physiological and biomechanical variables when using compression garments.

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Statement of ethical approval: No ethical approval required.

Funder: Partnership PhD with Medigarments and UWE.

31* Shortlisted

Current Practices and Beliefs of Thai Healthcare Deliverers in Rural Areas about the Use of Exercise and Self-management in the Treatment of Knee Osteoarthritis: A Qualitative Interview Study

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Background: The ESCAPE-pain programme helps people living with knee osteoarthritis (OA) to manage their symptoms and improve quality of life (Hurley *et al.*, 2007, 2012). Prior to implementing the programme in Thailand, it is important to understand how current practice, beliefs and expectations may impact its acceptability amongst healthcare staff. The aim of this study was to explore these beliefs in staff who are currently involved in the management of people living with knee OA in rural Thailand.

Methods: Healthcare professionals and village health volunteers (VHVs) were invited to participate in online one-on-one semi-structured interviews. Thai healthcare deliverers with experience in delivering interventions for knee OA in rural areas were recruited from hospitals in Northeast and Central regions of Thailand. The purposive sampling strategy was employed to ensure a wide range of healthcare deliverer roles and educational levels were included. All recordings were transcribed and analysed using an inductive thematic analysis.

Findings: To date 11 participants have been recruited and interviewed. Respondents have included physiotherapists (n=3), Thai traditional medicine practitioners (n=3), nurses (n=2), general medical practitioners (n=1), traditional Chinese medicine practitioners (n=1), and VHVs (n=1). The interview time averaged at 79 minutes with a range from 64-90 minutes. The initial findings have highlighted themes including: 1. Current practice is diverse and based on experience rather than best available evidence; 2. There is a lack of theoretical underpinning for interventions; 3. Diverse outcome measures are currently applied, mainly through subjective examination; 4. Pain reduction or elimination was the most cited goal of interventions. Further recruitment and data analysis are ongoing.

Implications: Gaining a better understanding of current practice, beliefs and expectations will provide valuable insights into how the ESCAPE-pain programme will be accepted in Thai healthcare. It may also highlight the need for adaptation of the programme to meet cultural expectations.

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Statement of ethical approval: Ethical approval was obtained by the University of the West of England Faculty Research Ethics Committee (UWE FREC; REF No. HAS.22.11.038) on 19th January 2023. Thai ethical approval was also received from three hospitals: Khunhan hospital, Si Saket (Letter no. SK0033.3/261) on 10th February 2023, Banlueam hospital, Nakhon Ratchasima (Letter

no. 0033.301/134) on 13th February 2023, and Mahasawat Health Promoting hospital, Nakhon Pathom (Letter no. NT51006.036/37) on 2nd February 2023.

Funder: This research is supported by the Impact, Collaboration, Evidence (ICE) from the University of the West of England, the Anglo-Thai Society, and the Royal Thai Government International Student Scholarship.

Beliefs about body weight that influence physical activity for people living with osteoarthritis: A mixed methods systematic review

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Background: Osteoarthritis is a degenerative joint disease that causes pain and stiffness, and negatively impacts quality of life. Core recommendations to self-manage symptoms for those at a higher weight (BMI $\geq 25\text{kg/m}^2$) are weight management and physical activity.¹ However, this population face many barriers to being active.² In non-clinical populations, research has found that beliefs about weight, including internalisation of weight stigma, can impact physical activity.³ However, to our knowledge, no review has explored this phenomenon among individuals with osteoarthritis.

Purpose: This review aims to explore how beliefs about body weight impact physical activity, as well as what influences those beliefs, among people living with osteoarthritis.

Methods: A mixed methods systematic review will be conducted. Four databases will be searched: Medline, Amed, PsycINFO, and SPORTDiscus. Eligible records will include peer reviewed journal articles from February 2014 to February 2024 that report on data related to the review's aim. Relevant data will be extracted, and quantitative data will be qualited, following an integrated convergent approach. Results will be described narratively and include commentary on study quality.

Results: Findings will be presented narratively within themes that explore the influence that beliefs about weight have on physical activity for people with osteoarthritis.

Conclusions: The review is currently in progress.

Practical implications: Findings will be discussed in relation to clinical guidelines for self-management of osteoarthritis, and the wider literature on beliefs that influence physical activity.

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Statement of ethical approval: Not applicable.

Funder: This review is part of a PhD project funded by the University of the West of England.

Co-Designing an Affective Computing Solution for Anxiety Disorders: Integrating Signals and Self-Reported Content within Clinical Pathways

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INTRODUCTION:

Recently, efforts to use digital technologies for mental health support have focused on individual well-being. However, integration into clinical pathways has received little attention. Anxiety disorders consistently present challenges of under-/mis-diagnosis due to difficulties in differential diagnoses and presence of common comorbidities. Standard self-reported approaches for assessing emotional regulation face criticism for their paradoxical nature, while semi-structured interviews may lack specificity and cross-cultural validity, enabling patients to conceal or simulate mental health conditions [1]. A comprehensive tool might be helpful in differentiating sub-disorders, quantifying their impact on quality of life, and substantiating therapeutic success [2].

AIM: To co-design a digital emotion-monitoring solution for people with anxiety disorders, collecting longitudinal data in daily scenarios.

OBJECTIVE: To bolster entire patient journey, encompassing prevention-screening, detection-diagnosis, and monitoring-treatment.

METHODOLOGY:

To address high dropout rates in digital mental health tools, our co-design process involves people with anxiety disorders and clinicians across six phases, from pre-design to post-design evaluation, ensuring the solution meets user needs and promotes engagement and privacy. This process will focus on the use of longitudinal emotion recognition data to identify anxiety patterns using common wearable devices. These devices collect passive (e.g. heart rate, galvanic skin response) and active (e.g. electrocardiogram) bio-signals along with user-generated data like diaries and recordings, which are analysed for tone and content.

RESULTS:

Recruitment materials and questionnaires are currently undergoing validation with participant representatives. At the conference, we will report on results from Phase I (pre-design) of our co-design process, with insights from both clinicians and people with anxiety disorders.

CONCLUSIONS:

Our prior work demonstrated the interest from both patients and clinicians for a digital solution capable of supporting the clinical pathway for anxiety disorders [3]. We are co-designing a solution incorporating emotion recognition technology to improve patient awareness and engagement, fostering acceptance and adherence to therapy.

References

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Statement of ethical approval: CATE-2324-274 (Approved with Conditions).

Funder: UWE CATE studentship.

Exploring patients views on anxiety associated with SPECT/CT scans

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Objectives: The anticipation of a diagnostic imaging procedure, particularly one using advanced technology, is likely to provoke feelings of anxiety in patients. The need for effective intervention to minimise or reduce the levels of patient anxiety prior to these types of procedures is evident (Ribeiro et al, 2019). A systematic literature review (King et al, 2020) highlighted instances of clinical practice where the use of preparatory interventions has been investigated. These interventions have been predominantly based around improving the patient's knowledge of the procedure, so that they are better prepared and less anxious about the unknown elements of the scan. The aim of this study involving semi-structured online patient interviews, was to explore patients' views and experiences of being referred for a SPECT/CT scan.

Key findings: A total of twelve participants (9 women, 3 men) were recruited from United Hospitals Bristol and Weston NHS Foundation Trust. A process of thematic analysis identified nine overarching themes which were split into two key categories related to the views of patients around the causes and focus of their anxiety and generating ideas and recommendations for creating a supportive environment which may help to reduce these anxiety levels.

Conclusions: This study provides a novel understanding of how a variety of factors contribute towards a patient's feelings of anxiety prior to a SPECT/CT scan, such as fear of failure and judgement, and concerns about their future treatment and care. It also provides evidence into how patients feel their anxiety could be minimised and better managed, including being provided with more effective information and a more personal service prior to the scan. Participants also placed importance on clinical departments creating a relaxing environment and providing an opportunity to raise awareness of their anxiety by alerting staff to their needs, prior to attendance.

References:

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Statement of ethical approval: Ethical approval was granted by the Health Research Authority (HRA) and Health and Care Research Wales (HRCW) (IRAS project ID: 261847; REC reference: 19/LO/1400). In addition, the study was also ratified by the University of the West of England Faculty of Health and Applied Sciences Research Ethics Committee (Application number: HAS.19.10.046).

Funder: University of the West of England (UWE).

35* Shortlisted

Development and refinement of patient care recommendations in brachytherapy for locally advanced cervical cancer using nominal group technique workshops

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Introduction

Patient experiences of brachytherapy for locally advanced cervical cancer (LACC) have been found to be widely variable, with some women reporting difficult and traumatic experiences and aspects of care requiring improvement.¹ The aim of this study was to develop patient care recommendations and consult with key stakeholders to review, refine and prioritise recommendations.

Method

Phase 1: Patient care recommendations were developed using data from staff survey and patient interview studies.^{1,2} Phase 2: Service users and service providers with recent experience of brachytherapy for LACC were recruited to take part in online nominal group technique (NGT) workshops. The workshops followed four standard NGT stages³: 1) initial voting and silent generation; 2) round robin; 3) clarification; 4) prioritisation by ranking. Voting data were summed across the workshops to derive the inter-group scores. Qualitative data were analysed through content analysis.

Results

Thirteen participants took part in three NGT workshops, with a combination of service user and service providers in each workshop. The initial 51 patient care recommendations were voted on, four new recommendations added and minor wording changes made. The resulting 55 recommendations were voted on. Recommendations were positively received with 25 recommendations scoring maximum points (very important/three points) by all thirteen participants. An importance score above 90% was given to 46 of the 55 recommendations with nine recommendations receiving scores between 74 and 90%. No recommendation scored lower than 74%.

Conclusions

The NGT workshops facilitated service users and providers working together to discuss, refine and prioritise potential patient care recommendations, leading to the verification of useful, potentially achievable and relevant recommendations. The 55 patient care recommendations will be used as a starting point for future development of clinical guidelines and subsequent implementation into clinical practice, aiming to improve consistency of care and patient experiences of brachytherapy for LACC.

References:

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Statement of ethical approval: UWE REC REF No: HAS.21.10.020.

Funder: National Institute for Health and Care Research (NIHR) [ICA-CDRF-2017-03-079].

Do mobile and electronic health technologies used by people with lung cancer affect physical functioning and wellbeing? A Systematic Literature Review

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Background:

Despite advancements in treatment and early detection, individuals diagnosed with lung cancer still face shorter life expectancies compared to other cancers. Hence, enhancing symptom management and overall quality of life becomes paramount for this demographic. Common symptoms such as breathlessness, fatigue, and depression can significantly impact physical functioning. However, existing healthcare services often lack the capacity to adequately address these needs. One potential solution lies in empowering patients to self-manage their condition using electronic health technologies.

Objective:

This review aims to assess available research on technologies supporting lung cancer patients in enhancing or maintaining their physical functioning and quality of life.

Methods:

A search was conducted across six databases from January 1990 to April 2023. Studies were included if they involved lung cancer patients aged 18 and above, who were exposed to physical activity interventions delivered via electronic or web-based applications. Studies had to report on the intervention's impact on physical function and/or quality of life. Telemedicine studies without an online intervention were excluded.

Results:

Following PRISMA guidelines, 794 papers were initially identified, with eight meeting inclusion criteria after screening. Seven studies, conducted between 2010-2018 across various countries, were included in the analysis. These studies aimed to develop and/or test the feasibility and acceptance of technology. Technologies identified included web-based apps, mobile apps, and gaming consoles, showing positive impacts on various physical parameters and quality of life scores.

Conclusions:

Electronic health apps show promise in improving physical functioning and well-being in lung cancer patients. However, there's a scarcity of long-term impact studies, and none address the implementation of these interventions in routine clinical practice. Further research is warranted to address these gaps.

Statement of ethical approval: N/A.

Funder: Oxford Institute for Applied Health Research.

A Scoping Review on the Integration of Patient Reported Outcome Measures in Standard Haematological Cancer Care

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Background: Haematological malignancies can profoundly affect patients' physical, emotional, and psychosocial well-being. Despite advancements in treatments, patients are experiencing extended survival times. Patient Reported Outcome Measures (PROMs) offer valuable insights into patients' perceptions of their health status and needs, supported by robust assessment tools. Although PROMs are prevalent in oncology, their integration into haematology clinical practice remains limited.

Aims: This scoping review aims to assess the applicability of PROMs in routine haematology care and to gauge the extent and nature of evidence regarding their benefits to patients.

Methods: Following the Joanna Briggs Institute methodology for scoping reviews and adhering to the Preferred Reporting Items for Systematic Reviews and Meta-analysis scoping review model, this review was conducted.

Results: Initial searches yielded 10,071 papers, with 110 full texts reviewed, and ultimately 14 papers meeting inclusion criteria (participants were adults with blood cancer, receiving care within routine care pathways. Studies that explored the use of tools while undergoing stem cell transplants were excluded. **Concept:** PROMs, needs assessment, Health-related quality of life tools/measures delivered in paper or web-based format. **Context:** studies of validated tools aimed at influencing practice within standard care pathways were included, where the impact or outcome of using the tool was reported). These papers identified over 20 individual outcome measures, categorised into accessibility and usability, self-efficacy, shared decision-making, and implementation.

Conclusions: The reviewed studies underscored the potential benefits of integrating PROMs into routine haematology care, addressing aspects such as PROM selection, acceptability, usability, user motivation, patient and healthcare provider experiences, perceived value, and implementation guidance. Nevertheless, limited evidence exists on how PROMs can effectively enhance patient outcomes within haematological cancer care pathways.

Statement of ethical approval: N/A.

Funder: NIHR ARC West and North Bristol NHS Trust (Research Capability Funding).

The long-term outcome of operative treatment for chronic plantar fasciopathy

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Background:

Plantar fasciopathy (PF) is one of the most common foot disorders affecting 4-10% of the population (Rose, 2019). Aetiology is multifactorial and refers to different heel pathologies (Beeson, 2014). Non-surgical treatment is effective in approximately 90% of patients (Becker, 2018). Surgery is recommended when conservative therapy has been unsuccessful (Schneider, 2018). There is no consensus regarding the most effective surgical technique.

Study aim: Systemically review the evidence on the long-term outcomes of surgical treatments for chronic PF.

Methods:

Systematic searching of Health and Social Care databases to identify current evidence of long-term outcomes of operative treatment for chronic PF. Original primary data collection studies in the English language were eligible. Records were screened by title and abstract. Studies were retrieved as full text and assessed for eligibility using pre-defined inclusion/exclusion criteria. The primary outcome of interest was subjective findings derived from patient-reported outcome measures. Secondary outcomes were from objective outcome measurements utilised for PF treatment, including long-term adverse effects. Risk of bias and quality appraisal were conducted.

Results:

72 articles were included for narrative synthesis. Average age of the patients was 47.8 years. Forty-four articles reported single-type and 28 studies reported various combined-type operations. Pain reduction after surgical intervention was the most common finding. Sixteen different foot and ankle-related objective outcome measures were utilised. Adverse effects varied across surgical interventions, 40.3% of the articles stated no long-term adverse effect. Severe foot & ankle-related long-term adverse effects were not reported. A combination of surgical treatments achieved the highest satisfaction rate.

Conclusions:

Despite good patient satisfaction following operative treatments none of the studies demonstrated complete patient satisfaction. Long-term adverse effects were low, but highest was following plantar fascia release. There was no evidence of gold-standard surgical treatment for chronic PF. A combination of different surgical interventions may be the future option.

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Statement of ethical approval: This was a systematic literature review and ethical approval was therefore not required.

Funder: Self-funded research.

Developing Psychosocial Support for People with Systemic Lupus Erythematosus (SLE)

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Introduction:

Systemic Lupus Erythematosus (SLE) can have considerable psychosocial impact on a person's mental health, daily life, relationships, and work life. (Gordon et al., 2018). However, no tailored psychosocial support exists globally for people with SLE (Twumasi et al., 2019). This study aims to develop a "toolkit" for psychosocial support for people with SLE.

Overall Aim:

Aims: Explore the support needs and preferences of people with SLE, and the perceived barriers and enablers to accessing, engaging with, and benefitting from psychosocial support. To identify what patients consider to be the important outcomes of psychosocial support and how these outcomes can be measured.

Explore the resource, education, and support needs of rheumatology clinical teams to facilitate provision of psychosocial support for SLE patients. To identify what Health Care Professionals (HCP) consider to be the important outcomes of psychosocial support and how these outcomes can be measured.

Methods:

Phase 1: Patients' National Survey

A national qualitative survey with 100-120 patients (Braun and Clarke, 2013) will explore previous experiences of support, the support needs and preferences of SLE patients, and their perceived barriers and enablers to accessing psychosocial support.

Phase 2: The Healthcare Professional Perspective

A national online survey with 50-100 specialist nurses, occupational therapists, physiotherapists, health psychologists, clinical psychologists, and rheumatologists from specialist lupus centres and non-specialist rheumatology services.

Analysis: The data generated from both surveys will undergo analysis using thematic analysis. (Braun & Clarke, 2022).

Results: Survey data collection has just started, and the Chief Investigator will present preliminary results.

References

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Statement of ethical approval: Ethical approval has been granted by both the NHS (REC reference: 23/EM/0202, IRAS number: 327534) and UWE (Reference number: CHSS.23.11.061).

Funder: This study is funded by UWE and Lupus UK.

Experiences of Fatigue with a Primary Brain tumour: Interviews with Patients and Healthcare professionals

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² North Bristol NHS FT

Background: Fatigue significantly compromises quality of life in patients with malignant primary brain tumours (MPBT)¹, necessitating an in-depth understanding of their physical and psychological experiences to develop effective interventions.

Aim: This study investigates fatigue experiences among MPBT patients, focusing on their perspectives and those of healthcare professionals regarding potential interventions. Interviews are underway, with analysis in progress.

Methods: Utilising a qualitative approach, parallel interviews with up to 20 MPBT patients recruited from brain tumour charities and 20 UK healthcare professionals from professional networks and organisations are being conducted. The sampling aims to capture diverse demographics, including ages, ethnicities, treatment stages, and tumour grades (2-4). Patient eligibility includes adults with MPBT in active monitoring, at least three months post-treatment, and experiencing fatigue. Exclusions apply to those unable to consent or communicate in English. Healthcare participants must be UK registered with at least one year of experience in the relevant field. Interviews, shaped by two comprehensive topic guides, are held via video, phone, or in person based on patient preference, then transcribed verbatim, organised in NVivo and analysed using reflexive thematic analysis².

Results: The reflexive thematic analysis will illuminate key themes and subthemes, and patient quotations will contextualize the findings. Some initial data suggest patient self-testing and monitoring for fatigue, managing sensory overload and regional variation in support may be salient issues to explore.

Conclusion: Insights from this study will deepen our understanding of fatigue's effects on MPBT patients, guiding the development of targeted interventions to manage fatigue and potentially enhance quality of life. Additionally, the findings may inform healthcare professionals on optimal support strategies for this patient population.

References:

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Statement of ethical approval: UWE ethical approval granted under the reference number; UWE REC REF No: CHSS.23.11.056.

Funder: This research is funded as part of a PhD studentship by UWE Bristol and Somerset, Wiltshire, Avon and Gloucestershire (SWAG) Cancer Services held by RSM. The funders had no role in these patient and healthcare professional interview studies.

Is picture naming ability driven by its presentation type? A comparison between healthy individuals and brain tumour patients

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Visual picture naming has become the gold standard technique for the detection and preservation of important language functions and their underlying neural areas during awake brain surgery/craniotomy (Rofes, 2015). However, very little is known about the optimal physical characteristics (e.g., colour, size, dimensionality, quality) of the stimuli used in these tasks. Extant batteries use a variety of images that differ in the richness of their surface details which potentially influences the accuracy and the speed of the target responses (Bonin et al., 2019). This renders the validity of these materials questionable and presents a distinct challenge for practitioners to select appropriate images for the patients. Therefore, this prospective study seeks to elucidate how images of different types impact naming performance of awake craniotomy patients, in comparison with their age-matched healthy controls. In doing so, we also provide evidence for which image type is best suited to elicit naming in these patients. To address these aims, participants will undertake a behavioural naming task where they will be shown images of three different types (black-and-white drawings, colour drawings, and photographs) that were carefully selected and controlled for certain image features (e.g., amount of details present), and represent daily-life objects (e.g., *table*) and actions (e.g., *to run*). An initial analysis will explore whether the naming performance (measured as naming correctness and naming latencies) varies as a function of the image type. Next, image suitability will be investigated by evaluating which image type was responded to most *accurately* and *quickly*. The findings of this study will provide valuable insights into the ideal attributes of the visual stimuli used for awake craniotomy patients. Implementing such stimuli will improve the efficacy of the picture naming tasks in accurately determining language functions and their related sites, which ultimately has implications for better patient care and surgical outcomes.

References:

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Statement of ethical approval: This study has been given full ethical approval by the UWE Bristol Research Ethics Committee under the reference number ACE.22.12.017.

An NHS Quality Improvement Project will also be obtained prior to the testing in the awake craniotomy patients.

Funder: This study is co-funded by UWE Bristol and the Somerset, Wiltshire, Avon and Gloucestershire (SWAG) Cancer Alliance.

A Naturalistic Database of Gesture in British Monolinguals and its Clinical Applications

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Theoretical perspectives on why humans gesture have been complemented recently with psychological studies of how gestures help us communicate clearly and quickly. There is also evidence that rehabilitating gesture abilities helps to improve communication in patients with neurological issues of various kinds (de Kleine et al., 2023; Difrancesco et al., 2012). Little work has been done, however, to determine what kinds of therapeutic practices might be developed to aid the rehabilitation of gestural abilities specifically. This is important in the case of aphasia – patients with linguistic deficits as a result of stroke, tumours, damage, etc., are often unable to communicate verbally, and yet aphasia testing batteries do not test non-verbal communication skills whose preservation and rehabilitation might enable better quality of life. In this ongoing project, our main aim is to understand how British English monolinguals gesture when they communicate naturally. To do so, 52 neurotypical adults recruited from the staff population at UWE have participated in one-on-one semi-naturalistic conversations with a confederate. Participants' gestural productions have been analysed for their types and frequencies per type, varying by the level of complexity of conversation topic and the extent of ability to visibly perceive an interlocutor's gestures. Of particular interest for clinical application are *pro-speech* gestures (gestures made to replace spoken language; Schlenker, 2019), as they serve as a window to understanding how gestural abilities might compensate for communicative goals when verbal expression is restricted. More specifically, analysis of this type of gesture's usage enables the identification of gesture types that could be tested as a part of typical aphasia testing batteries for patients whose impairments have affected their speech. The clinical aim of this work, therefore, is to increase accessibility to communicative rehabilitation for patients whose possibility for post-impairment preservation of communicative capacity would otherwise be much lower.

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Statement of ethical approval: The project has received full ethical approval from the University of the West of England College of Arts, Technology, and the Environment Research Ethics Committee, UWE REC REF No: CATE-2324-208.

Funder: College of Arts, Technology and Environment, University of the West of England
Psychological Science Research Group, University of the West of England.

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How can occupational therapists integrate the Handy OT Model to support occupation centred practice?

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Background

In occupational therapy, occupations are the things people need to, want to, and are expected to do. Occupations maintain and develop physical, social and mental capabilities, and have cumulative positive or negative effects on health, wellbeing and life satisfaction. There is an occupational therapy priority for occupation to be central to clinical practice to influence the health and wellbeing of patients.¹

However, barriers to occupation centred practice exist at patient, practitioner and system levels, leading to a profession-wide call for research and strategies to strengthen occupation centred practice. The Handy OT Model² identifies and explains six core, interrelated factors common to all occupations that humans engage in, known as the Handy 6 Cs: choice, challenge, counting (meaning) connection congruence and contrast. Practice-based experience points to the Handy OT Model offering an innovative, and easily applied way to understand and analyse the nature, and qualities of occupation, how occupation impacts health and wellbeing offering a new approach and strategies for change.

Research question

How can the Handy OT model be used to support occupation-centred practice?

Objectives:

To co-produce Handy OT resources and a logic model using co-creation workshops with two groups of occupational therapists.

To explore how the Handy OT Model impacts occupational therapists understanding, analysis, and promotion of occupation using individual semi-structured interviews.

To evaluate how exposure to the Handy OT Model shapes occupational therapy students' understanding of their profession using a qualitative survey.

Design

A qualitative, case study co-production approach will be taken to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context.³

Findings will be analysed using framework analysis to identify commonalities and differences in the data, before focusing on relationships between different parts of the data and seeking to draw descriptive and/or explanatory conclusions clustered around themes.⁴

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Statement of ethical approval: appropriate ethical approval will be gained prior to recruitment and data collection.

Funder: Doctoral Capacity Building Programme, UWE.